APPENDICES

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Appendix 2-1 NOP and NOP Comments

Date: January 6, 2023

Subject: **Notice of Preparation of a Draft Subsequent Environmental Impact Report and Scoping Meeting for the Mills Crossing Civic Center Project**

To: State Clearinghouse
State Responsible Agencies
State Trustee Agencies
Other Public Agencies
Organizations and Interested Persons

Lead Agency: City of Rancho Cordova
Department of Community Development – Planning Division
2729 Prospect Park Drive
Rancho Cordova, CA 95670
Phone: (916) 851-8700
Contact: Stefan Heisler, Housing Manager
Email: sheisler@cityofranchocordova.org

Notice of Preparation: This is to notify the public agencies and the general public that the City of Rancho Cordova, as Lead Agency, will prepare a subsequent environmental impact report (SEIR) for the Mills Crossing Civic Center Project (referred to as the "proposed project"). The City is interested in the input and/or comments of public agencies and the general public as to the scope and content of the environmental information that should be evaluated in the SEIR. Public agencies will need to use the SEIR prepared by the City when considering applicable permits, or other approvals for the proposed project.

Project Title: Mills Crossing Civic Center Project

Project Location: A 9.85-acre site at the corner of Folsom Boulevard and La Loma Drive in the City of Rancho Cordova (Assessor's Parcels Numbers [APN] 076-0020-019, -20, -21, -22).

Scoping Meeting: **Thursday January 19, 2023 starting at 6:00 PM**, the City of Rancho Cordova Department of Community Development will conduct an in-person public scoping meeting to solicit input and comments from public agencies and the general public on the proposed SEIR for the Mills Crossing Civic Center Project.

This public scoping meeting will be held:

- **In-person:**

Rancho Cordova City Hall
2729 Prospect Park Drive
Rancho Cordova, CA 95670

The scoping meeting will include a materials describing the proposed Mills Crossing Civic Center Project, followed by an opportunity for members of the public to discuss the project with City and consultant staff and provide comment on environmental topics which should be discussed and analyzed in the SEIR.

If you have any questions regarding this scoping meeting, contact Stefan Heisler at sheisler@cityofranchocordova.org, or (916) 851-8700. Additional information about the proposed project is available at the following City webpage:

https://www.cityofranchocordova.org/residents/new-businesses-and-projects/mills-crossing-civic-center

Comment Period: Consistent with the time limits mandated by State law, your input, comments, or responses must be received in writing and sent at the earliest possible date, but not later than 5:00 PM on February 6, 2023.

Comments/ Input: Please send your input, comments, or responses (including the name for a contact person in your agency, if applicable) to:

Attn: Stefan Heisler, Housing Manager
City of Rancho Cordova Department of Community Development
2729 Prospect Park Drive
Rancho Cordova, CA 95670
sheisler@cityofranchocordova.org

If sending input, comments, or responses via email, please write "Mills Crossing Civic Center NOP Comments" in the subject line.

Project Location and Existing Uses

The 9.85-acre project site is located at the corner of Folsom Boulevard and La Loma Drive in the City of Rancho Cordova, Sacramento County (see Figure 1, *Regional Location*). The project site is vacant and includes grassy and paved areas. The project site is surrounded by residential uses to the north, residential uses and Folsom Lake College/Rancho Cordova Civic Center to the east, light industrial uses to the south, and commercial and residential uses to the west (see Figure 2, *Aerial Photograph*). The project site is listed on the Department of Toxic Substance Control's Envirostor site for evaluation.

Project Description

The proposed project would result in the following uses:

- Community-Commercial Buildings (up to 132,000 square feet) and would include:

	Gross Area (SF)	**Building**
Health & Wellness	27,500	1
Community-Commercial	25,000	1
Community-Commercial	27,000	3
Arts Center - Theater	18,000	2
Arts Center - Flex Studios	17,000	2
Community Event Hall	9,000	3
Commercial-Retail	7,200	4
Total	**130,700**	

- Housing Units (up to 120 units):
  - Between 55-60 Multi-Family Affordable Apartments
  - Between 50-60 Zero Lot Line Townhouse-Style Homes for Sale

- Public Open Space (up to 2.5 acres):
    - Between 1.3-1.5 acres of Neighborhood and Community Greens
    - Between 0.75-1.0-acre of Plaza and Green Space
- Parking Structure which would include between 275-325 parking stalls.

Figure 3, *Conceptual Site Plan*, shows the proposed layout of these uses on the project site. It is anticipated that construction of the project would occur from 2024 through 2029.

Areas of Potential Impacts

The California Environmental Quality Act (CEQA) Guidelines Section 15128 allows environmental issues, for which there is no likelihood of significant impact, to be "scoped out" and not analyzed further in the SEIR. As the project site was assumed for development in the General Plan EIR, some footprint-related topics can be focused out of the SEIR as adequately addressed in the General Plan EIR.

Environmental Topics	Evaluated in EIR	Not Evaluated in EIR
Aesthetics		X
Agriculture and Forestry		X
Air Quality	X	
Biological Resources	X	
Cultural Resources	X	
Energy	X	
Geology and Soils		X
Greenhouse Gas Emissions	X	
Hazardous Materials		X
Hydrology/Water Quality		X
Land Use/Planning	X	
Mineral Resources	X	
Noise	X	
Population/Housing	X	
Public Services	X	
Parks and Recreation	X	
Transportation	X	
Tribal Cultural Resources	X	
Utilities/Service Systems	X	
Wildfire		X

Requested Actions

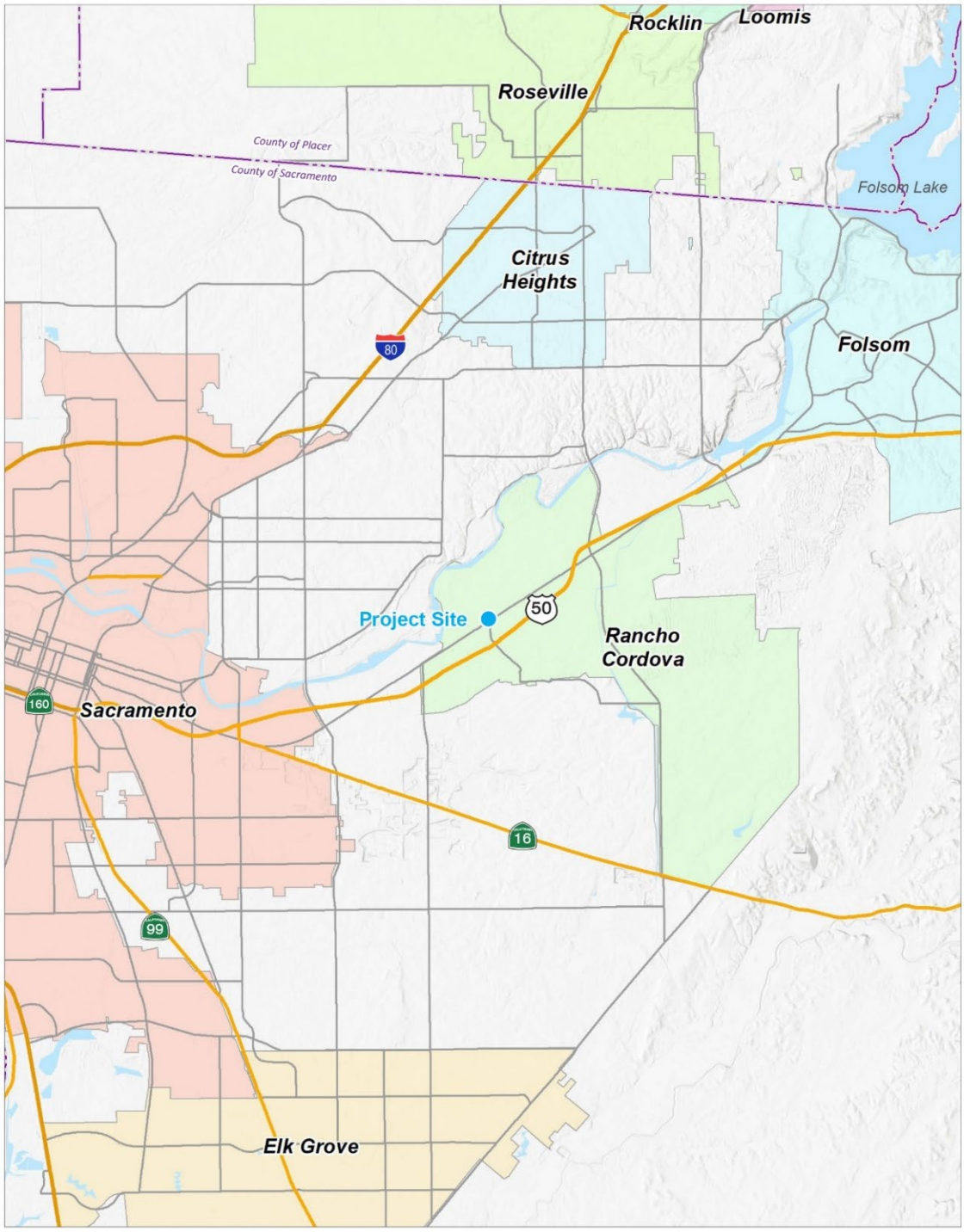
This section presents the actions that would be required to implement the proposed project.

City of Rancho Cordova

- Site Plan Approval
- Building Permits
- Certify SEIR and Adopt Mitigation Monitoring and Reporting Program

Central Valley Regional Water Quality Control Board

- Issuance of National Pollutant Discharge Elimination System (NPDES) Permit
- Issuance of Construction Permit



0 3
Scale (Miles)

Note: Unincorporated county areas are shown in white.

Figure 1
Regional Location

PLACEWORKS

Source: Nearmap, Inc., 2022.

0 270
Scale (Feet)

Project Boundary

Figure 2
Aerial Photograph

PLACEWORKS

Source: City of Rancho Cordova, 2022.

0 100
Scale (Feet)

Project Boundary

Figure 3
Site Plan

PLACEWORKS

From: Nancy
To: Stefan Heisler
Subject: Comments on Mills Crossing plan
Date: Thursday, January 5, 2023 5:45:08 PM

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1. Parking seems excessive when there is so much street parking available; the Folsom Lake College parking lot is NEVER even close to full and could be leased for events. Public transportation should be encouraged as the space is right across the street from buses and light rail. Reduce parking and add more green space or a craft center (like in Davis).
2. Please landscape with native plants and trees - CA Native Plant Society should be used as a resource. No more crepe myrtle please - those trees are getting tiresome. Add oaks or CA sycamore...shrubs with native fruit for birds. Save on maintenance, support plant diversity and wildlife with native plants.

Nancy Marsh
[redacted]

SMUD®

Sent Via E-Mail

January 7, 2023

Stefan Heisler, Housing Manager
City of Rancho Cordova
Department of Community Development – Planning Division
2729 Prospect Park Drive
Rancho Cordova, CA 95670
sheisler@cityofranchocordova.org

Subject: **Mills Crossing Civic Center Project / 2023010102 / NOP**

Dear Mr. Heisler:

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide comments on the Notice of Preparation of a Draft EIR (NOP) for the Mills Crossing Civic Center Project (Project, SCH 2021040039). SMUD is the primary energy provider for Sacramento County and the proposed Project area. SMUD's vision is to empower our customers with solutions and options that increase energy efficiency, protect the environment, reduce global warming, and lower the cost to serve our region. As a Responsible Agency, SMUD aims to ensure that the proposed Project limits the potential for significant environmental effects on SMUD facilities, employees, and customers.

It is our desire that the Project will acknowledge any impacts related to the following:

- Overhead and or underground transmission and distribution line easements. Please view the following links on smud.org for more information regarding transmission encroachment:
  - https://www.smud.org/en/Business-Solutions-and-Rebates/Design-and-Construction-Services
  - https://www.smud.org/en/Corporate/Do-Business-with-SMUD/Land-Use/Transmission-Right-of-Way
- Utility line routing
- Electrical load needs/requirements
- Energy Efficiency
- Climate Change
- Cumulative impacts related to the need for increased electrical delivery
- The potential need to relocate and or remove any SMUD infrastructure that may be affected in or around the project area

More specifically, SMUD would like to have the following details related to the electrical infrastructure incorporated into the project description:

- South of Folsom Blvd, there are existing 69/12kV OH/UG facilities
- On project site, there are existing 12kV OH/UG facilities
- Structural setbacks of less than 14-feet shall require the applicant to conduct a pre-engineering meeting with all utilities to ensure proper clearances are maintained
- To maintain adequate trench integrity, building foundations must have a minimum horizontal clearance of 5 feet from any SMUD trench. Developer to verify with other utilities (Gas, Telephone, etc.) for their specific clearance requirements
- Proposed SMUD facilities located on the customer's property outside of the existing or proposed PUE(s) may require a dedicated SMUD easement
- The Applicant shall dedicate and provide a vehicular access road; SMUD will supply the minimum specifications during the acquisition process. (or: The Applicant shall dedicate and provide all-weather vehicular access for service vehicles that are up to 26,000 pounds. At a minimum: (a) the drivable surface shall be 20-feet wide; and (b) all SMUD underground equipment and appurtenances shall be within 15-feet from the drivable surface)
- SMUD requires a minimum 12.5-foot PUE adjacent to all public roads for 12kV facilities
- The developer shall dedicate any private drive, ingress and egress easement, or Irrevocable Offer of Dedication (and 10 feet adjacent thereto) as a public utility easement for overhead and underground facilities and appurtenances
- If alternative locations are not provided, existing overhead/underground 12kV facilities will need to remain in order to maintain existing services not part of development
- If applicable existing overhead lines will be removed and existing underground cables will be relocated at developer's expense to maintain existing services within development

SMUD would like to be involved with discussing the above areas of interest as well as discussing any other potential issues. We aim to be partners in the efficient and sustainable delivery of the proposed Project. Please ensure that the information included in this response is conveyed to the Project planners and the appropriate Project proponents.

Environmental leadership is a core value of SMUD and we look forward to collaborating with you on this Project. Again, we appreciate the opportunity to provide input on this Project. If you have any questions regarding this letter, please do not hesitate to contact me at 916.732.7406, or by email at jerry.park@smud.org.

Sincerely,

Jerry Park
Environmental Services Specialist
Sacramento Municipal Utility District

cc: Entitlements

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Jan 13 2023
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California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

January 9, 2023

Stefan Heisler
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670

Re: 2023010102, Mills Crossing Civic Center Project, Sacramento County

Dear Mr. Heisler:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

- **a.** A brief description of the project.
- **b.** The lead agency contact information.
- **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
- **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

- **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

- **a.** Alternatives to the project.
- **b.** Recommended mitigation measures.
- **c.** Significant effects. (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:

- **a.** Type of environmental review necessary.
- **b.** Significance of the tribal cultural resources.
- **c.** Significance of the project's impacts on tribal cultural resources.
- **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

- **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
- **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:

a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or

b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:

a. Avoidance and preservation of the resources in place, including, but not limited to:

i. Planning and construction to avoid the resources and protect the cultural and natural context.

ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.

b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:

i. Protecting the cultural character and integrity of the resource.

ii. Protecting the traditional use of the resource.

iii. Protecting the confidentiality of the resource.

c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.

d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).

e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).

f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:

a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.

b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.

c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).

2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.

3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).

4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:

- **a.** The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
- **b.** Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:

- **a.** If part or all of the APE has been previously surveyed for cultural resources.
- **b.** If any known cultural resources have already been recorded on or adjacent to the APE.
- **c.** If the probability is low, moderate, or high that cultural resources are located in the APE.
- **d.** If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.

- **a.** The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
- **b.** The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:

a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.

b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.

a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.

b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.

c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Pricilla.Torres-Fuentes@nahc.ca.gov.

Sincerely,

Pricilla Torres-Fuentes

Pricilla Torres-Fuentes
Cultural Resources Analyst

cc: State Clearinghouse

From: PGE Plan Review
To: Stefan Heisler
Subject: RE: Notice of Preparation of a Draft Subsequent Environmental Impact Report
Date: Tuesday, January 10, 2023 7:59:53 AM
Attachments: image002.png
image003.jpg

Classification: Public

Good morning, Stefan,

Thank you for your email. Once detailed project plans are available, please send via email and we will review.

Best Regards,

Pacific Gas and Electric Company
Plan Review Team
Email: pgeplanreview@pge.com

From: Stefan Heisler <sheisler@cityofranchocordova.org>
Sent: Friday, January 6, 2023 9:23 AM
To: sacplan@saccounty.gov; smithtodd@saccounty.net; pjohns@folsom.ca.us; jlaurain@adamsbroadwell.com; michael@lozeaudrury.com; Hannah Hughes <hannah@lozeaudrury.com>; Maya Vishwanath <maya@lozeaudrury.com>; Egbert, Adam <age1@pge.com>; Adam Lindgren <adam@meyersnave.com>; Adam Lindgren <alindgren@cityofranchocordova.org>; agcom@saccounty.net; Albert Stricker <astricker@cityofranchocordova.org>; Amanda Norton <anorton@cityofranchocordova.org>; Andrew Saltmarsh <asaltmarsh@crpd.com>; Audie Foster <audie.foster@amwater.com>; Benjamin Turner <dlrp@consrv.ca.gov>; Bree Chuong <bchuong@sacsheriff.com>; Brian Bailey <baileyb@saccounty.net>; Caltrans District 3 Local Development Review <D3.Local.Development@dot.ca.gov>; Cameron Shew <ShewC@saccounty.net>; Chris Bohrer <cbohrer@egusd.net>; hunleyc@saccounty.net; pacec@saccounty.net; Cristina James <cjames@crpd.com>; Civic Thread General Project Email <ProjectReview@civicthread.org>; Cristian Ganea <Ganea.cristian@metrofire.ca.gov>; Cyrus Abhar <cabhar@cityofranchocordova.org>; darrowm@saccounty.net; Dave Ghirardelli <ghirardellid@saccounty.net>; Dennis Barber <DBarber@republicservices.com>; Dov Kadin <dkadin@sacog.org>; Elizabeth Sparkman <esparkman@cityofranchocordova.org>; eric_fredericks@dot.ca.gov; Erin Naderi <enaderi@cityofranchocordova.org>; Gary Gasperi <GasperiG@saccounty.net>; gchew@sacog.org; gwickham@fcusd.org; hockerl@saccounty.net; smalleyj@saccounty.net; Jeremiah Zillig <jzillig@cityofranchocordova.org>; jimd@sac-city.k12.ca.us; jhurley@airquality.org; Joanne McCarthy <JMccarth@fcusd.org>; rogersjo@saccounty.net; klizon@sacog.org; Kim Juran <kjuran@cityofranchocordova.org>; Laura Fickle <lfickle@cityofranchocordova.org>; Liisa Behrends <lbehrends@cityofranchocordova.org>; Lisbet Gullone <lgullone@gmail.com>; Lori Murphy

<lmurphy@cityofranchocordova.org>; lpertl@smud.org; ltaylor@crpd.com; Maria Lopez <mlopez@cityofranchocordova.org>; Mary Pakenham-Walsh <Mary.R.Pakenham-Walsh@usace.army.mil>; Micah Runner <mrunner@cityofranchocordova.org>; Michelle Havens <michelle_havens@fws.gov>; Michelle Mingay <mmingay@cityofranchocordova.org>; mike@cecwest.com; Nancy Quaresma <NANCY_QUARESMA@comcast.com>; Palmer Hilton <philton@meyersnave.com>; Palmer Hilton <philton@cityofranchocordova.org>; phindmarsh@placeworks.com; PGE Plan Review <pgeplanreview@pge.com>; Pham Saechao <psaechao@egusd.net>; Quoc Nham <qnham@cityofranchocordova.org>; rachel.delrio@smud.org; blackmarr@saccounty.net; saccounty wateragency <scwaplanning@saccounty.net>; crrdstaff@metrofire.ca.gov; Sacramento Regional Transit <rtplanning2@sacrt.com>; Sarah Poe <spoe@sacrt.com>; SASD General Review Email <sasddevservices@sacsewer.com>; Sean Twilla <seantwilla@gswater.com>; SMAQMD Project Review <projectreview@airquality.org>; Smud <Entitlements@smud.org>; Stefan Heisler <sheisler@cityofranchocordova.org>; Steve Harriman <sharriman@cityofranchocordova.org>; USFWS <sacramentovalleydivision@doimspp.onmicrosoft.com>; Victor Ramos <vramos@cityofranchocordova.org>; whughes@smud.org; Nicholas Sosa <nsosa@cityofranchocordova.org>; Darcy Goulart <dgoulart@cityofranchocordova.org>
Subject: Notice of Preparation of a Draft Subsequent Environmental Impact Report

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CITY OF RANCHO CORDOVA NOTICE OF PREPARATION OF A DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT FOR THE MILLS CROSSING PROJECT

Dated: January 6, 2023

TO: Responsible Agencies, Interested Parties, and Organizations

SUBJECT: Mills Crossing Project Preparation of Draft SEIR — CITY OF RANCHO CORDOVA, SACRAMENTO COUNTY

The City of Rancho Cordova, as Lead Agency, intends to prepare a Draft Subsequent Environmental Impact Report (SEIR) for the Mills Crossing project (Project). In accordance with Section 15082 of the CEQA Guidelines, the City has prepared this Notice of Preparation (NOP) to provide responsible agencies and other interested parties with sufficient information describing the Project and its potential environmental effects.

PROJECT LOCATION: The Project is located at 10153-10179 Folsom Blvd (APNs: 076-0020-019, -020, -021, & -022)

PROPERTY OWNER: City of Rancho Cordova
APPLICANT/DEVELOPER: City of Rancho Cordova

2729 Prospect Park Drive
2729 Prospect Park Drive
Rancho Cordova, CA 95670
Rancho Cordova, CA 95670

PROJECT DESCRIPTION: The City of Rancho Cordova is proposing a mixed-use project located on a property zoned Residential Mixed Use (RMU) within the Folsom Blvd Specific Plan (FBSP) designation of the General Plan. The project will include approximately 130,700 SF of community-commercial buildings, up to 120 housing units including multi-family apartments and zero lot line townhouse-style homes, up to 2.5 acres of public open space, and a parking structure with up to 325 parking stalls. The Community-commercial component will include health and wellness, community serving commercial, an arts center with black box theater and flex studios, a community event hall, and retail.

Hazardous Waste Sites: Pursuant to Section 15087(c)(6) of the Guidelines for California Environmental Quality Act, the City of Rancho Cordova acknowledges that a portion of the property, specifically the parcel in the west corner of the project site (APN: 076-0020-021) is listed as a site for evaluation on the Department of Toxic Substances Control (DTSC) EnviroStor database (DTSC 2022).

Public Comment Opportunity: The public review and comment period for the NOP will extend for 30 days **starting January 6, 2023 and ending February 6, 2023 at 5:00 PM**. The NOP can be viewed and/or downloaded at the following website: **https://www.cityofranchocordova.org/residents/new-businesses-and-projects/mills-crossing-civic-center**

A Scoping Meeting will be held on Thursday, January 19, 2023 at 6:00 p.m. in the City of Rancho Cordova City Hall, American River Room North, located at 2729 Prospect Park Drive, Rancho Cordova, CA 95670

Comments/Questions: Comments and/or questions regarding the NOP may be directed to:
Stefan Heisler, Housing Manager
City of Rancho Cordova Housing Division
2729 Prospect Park Dr.
Rancho Cordova, CA 95670
or **sheisler@cityofranchocordova.org**

Stefan Heisler
Housing Manager
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670
(916) 851-8757
sheisler@cityofranchocordova.org
www.cityofranchocordova.org

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Department of Transportation
Ron E. Vicari, Director

Divisions
Administration
Maintenance & Operations
Engineering & Planning

County of Sacramento

January 25, 2023

Stefan Heisler
Housing Manager
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670

SUBJECT: COMMENTS ON NOTICE OF PREPARATION OF A DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT AND SCOPING MEETING FOR THE MILLS CROSSING CIVIC CENTER PROJECT.

Stefan Heisler,

The County of Sacramento appreciates the opportunity to comment on the Notice of Preparation of a Draft Subsequent Environmental Impact Report for the Mills Crossing Civic Center Project (The Mills). We anticipate a project of this size may generate enough traffic to cause impacts in Sacramento County. Because of this, we'd ask the city to analyze the following County facilities:

- Intersections (LOS and queuing analysis)
  - Folsom Blvd. at Horn Rd./Paseo Rio Way
  - Folsom Blvd. at Bradshaw Rd.

If any County facilities are impacted from the project, Sacramento County would request to enter a Project Specific Reciprocal Funding Agreement with the City of Rancho Cordova, as necessary. Please feel free to contact me at (916) 876-4108 with any questions or comments.

Sincerely,

_____
Gary Gasperi, P.E., T.E.
Senior, Civil Engineer
Department of Transportation

GG

CC: Matthew Darrow, DOT
Cameron Shew, DOT

Cordova
Recreation & Park District

February 2, 2023

Stefan Heisler
City of Rancho Cordova Housing Division
2729 Prospect Park Dr.
Rancho Cordova, CA 95670
(916) 851-8757

Regarding:	**Mills Crossing Civic Center** **Notice of Preparation (NOP)** **Draft Subsequent Environmental Impact Report (DSEIR)**
Review Documents:	**Mills Crossing Civic Center, Concept 2** **Folsom Boulevard Specific Plan (FBSP)** **Rancho Cordova's Zoning Code and General Plan** **Scoping Meeting Information Provided on January 19, 2023**
Public Comment Opportunity:	**January 6 – February 6, 2023**

Reviewed by: Cordova Recreation and Park District
Laura Taylor, CRPD Park Planning and Development Manager
Lisbet Gullone, CRPD Contract Planner

Cordova Recreation and Park District (CRPD) is responding to the City of Rancho Cordova's Notice of Preparation to prepare a Draft Subsequent Environmental Impact Report for the Mills Crossing Civic Center project.

This comment letter has more requests for clarifications than statements. This is a unique project. Usually CRPD would have more familiarity with a development project before CRPD is asked to comment on an EIR because CRPD, the Developer and City would have already worked together on a land use plan that clearly identifies Quimby park land dedication and City Open Space (or Neighborhood Green Space). The land use plan and ownership responsibilities are often out prior to the NOP for an EIR. CRPD has not previously made comments regarding the proposed Civic Center development.

CRPD Planning staff attended the City's Scoping Meeting held on January 19, 2023. After that meeting Planning staff had email correspondence with Stefan Heisler following up on a few questions.

PROJECT DESCRIPTION

The proposed 10-acre Mills Crossing development is located in the Transit Oriented District Overlay Zone of Mather Field/Mills Light Rail Station on the south side of Folsom Boulevard. Concept 2 of the project will include 130,700 square feet of commercial space, a parking structure for 325 vehicles, 2.5 acres of public open space and up to 120 housing units. The current master plan exhibit shows 48 townhome lots and a four-story apartment building. According to the housing program, the apartment building will include a minimum of 55 affordable units. The final number of residential units within Mills Crossing is not yet known.

Stefan confirmed that the proposed townhomes will be on individual lots. The proposed project falls under Quimby park land requirements for projects with 50 or more lots. Stefan said it is not clear yet if some portion of the public outdoor space in the land use plan is intended to be Quimby park land dedicated to Cordova Recreation and Park District and that further conversations are needed between the City and CRPD.

PARK AND RECREATION SYSTEM IMPACTS

Rancho Cordova's new Civic Center project includes three public outdoor space parcels with a combined area of 2.5 acres. The parcels have inconsistent labels so it is unclear which parcels are intended to be City Open Space or Quimby park land dedications. The project graphic on the City's web page Mills Crossing Civic Center | City of Rancho Cordova indicates a 1.1 acre Community Park. Community Parks are under the jurisdiction of CRPD and are dedicated to CRPD as Quimby park land dedication. However the City Council agenda staff report associated with the 12/6/2021 presentation to the City Council states, "City maintaining ownership, management and control of the community facilities, ...". CRPD has not yet been included on discussions pertaining to the proposed Community Park site. The intent for ownership and maintenance of the Hybrid/Plaza Park also needs clarification.

CRPD anticipates that standard Quimby dedication requirements will be applied to all residential units per the Municipal Code, Chapter 22.40. Once more information about the townhomes and apartment units have been provided CRPD will calculate the Quimby dedication acreage requirement. For order of magnitude consideration, CRPD anticipates the Quimby park land dedication amount for this project to be around 1.25 acres. This project may also need to contribute towards maintenance of the Quimby Community Park and other existing park facilities impacted by the residents of this project by annexing into an existing CRPD Community Facilities District.

CRPD's Recommendations

The Subsequent Environmental Impact Report should include the following information:

- For CRPD to accurately respond to the potential impacts of this project, the land use plan should clearly identify Quimby park land and City Open Space in the proposed project. CRPD looks forward to further discussions with the City on this item.

- Cordova Recreation and Park District should be listed as the jurisdiction responsible for Quimby Parkland.

- Once the Quimby park land (and/or Quimby in-lieu fees) for this project have been clarified for this project then CRPD can provide more information about Quimby in-lieu fees, park impact fees and on-going maintenance assessments for park land.

FUTURE ENTITLEMENT PROCESS

Thank you for notifying CRPD regarding the preparation of additional environmental documents for the Mills Crossing project. Please contact CRPD if you have any questions or comments regarding CRPD's current recommendations.

CRPD will continue to follow the progress of Rancho Cordova's new Civic Center project with great interest.

Respectfully,

Laura L. Taylor, ASLA
Park Planning and Development Manager
Cordova Recreation and Park District

Copy: Patrick Larkin, General Manager for Cordova Recreation and Park District
Elizabeth Sparkman, Rancho Cordova Community Development Director

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February 4, 2023

Stefan Heisler
Housing Manager
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670

NAME OF DEVELOPMENT: Mills Crossing Project
TYPE OF DOCUMENTS: Notice of Preparation (NOP) - Draft Subsequent Environmental Impact Report

Sacramento Regional Transit District (SacRT) appreciates the opportunity to review the NOP for the Draft Subsequent Environmental Impact Report for the Mills Crossing Project. SacRT has provided previous support related to this project, to the Sacramento Area Council of Governments (SACOG) in October 2022 related to the Green Means Go Early Activation Category Application (Attachment 1).

The Mills Crossing Project (Project) is located on a 9.85-acre site at the corner of Folsom Boulevard and La Loma Drive in the City of Rancho Cordova. The Project will include approximately 130,700 SF of community-commercial buildings, up to 120 housing units including multi-family apartments and zero lot line townhouse-style homes, up to 2.5 acres of public open space, and a parking structure with up to 325 parking stalls. The Community-commercial component will include health and wellness, community serving commercial, an arts center with black box theater and flex studios, a community event hall and retail.

SacRT's previous letter of support for the Project was primarily focused on transit-oriented development (TOD) goals, and the opportunities that the Project presents. SacRT has a renewed focus on TOD, which helps the community and surrounding neighborhoods by providing benefits such as higher quality of life, increased transit ridership, reduced traffic congestion and driving, healthier lifestyle through more active transportation, and reduced pollution and environmental destruction. SacRT feels that the Mills Crossing Project will provide these benefits such as these.

In addition to the statements described above, SacRT also has the following comments pertaining to the Project:

- SacRT supports the development patterns with a mix of commercial and residential, as they are appropriate for efficient transit operations and supportive of TOD.
- SacRT supports the high-density residential sites located within the planned community and planned pedestrian pathways and crossings to fixed-route transit options.
- SacRT supports the inclusion of 55-60 multi-family affordable housing units.
- SacRT requests review of a traffic impact analysis, to further understand the methodology for planned number of parking spaces.

Comments listed below pertain specifically to the site plan included in the NOP:

- SacRT is in favor of placing the community facilities, commercial/retail spaces, and the arts center facing Folsom Boulevard, and nearest to transit. Additionally, with the public plaza also fronting

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Folsom Boulevard, this provides easy pedestrian access into the center and onto safe crossings and pathways leading directly to housing units.

- SacRT is interested in a revised layout of the residential units within the community. As it is currently proposed, the affordable housing units are located around the perimeter of the Project area, adjacent to La Loma Drive and at the edge of the property line. SacRT would be interested to see the affordable housing units brought closer to the center of the community, around the neighborhood green space, and closer to the planned pathways to transit. SacRT believes that many residents of affordable housing units are likely to be transit-dependent; therefore, placing these units closer to transit options may be more beneficial.

Thank you again for the opportunity to review the NOP for the Mills Crossing Project. SacRT staff looks forward to the continued review of project information as it becomes available and looks forward to collaborating on the transit goals identified in the future SEIR.

Sincerely,

Sarah Poe
Planner, SacRT

Attachment: SacRT Letter of Support – Green Means Go - Mills Crossing Project

SACRAMENTO METROPOLITAN
AIR QUALITY
MANAGEMENT DISTRICT

February 6, 2023

Stefan Heisler, Housing Manager
City of Rancho Cordova Housing Division
2729 Prospect Park Dr.
Rancho Cordova, CA 95670
sheisler@cityofranchocordova.org

Subject: Mills Crossing Project Preparation of Draft SEIR

Dear Stefan Heisler:

Thank you for providing the Sacramento Metropolitan Air Quality Management District (Sac Metro Air District) with the Notice of Preparation (NOP) of a Draft Subsequent Environmental Impact Report (SEIR) for the Mills Crossing project (Project). The project, located at 10153-10179 Folsom Blvd, will include approximately 130,700 SF of community-commercial buildings, up to 120 housing units, including multi-family apartments and zero lot line townhouse-style homes, up to 2.5 acres of public open space, and a parking structure with up to 325 parking stalls. The Community-commercial component will include health and wellness, community serving commercial, an arts center with black box theater and flex studios, a community event hall, and retail. Sac Metro Air District comments on the project CEQA review follow.

CEQA Review:

CEQA Guide:

The Sac Metro Air District recommends that the City of Rancho Cordova utilize the Guide to Air Quality Assessment in Sacramento County[1] (CEQA Guide) as a resource for preparing the DEIR. The CEQA Guide includes recommended thresholds of significance, analysis methods, mitigation measures, and best management practices for project CEQA review in support of regional plans to attain Federal and State air quality and climate goals, reduce public exposure to toxic air contaminants, and disclose project public health effects.

Construction Analysis:

The DEIR's construction analysis should quantify and disclose projected construction emissions of Criteria Pollutants, pollutants regulated by the Clean Air Act, using methods referenced in the CEQA Guide's chapter on Construction-Generated Criteria Air Pollutant and Precursor Emissions. If construction emissions are projected to exceed applicable Sac Metro Air District thresholds of significance, the DEIR should incorporate mitigation measures for construction emissions using methods in this chapter.

[1] Guide to Air Quality Assesment in Sacramento County: https://www.airquality.org/Businesses/CEQA-Land-Use-Planning/CEQA-Guidance-Tools

All projects must implement Sac Metro Air District Basic Construction Emission Control Practices to use the non-zero particulate matter CEQA thresholds of significance. These are also helpful to ensure compliance with Sac Metro Air District's Rule 403, Fugitive Dust.

Please note that all projects are subject to Sac Metro Air District rules and regulations at the time of construction. Please visit our website to find a list of the most common rules that apply during the construction phase of projects[2].

Operational Analysis:

The DEIR's analysis of operational emissions should quantify and disclose projected operational emissions of Criteria Pollutants using methods referenced in the CEQA Guide's chapter on Operational Criteria Air Pollutant and Precursor Emissions[3]. For projects that will exceed Sac Metro Air District's operational emissions thresholds of significance for reactive organic gases, oxides of nitrogen, or particulate matter, Sac Metro Air District recommends the project proponent develop an Air Quality Mitigation Plan (AQMP), using methods described in the CEQA Guide. Consistent with the City of Rancho Cordova General Plan Air Quality Element[4] [5], the AQMP should include measures to reduce operational emissions of these pollutants by 15% or more and can be a standalone document or incorporated into the environmental document. The AQMP must be referenced in the DEIR as an air quality mitigation measure, appended to the document, and referenced as a condition of approval by the lead agency.

Sac Metro Air District recommends using its Recommended Guidance for Land Use Emission Reductions[6] to develop AQMP measures. Should the project need to develop an AQMP, Sac Metro Air District respectfully requests consultation to review the AQMP for technical adequacy before inclusion in the DEIR.

Analysis of operational Criteria Pollutants should also include an analysis of health effects that may result from operational emissions pursuant to the "Friant Ranch" decision. In December 2018, the California Supreme Court issued a decision in the Sierra Club v. County of Fresno case regarding the "Friant Ranch" project ((2018) 6 Cal. 5th 502). The Court determined that CEQA air quality analysis should include a reasonable effort to connect a project's air quality impacts to likely health consequences or explain why it is not feasible to do so in meaningful detail. To analyze health effects pursuant to the Friant Ranch decision, consult Sac Metro Air

[2] Sac Metro Air District Rules Attachment, https://www.airquality.org/LandUseTransportation/Documents/RulesAttachment10-2020Final.pdf

[3] Sac Metro Air District, Guide to Air Quality Assesment in Sacramento County, Chapter 4-Operational, http://www.airquality.org/LandUseTransportation/Documents/Ch4OperationalFinal10-2020.pdf

[4] City of Rancho Cordova General Plan, Chapter XII, page 11; Action AQ.1.2.2.– "*Require project proponents to coordinate with SMAQMD on appropriate methodologies for evaluating project emissions and air quality impacts (e.g., emissions modeling software, SMAQMD's thresholds of significance, etc.).*" Adopted 6/26/2006

[5] City of Rancho Cordova General Plan, Chapter XII, page 11; Action AQ.1.2.3.– *"Require all new development projects that exceed SMAQMD's thresholds of significance to incorporate design, construction material, and/or other operational features that will result in a 15 percent reduction in emissions when compared to an "unmitigated baseline" project."* Adopted 6/26/2006

[6] Sac Metro Air District Guide to Air Quality Assesment in Sacramento County, http://www.airquality.org/Residents/CEQA-Land-Use-Planning/CEQA-Guidance-Tools

District's Guidance to Address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District.[7]

The operational analysis should also study consistency with local and regional plans, including the City of Rancho Cordovoa's Folsom Boulevard Specific Plan[8] and SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for the Sacramento region[9].

Greenhouse Gases:

If CEQA analysis demonstrates that Project greenhouse gas (GHG) emissions, from construction or operations will exceed applicable Sac Metro Air District thresholds of significance[10], we recommend mitigating emission impacts using mitigation methods referenced in the CEQA Guide's chapter on GHG Emissions[11].

Permit Requirements:

Equipment in the Community center or commercial operations may be subject to Sac Metro Air District permit requirements. Sac Metro Air District Rule 201 requires any business or person to obtain an Authority to Construct and Permit to Operate before installing or operating new equipment or processes that may release or control air pollutants. To ensure that all Sac Metro Air District rules and regulations are considered, please visit the Sac Metro Air District's website[12] for permit application instructions and forms.

Design Comments:

Clean Air Resiliency Center

Climate-exacerbated hazards and disasters will likely compound existing vulnerabilities and challenges for individuals and communities. With increasing extreme weather events, wildfires, and other worsening natural disasters, it becomes critical to develop and establish local resilience centers that can support the needs of the surrounding community—as well as potentially evacuees—at short notice for potentially extended periods.

The City of Rancho Cordova can assist in this effort by anticipating how the proposed community center can be adapted to serve as a resilience center or provide emergency services, such as a cooling center or clean air centers. We recommend that the project be equipped with MERV-13 or higher-rated air filtration systems to serve as a clean air center during wildfire smoke events. We recommend including an onsite renewable energy system, specifically a solar photovoltaic system coupled with battery storage, to provide emergency

[7] Sac Metro Air District Guidance to address the Friant Ranch Ruling for CEQA Projects in the Sac Metro Air District, http://www.airquality.org/LandUseTransportation/Documents/SMAQMDFriantRanchFinalOct2020.pdf
[8] Folsom Boulevard Specific Plan, City of Rancho Cordova, 12/16/2013; https://www.cityofranchocordova.org/home/showdocument?id=10725
[9] Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) for the Sacramento region https://www.sacog.org/metropolitan-transportation-plansustainable-communities-strategy
[10] http://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf
[11] http://www.airquality.org/LandUseTransportation/Documents/Ch6GHG2-26-2021.pdf
[12] Sac Metro Air District Permit & Registration Programs webpage: https://www.airquality.org/Businesses/Permits-Registration-Programs

power. Disaster preparedness training, supplies, and other capacity-building features should be included in the final plan for the Project.

Multi-Modal Accommodation

The DEIR should evaluate project support of bicycle and pedestrian transportation as consistent with adopted policies to encourage multi-modal transportation. Specific policies include those in the Folsom Boulevard Specific Plan[13].

Urban Heat Island (UHI) impacts:

Sac Metro Air District participated in the Capital Region Transportation Sector Urban Heat Island Mitigation Project (UHI Project), producing a report on urban heat island effect impacts on the Sacramento region and mitigation strategies for these impacts. According to the report, the heat island effect already presents a serious challenge for our region. Developed areas in Sacramento range from 3 to 9 degrees Fahrenheit warmer than surrounding areas, which results in decreased air quality and associated public health impacts. The urban heat island results from the conversion of undeveloped land to developed land.

Higher ambient temperatures can increase the formation of ozone, a respiratory system irritant. During extreme heat and extended heat waves, these higher temperatures can lead to heat stress, heat stroke, and even heat mortality, especially for the elderly, the young, and those with pre-existing health conditions.

The recommendations below on strategies to reduce urban heat island effect impacts are consistent with the UHI Project.

- Utilize certified cool roofs, consistent with recommendations for solar reflectance and thermal emittance in the California Building Energy Efficiency Standards Table 170.2-A for the Sacramento Climate Zone (Zone 12), as applicable.

- Utilize “cool pavement” for new outdoor pavement, with the highest albedo possible but no less than 0.25. Please visit Sac Metro Air District’s Recommended Cool Pavement Strategies[14] for guidance on cool pavement strategies

- Incorporate new trees to shade new and existing pavements and structures to the full extent feasible.

- We recommend selecting air-quality supportive tree species for these plantings. A list of air-quality-supportive tree species is available in the Sacramento Tree Foundation’s Shady Eighty guide,[15] along with information for each species on tree shade canopy, the distance between plantings, and more.

Communication:

[13] Folsom Boulevard Specific Plan, City of Rancho Cordova, 12/16/2013; https://www.cityofranchocordova.org/home/showdocument?id=10725
[14] Capital Region Transportation Sector Urban Heat Island Mitigation Plan https://www.airquality.org/LandUseTransportation/Documents/UHI%20Mitigation%20Plan.pdf
[15] Sacramento Tree Foundation Shady 80 Guide; https://sactree.org/best-trees-for-sacramento/

To allow for sufficient time for coordination, please send all future environmental documents and notices to ProjectReview@AirQuality.org.

You may contact me at jhurley@airquality.org or 279-207-1130 if you have questions regarding these comments.

-JJ Hurley

Joseph J. Hurley
Air Quality Planner/Analyst
CEQA & Land Use

Cc: Paul Philley, AICP, CEQA, and Land Use Program Supervisor, Sac Metro Air District

Central Valley Regional Water Quality Control Board

6 February 2023

Stefan Heisler
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670
sheisler@cityofranchocordova.org

Governor's Office of Planning & Research

FEB 6 2023

STATE CLEARING HOUSE

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION FOR THE DRAFT ENVIRONMENTAL IMPACT REPORT, MILLS CROSSING CIVIC CENTER PROJECT, SCH#2023010102, SACRAMENTO COUNTY

Pursuant to the State Clearinghouse's 6 January 2023 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation for the Draft Environmental Impact Report* for the Mills Crossing Civic Center Project, located in Sacramento County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore, our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office of

Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website:
http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at:
https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.

This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit), Construction General Permit Order No. 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Clean Water Act Section 404 Permit

If the project will involve the discharge of dredged or fill material in navigable waters or wetlands, a permit pursuant to Section 404 of the Clean Water Act may be needed from the United States Army Corps of Engineers (USACE). If a Section 404 permit is required by the USACE, the Central Valley Water Board will review the permit application to ensure that discharge will not violate water quality standards. If the project requires surface water drainage realignment, the applicant is advised to contact the Department of Fish and Game for information on Streambed Alteration Permit requirements. If you have any questions regarding the Clean Water Act Section 404 permits, please contact the Regulatory Division of the Sacramento District of USACE at (916) 557-5250.

Clean Water Act Section 401 Permit – Water Quality Certification

If an USACE permit (e.g., Non-Reporting Nationwide Permit, Nationwide Permit, Letter of Permission, Individual Permit, Regional General Permit, Programmatic General Permit), or any other federal permit (e.g., Section 10 of the Rivers and Harbors Act or Section 9 from the United States Coast Guard), is required for this project due to the disturbance of waters of the United States (such as streams and wetlands), then a Water Quality Certification must be obtained from the Central Valley Water Board prior to initiation of project activities. There are no waivers for 401 Water Quality Certifications. For more information on the Water Quality Certification, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/water_issues/water_quality_certification/

Waste Discharge Requirements – Discharges to Waters of the State

If USACE determines that only non-jurisdictional waters of the State (i.e., "non-federal" waters of the State) are present in the proposed project area, the proposed project may require a Waste Discharge Requirement (WDR) permit to be issued by Central Valley Water Board. Under the California Porter-Cologne Water Quality Control Act, discharges to all waters of the State, including all wetlands and other waters of the State including, but not limited to, isolated wetlands, are subject to State regulation. For more information on the Waste Discharges to Surface Water NPDES Program and WDR processes, visit the Central Valley Water Board website at:https://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_surface_water/

Projects involving excavation or fill activities impacting less than 0.2 acre or 400 linear feet of non-jurisdictional waters of the state and projects involving dredging activities impacting less than 50 cubic yards of non-jurisdictional waters of the state may be eligible for coverage under the State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ (General Order 2004-0004). For more information on the General Order 2004-0004, visit the State Water Resources Control Board website at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2004/wqo/wqo2004-0004.pdf

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Threat General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Threat Waiver) R5-2018-0085. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Threat General Order and the application process, visit the Central Valley Water Board website at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Threat Waiver and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2018-0085.pdf

Limited Threat General NPDES Permit

If the proposed project includes construction dewatering and it is necessary to discharge the groundwater to waters of the United States, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. Dewatering discharges are typically considered a low or limited threat to water quality and may be covered under the General Order for *Limited Threat Discharges to Surface Water* (Limited Threat General Order). A complete Notice of Intent must be submitted to the Central Valley Water Board to obtain coverage under the Limited Threat General Order. For more information regarding the Limited Threat General Order and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/general_orders/r5-2016-0076-01.pdf

NPDES Permit

If the proposed project discharges waste that could affect the quality of surface waters of the State, other than into a community sewer system, the proposed project will require coverage under a National Pollutant Discharge Elimination System (NPDES) permit. A complete Report of Waste Discharge must be submitted with the Central Valley Water Board to obtain a NPDES Permit. For more information regarding the NPDES Permit and the application process, visit the Central Valley Water Board website at: https://www.waterboards.ca.gov/centralvalley/help/permit/

you have questions regarding these comments, please contact me at (916) 464-4684 or Peter.Minkel2@waterboards.ca.gov.

Peter Minkel

Peter Minkel
Engineering Geologist

cc: State Clearinghouse unit, Governor's Office of Planning and Research, Sacramento

9 February 2023

City of Rancho Cordova Department of Community Development
Attn: Stefan Heisler, Housing Manager
2729 Prospect Park Drive
Rancho Cordova, CA
Via email: sheisler@cityofranchocordova.org.

Re: Mills Crossing Civic Center Project Notice of Preparation (SCH #2023010102)

Dear Mr. Heisler,

This letter is in response to the Notice of Preparation for the proposed Mills Crossing Civic Center Project that would be built there in Rancho Cordova. I have reviewed the documents and based on what information is provided there, I have several suggestions of topics to be studied as well as elements to be improved.

Based on the image included in the NOP document, it appears that the project would, as proposed, introduce several hazards by design so the study should be sure to acknowledge and propose mitigation for them. The first is that it looks like there would be an unacceptable number of options for entering the parking structure off of La Loma Drive. As currently shown in the image, the entrance would be accessible from all movements to/from La Loma Dr. However, based on measurements using Google Maps, it would be only 100 feet at most from the intersection of La Loma Dr. and Folsom Blvd. That would be far too close to the intersection to allow all turning movements into the garage (and/or from the existing driveway across the street), presenting an additional threat to any bicyclists using the Class II bike lanes which exist on La Loma Dr. Thus, the EIR must either acknowledge this creation of a hazard by design or identify what mitigation measures would be taken to restrict the parking garage to only allow right in/right out.

Additionally, the Project proposes to construct an entirely new street which would run across the site from La Loma Dr. to El Caprice Dr. which based on measurements, would be roughly 900 feet long. The image is not detailed enough to be able to conclusively determine all features and markings that would be used for this new street. However, what we see is not promising and appears to create several hazards by design. The length is nearly a fifth of a mile, which is enough to create a speeding problem if not managed properly. This would be further influenced by the fact that this new street would create a shortcut between El Caprice Dr. and La Loma Dr. which would induce drivers to use it in an attempt to save time, especially for shorter trips such as from the homes behind the Project to retail locations along Folsom Blvd. This is particularly worrisome given the proposal for a prominent crosswalk approximately in the middle which would connect the proposed Public Plaza + Green Space with the proposed Neighborhood Green where people crossing would be put at heightened risk due to the shortcut.

It borders on criminal to propose infrastructure to be built new in 2023 at the earliest which would cast in place known safety problems. Both the potential speeding problem and cut-through traffic present hazards which must not only be acknowledged in the EIR, but actually mitigated too. Thus, this new road should be designed to discourage cut-through traffic as well as speeding. Fortunately, a route that is slow to drive is not going to be as attractive a route to use as a shortcut so the solutions to both problems build upon each other.

An ideal approach for the City to use would be to take advantage of AB 43 (Friedman, 2021) allowing speed limits below 25 MPH to produce a street that is *designed and built* for 20 MPH travel speeds

from the very beginning. (Some excellent models of the complete package of what this looks like are the reconstructions of Mariaplaats[1] or Adriaen van Ostadelaan,[2] both in Utrecht, NL.) Doing so would mean that the project starts with proven measures via keeping speeds and traffic counts low.[3] This would not at all preclude the street from being used by motor traffic and there would continue to be access to all the residential components as well as the parking garage. However, the focus would be to create an environment where that is the sole reason that a vast majority of motor traffic using the street, **not** just an ancillary action done by a few.

With the examples in mind, it is easier to see what is wrong. The first glaring issue with the new street is that it appears to have on-street parking. Given the provision of an entire parking structure as well as on-street parking mixed in with the residential portion of the Project, the need to still provide more on-street parking is questionable. Instead the space that is currently used for parking can be used to narrow the street by using wider sidewalks and bioswales/planter boxes with trees, all of which is instrumental in helping keep speeds low.[4][5] Doing so also would improve any potential water quality and runoff capture issues and requirements by both reducing the paved surface as well as providing infrastructure which actively helps capture and clean the runoff, not make more of it.

Nevertheless, if it is decided that on-street parking is truly necessary, then it should at least be provided in a manner that makes it abundantly clear that it is not a part of the traveled way if/when no cars are parked there. This can take on a variety of forms, but a vital approach is to use bays as well as elements which provide an unmistakable demarcation between the traveled way and the parking bay. While the examples referenced in the videos above provided parking at sidewalk level, other techniques include providing the gutter between the traveled way and parking and sloping the parking away from the sidewalk (see Figure 1), using a contrasting material to pave the parking bays, and of course, providing bulbouts at the locations where parking is not going to be allowed.

Another issue is the proposed crosswalk referenced earlier. Once again, it is not possible to conclusively determine the exact details of what is proposed based on the image from the NOP document. However, it is vital that such a prominent element be done properly the first time around, both to ensure safety and to avoid needing to search for funding to take corrective actions later to fix a hazardous design which did not need to exist in the first place. Thus, a few items are critical for its design, namely making it a raised crosswalk as well as using bulbouts. Additionally, all other crosswalks associated with the Project site need to receive the same treatment, including what would traditionally be considered or provided in an unmarked manner.

---

[1] BicycleDutch. (2015). *Mariaplaats Utrecht Reconstruction [423].* Retrieved February 15, 2023, from https://www.youtube.com/watch?v=JbNA96FVWyg.

[2] BicycleDutch. (2016). *The reconstructed A. v. Ostadelaan in Utrecht (Netherlands) [502]*. Retrieved February 15, 2023, from https://www.youtube.com/watch?v=Ibcly3iLpS8.

[3] Grundy, C., Steinbach, R., Edwards, P., Green, J., Armstrong, B., & Wilkinson, P. (2009). Effect of 20 mph traffic speed zones on road injuries in London, 1986-2006: controlled interrupted time series analysis. *Bmj*, *339*.

[4] Gitelman, V., Pesahov, F., Carmel, R., & Bekhor, S. (2016). The identification of infrastructure characteristics influencing travel speeds on single-carriageway roads to promote self-explaining roads. *Transportation research procedia*, *14*, 4160-4169.

[5] PE, W. E. M., Coppola, N., & Golombek, Y. (2018). Urban clear zones, street trees, and road safety. *Research in Transportation Business & Management*, *29*, 136-143.

Marven E. Norman
PO Box 1147
San Bernardino, CA 92402

Finally, while it is often presented as a "conservative" choice for developments to overbuild car infrastructure and ignore other forms of transportation for purposes of analysis, given the location of the Project directly adjacent a rail transit station, it is unfathomable that the studies done for this Project would need to make that same error. In a similar vein, it is vital that any offsite traffic mitigation deemed to be "necessary" for the Project **not** contradict and undermine the existing active transportation plans for the City, County, Caltrans, or any other entities. Instead, those items should at a bare minimum, build out what is included in those plans and ideally use the opportunity to actually upgrade those recommended facilities based on the latest standards.

Thank you for taking the time to receive and consider these comments. If there are any questions, please do not hesitate to reach out for clarification.

Sincerely,

Marven E. Norman

CC: SABA

Marven E. Norman
PO Box 1147
San Bernardino, CA 92402

Figure 1: Parking bays in Redlands, CA.

Marven E. Norman
PO Box 1147
San Bernardino, CA 92402

Appendices

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Appendix 5.1-1 Air Quality and Greenhouse Gas Emission Assessment

Air Quality & Greenhouse Gas Emissions Assessment

Mills Crossing

Rancho Cordova, California

Prepared For:

Placeworks, Inc.
101 Parkshore Drive, Suite 112
Folsom, California 95630

Prepared By:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

June 2023

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Attachment A – CalEEMod Output File for Criteria Pollutant and Greenhouse Gas Emissions

LIST OF ACRONYMS AND ABBREVIATIONS

°F	Degrees Fahrenheit
µg/m3	Micrograms per cubic meter; ppm = parts per million
1992 CO Plan	1992 Federal Attainment Plan for Carbon Monoxide
AB	Assembly Bill
APN	Assessor's Parcel Number
AQMD	Air Quality Management District
ATCM	airborne toxics control measure
BAAQMD	Bay Area Air Quality Management District
BACT	Best Available Control Technology
BMP	Best Management Practices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAAP	Climate Action and Adaptation Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCAA	California Clean Air Act
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CH_4	Methane
City	City of Rancho Cordova
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
County	Sacramento County
DPM	Diesel particulate matter
EO	Executive Order
FB-RMU	Residential Mixed-Use
FBSP	Folsom Boulevard Specific Plan
GHG	Greenhouse gas
GWP	Global warming potential
HVAC	Heating, ventilation, and air conditioning

LIST OF ACRONYMS AND ABBREVIATIONS

IPCC	Intergovernmental Panel on Climate Change
MPO	Metropolitan Planning Organization
MTP/SCS	Metropolitan Transportation Plan/Sustainable Communities Strategy
N_2O	Nitrous oxide
NAAQS	National Ambient Air Quality Standards
NO_2	Nitrogen dioxide
NO_x	Nitric oxides
O_3	Ozone
PERP	portable equipment registration
PM	Particulate matter
PM_{10}	Coarse particulate matter
$PM_{2.5}$	Fine particulate matter
ppm	Parts per million
PRC	Public Resources Code
Project	Mills Crossing Project
RMU (FBSP)	Residential Mixed-Use – Folsom Boulevard Specific Plan
ROGs	Reactive organic gases
SACOG	Sacramento Area Council of Governments
SB	Senate Bill
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SMAQMD	Sacramento Metropolitan Air Quality Management District
SIP	State Implementation Plan
SO_2	Sulfur dioxide
SO_x	Sulfur oxides
SVAB	Sacramento Valley Air Basin
TACs	Toxic air contaminants
TDM	Transportation Demand Management
USEPA	U.S. Environmental Protection Agency
VOCs	Volatile organic compounds
VMT	Vehicle Miles Traveled

1.0 INTRODUCTION

This report documents the results of an Air Quality and Greenhouse Gas (GHG) Emissions Assessment completed for the Mills Crossing Project (Project), which proposes the construction of a community center with a health and wellness center, a parking structure, arts center and theater, a multifamily and single-family housing development, commercial and retail businesses, and community and event centers. This assessment was prepared using methodologies and assumptions recommended in the rules and regulations of the Sacramento Metropolitan Air Quality Management District (SMAQMD). Regional and local existing conditions are presented, along with pertinent emissions standards and regulations. The purpose of this assessment is to estimate Project-generated criteria air pollutants and GHG emissions attributable to the Project and to determine the level of impact the Project would have on the surrounding environment.

1.1 Project Location and Description

The Project Site is a 9.85-acre property located at the corner of Folsom Boulevard and La Loma Drive in the City of Rancho Cordova, Sacramento County, and encompasses the following Assessor's Parcel Numbers (APNs): 076-0020-019, -20, -21, -22. The Proposed Project Area is roughly bounded by Folsom Boulevard to the south, La Loma Drive to the west, El Caprice Drive to the east, and residential housing to the north fronting Malaga Way and Ashbury Court. Surrounding land uses includes the residential uses to the north, residential uses and Folsom Lake College/Rancho Cordova Civic Center to the east, light industrial uses to the south, and commercial and residential uses to the west. The Mather Field/Mills Train Station is located directly across Folsom Boulevard from the Project Site and can be accessed via a pedestrian crosswalk with stop-traffic control. Additionally, the site is fronted by a Class II bike lane on Folsom Boulevard.

The Project Site is located within the Folsom Boulevard Specific Plan area. The Folsom Boulevard Specific Plan (FBSP or Specific Plan) is the primary planning tool the City uses to guide future development and redevelopment within the Specific Plan area. It seeks to increase the density of both housing and commercial activity; increase pedestrian, bicycle, and transit trips to, from, and through the area; increase the visibility of the corridor as a destination; and change the dynamic and image to that of a high demand, thriving urban area. The site is zoned Residential Mixed-Use – Folsom Boulevard Specific Plan (RMU [FBSP]). The RMU (FBSP) Zoning District is intended to designate property for the development of medium and high-density housing (between 6.1 and 40 dwelling units per acre) that may incorporate office and/or commercial services. While the predominant use of the development is residential, the City encourages the vertical and/or horizontal integration of commercial and/or office uses that are compatible with the residential development.

The Project Site has a City of Rancho Cordova General Plan land use designation of Residential Mixed-Use (FB-RMU).

The Project proposes a mix of land uses as follows:

Community-Commercial Buildings

The community-commercial buildings would include up to 140,000 square feet of uses, and would include the following:

- Health and Wellness
    - Community Health Clinic – up to 30,000 square feet
- Events and Meetings Space
    - Space for meetings, community and cultural events, banquet, and weddings – up to 15,000 square feet
- Arts Center (Subtotal – up to 35,000 square feet)
    - Flex Theater (black/white/green box) – up to 18,000 square feet
    - Flexible Classrooms and Rehearsal Space – up to 6,000 square feet
    - Production/Artist's Studios – up to 4,000 square feet
    - Gallery/Exhibits – up to 4,000 square feet
    - Administrative Space – up to 3,000 square feet
- Community-Commercial Building (Subtotal – up to 52,500 square feet)
    - Commercial Office-Anchor – up to 25,000 square feet
    - Commercial Office-Shared – up to 10,000 square feet
    - Flexible Studios 1 – up to 5,000 square feet
    - Flexible Studios 2 – up to 7,500 square feet
    - Commercial Kitchen – up to 5,000 square feet
- Commercial-Retail (Subtotal – up to 7,500 square feet)
    - Fresh Market, Food and Beverage, Café, Retail – up to 5,000 square feet
    - Café – up to 2,500 square feet

Housing

The Proposed Project would provide up to 120 dwelling units, as follows:

- Between 55-60 Multi-Family Affordable Apartments
- Between 50-60 Zero Lot Line Townhouse-Style Homes for Sale

Public Open Space

The Proposed Project would include up to 2.5 acres of public open space as follows:

- Between 1.3-1.5 acres of Neighborhood and Community Greens
- Between 0.75-1.0-acre of Plaza and Green Space

Parking Structure

The Proposed Project would include a parking structure with between 275-325 parking spaces.

The Project Site would be accessible via Folsom Boulevard to the south and La Loma Drive to the west of the Project Site.

Construction activities would involve the removal of vegetation and paved areas; grading to finished design elevations; excavation to allow construction of building foundations, utilities, roadways, parking areas, sidewalks, and landscaping. Equipment used during construction may include, but is not limited to, crawler tractors, tractors, loaders, backhoes, excavators, graders, scrapers, cranes, forklifts, generator sets, welders, pavers, paving equipment, rollers, and air compressors. It is anticipated that construction of the Project would occur from 2024 through 2029.

2.0 AIR QUALITY

2.1 Air Quality Setting

Air quality in a region is determined by its topography, meteorology, and existing air pollutant sources. These factors are discussed below, along with the current regulatory structure that applies to the Sacramento Valley Air Basin (SVAB), which encompasses the Project Site, pursuant to the regulatory authority of the SMAQMD.

Ambient air quality is commonly characterized by climate conditions, the meteorological influences on air quality, and the quantity and type of pollutants released. The air basin is subject to a combination of topographical and climatic factors that reduce the potential for high levels of regional and local air pollutants. The following section describes the pertinent characteristics of the air basin and provides an overview of the physical conditions affecting pollutant dispersion in the Project Area.

2.1.1 Sacramento Valley Air Basin

The California Air Resources Board CARB divides the State into air basins that share similar meteorological and topographical features. The Project site lies in the SVAB, which is comprised all of Butte, Colusa, Sacramento, Shasta, Sutter, Tehama, Yolo, and Yuba counties and parts of Solano and Placer County. The air basin is relatively flat, bordered by mountains to the east, west, and north and by the San Joaquin Valley to the south. Air flows into the SVAB through the Carquinez Strait, moving across the Sacramento Delta, and bringing pollutants from the heavily populated San Francisco Bay Area. The climate is characterized by hot, dry summers and cool, rainy winters. Characteristic of SVAB winter weather are periods of dense and persistent low-level fog, which are most prevalent between storm systems. From May to October, the region's intense heat and sunlight lead to high ozone pollutant concentrations. Summer inversions are strong and frequent but are less troublesome than those that occur in the fall. Autumn inversions, formed by warm air subsiding in a region of high pressure, have accompanying light winds that do not provide adequate dispersion of air pollutants.

2.1.1.1 Meteorological Influences on Air Quality

Regional flow patterns affect air quality patterns by directing pollutants downwind of sources. Localized meteorological conditions, such as moderate winds, disperse pollutants and reduce pollutant concentrations. However, the mountains surrounding the SVAB can create a barrier to airflow, which can trap air pollutants in the valley when meteorological conditions are right and a temperature inversion exists. The highest frequency of air stagnation occurs in the autumn and early winter when large high-pressure cells lie over the valley. The lack of surface wind during these periods and the reduced vertical air flow caused by less surface heating reduces the influx of outside air and allows air pollutants to become concentrated in a stable volume of air. The surface concentrations of pollutants are highest when these conditions are combined with smoke from agricultural burning or when temperature inversions trap cool air, fog, and pollutants near the ground.

The ozone season (May through October) in the valley is characterized by stagnant morning air or light winds, with the delta sea breeze arriving in the afternoon out of the southwest. Usually, the evening breeze transports the airborne pollutants to the north out of the valley. During about half of the days from July to September, however, a phenomenon called the Schultz Eddy prevents this from occurring. Instead of allowing the prevailing wind patterns to move north and carry the pollutants out of the valley, the Schultz Eddy causes the wind pattern to circle back south. This phenomenon exacerbates the pollution levels in the area and increases the likelihood of exceeding federal or state standards.

2.1.2 Criteria Air Pollutants

Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health with a determined margin of safety. Ozone (O_3), coarse particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are generally considered to be regional pollutants because they or their precursors affect air quality on a regional scale. Pollutants such as carbon monoxide (CO), nitrogen dioxide (NO_2), and sulfur dioxide (SO_2) are considered to be local pollutants because they tend to accumulate in the air locally. PM is also considered a local pollutant. Health effects commonly associated with criteria pollutants are summarized in Table 2-1.

Table 2-1. Criteria Air Pollutants- Summary of Common Sources and Effects

Pollutant	Major Manmade Sources	Human Health & Welfare Effects
CO	An odorless, colorless gas formed when carbon in fuel is not burned completely; a component of motor vehicle exhaust.	Reduces the ability of blood to deliver oxygen to vital tissues, effecting the cardiovascular and nervous system. Impairs vision, causes dizziness, and can lead to unconsciousness or death.
NO_2	A reddish-brown gas formed during fuel combustion for motor vehicles, energy utilities and industrial sources.	Respiratory irritant; aggravates lung and heart problems. Precursor to ozone and acid rain. Causes brown discoloration of the atmosphere.
O_3	Formed by a chemical reaction between reactive organic gases (ROGs) and nitrous oxides (N_2O) in the presence of sunlight. Common sources of these precursor pollutants include motor vehicle exhaust, industrial emissions, solvents, paints and landfills.	Irritates and causes inflammation of the mucous membranes and lung airways; causes wheezing, coughing and pain when inhaling deeply; decreases lung capacity; aggravates lung and heart problems. Damages plants; reduces crop yield.
PM_{10} & $PM_{2.5}$	Power plants, steel mills, chemical plants, unpaved roads and parking lots, wood-burning stoves and fireplaces, automobiles and others.	Increased respiratory symptoms, such as irritation of the airways, coughing, or difficulty breathing; aggravated asthma; development of chronic bronchitis; irregular heartbeat; nonfatal heart attacks; and premature death in people with heart or lung disease. Impairs visibility (haze).
SO_2	A colorless, nonflammable gas formed when fuel containing sulfur is burned. Examples are refineries, cement manufacturing, and locomotives.	Respiratory irritant. Aggravates lung and heart problems. Can damage crops and natural vegetation. Impairs visibility.

Source: California Air Pollution Control Officers Association (CAPCOA 2013)

2.1.2.1 Carbon Monoxide

CO in the urban environment is associated primarily with the incomplete combustion of fossil fuels in motor vehicles. CO combines with hemoglobin in the bloodstream and reduces the amount of oxygen that can be circulated through the body. High CO concentrations can cause headaches, aggravate cardiovascular disease and impair central nervous system functions. CO concentrations can vary greatly over comparatively short distances. Relatively high concentrations of CO are typically found near crowded intersections and along heavy roadways with slow moving traffic. Even under the most severe meteorological and traffic conditions, high concentrations of CO are limited to locations within relatively short distances of the source. Overall CO emissions are decreasing as a result of the Federal Motor Vehicle Control Program, which has mandated increasingly lower emission levels for vehicles manufactured since 1973. CO levels in the SVAB are in compliance with the state and federal one- and eight-hour standards.

2.1.2.2 Nitrogen Oxides

Nitrogen gas comprises about 80 percent of the air and is naturally occurring. At high temperatures and under certain conditions, nitrogen can combine with oxygen to form several different gaseous compounds collectively called nitric oxides (NO_x). Motor vehicle emissions are the main source of NO_x in urban areas. NO_x is very toxic to animals and humans because of its ability to form nitric acid with water in the eyes, lungs, mucus membrane, and skin. In animals, long-term exposure to NO_x increases susceptibility to respiratory infections, and lowering resistance to such diseases as pneumonia and influenza. Laboratory studies show that susceptible humans, such as asthmatics, who are exposed to high concentrations can suffer from lung irritation or possible lung damage. Precursors of NO_x, such as NO and NO_2, attribute to the formation of O_3 and $PM_{2.5}$. Epidemiological studies have also shown associations between NO_2 concentrations and daily mortality from respiratory and cardiovascular causes and with hospital admissions for respiratory conditions.

2.1.2.3 Ozone

O_3 is a secondary pollutant, meaning it is not directly emitted. It is formed when volatile organic compounds (VOCs) or ROGs and NO_x undergo photochemical reactions that occur only in the presence of sunlight. The primary source of ROG emissions is unburned hydrocarbons in motor vehicle and other internal combustion engine exhaust. NO_x forms as a result of the combustion process, most notably due to the operation of motor vehicles. Sunlight and hot weather cause ground-level O_3 to form. Ground-level O_3 is the primary constituent of smog. Because O_3 formation occurs over extended periods of time, both O_3 and its precursors are transported by wind and high O_3 concentrations can occur in areas well away from sources of its constituent pollutants.

People with lung disease, children, older adults, and people who are active can be affected when O_3 levels exceed ambient air quality standards. Numerous scientific studies have linked ground-level O_3 exposure to a variety of problems including lung irritation, difficult breathing, permanent lung damage to those with repeated exposure, and respiratory illnesses.

2.1.2.4 Particulate Matter

PM includes both aerosols and solid particulates of a wide range of sizes and composition. Of concern are those particles smaller than or equal to 10 microns in diameter size (PM_{10}) and small than or equal to 2.5 microns in diameter ($PM_{2.5}$). Smaller particulates are of greater concern because they can penetrate deeper into the lungs than larger particles. PM_{10} is generally emitted directly as a result of mechanical processes that crush or grind larger particles or form the resuspension of dust, typically through construction activities and vehicular travel. PM_{10} generally settles out of the atmosphere rapidly and is not readily transported over large distances. $PM_{2.5}$ is directly emitted in combustion exhaust and is formed in atmospheric reactions between various gaseous pollutants, including NO_x, sulfur oxides (SO_x) and VOCs. $PM_{2.5}$ can remain suspended in the atmosphere for days and/or weeks and can be transported long distances.

The principal health effects of airborne PM are on the respiratory system. Short-term exposure of high $PM_{2.5}$ and PM_{10} levels are associated with premature mortality and increased hospital admissions and emergency room visits. Long-term exposure is associated with premature mortality and chronic respiratory disease.

According to the U.S. Environmental Protection Agency (USEPA), some people are much more sensitive than others to breathing PM_{10} and $PM_{2.5}$. People with influenza, chronic respiratory and cardiovascular diseases, and the elderly may suffer worse illnesses; people with bronchitis can expect aggravated symptoms; and children may experience decline in lung function due to breathing in PM_{10} and $PM_{2.5}$. Other groups considered sensitive include smokers and people who cannot breathe well through their noses. Exercising athletes are also considered sensitive because many breathe through their mouths.

2.1.3 Toxic Air Contaminants

In addition to the criteria pollutants discussed above, toxic air contaminants (TACs) are another group of pollutants of concern. TACs are considered either carcinogenic or noncarcinogenic based on the nature of the health effects associated with exposure to the pollutant. For regulatory purposes, carcinogenic TACs are assumed to have no safe threshold below which health impacts would not occur, and cancer risk is expressed as excess cancer cases per one million exposed individuals. Noncarcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor vehicle exhaust. Public exposure to TACs can result from emissions from normal operations, as well as from accidental releases of hazardous materials during upset conditions. The health effects of TACs include cancer, birth defects, neurological damage, and death.

Most recently, CARB identified diesel particulate matter (DPM) as a TAC. DPM differs from other TACs in that it is not a single substance but rather a complex mixture of hundreds of substances. Diesel exhaust is a complex mixture of particles and gases produced when an engine burns diesel fuel. DPM is a concern because it causes lung cancer; many compounds found in diesel exhaust are carcinogenic. DPM includes the particle-phase constituents in diesel exhaust. The chemical composition and particle sizes of DPM vary between different engine types (heavy-duty, light-duty), engine operating conditions (idle, accelerate, decelerate), fuel formulations (high/low sulfur fuel), and the year of the engine (USEPA 2002). Some short-term (acute) effects of diesel exhaust include eye, nose, throat, and lung irritation, and diesel exhaust can cause coughs, headaches, light-headedness, and nausea. DPM poses the greatest health risk among the TACs; due to their extremely small size, these particles can be inhaled and eventually trapped in the bronchial and alveolar regions of the lung.

2.1.4 Ambient Air Quality

Ambient air quality at the Project Site can be inferred from ambient air quality measurements conducted at nearby air quality monitoring stations. CARB maintains more than 60 monitoring stations throughout California. O_3, PM_{10} and $PM_{2.5}$ are the pollutant species most potently affecting the Project region. As described in detail below, the region is designated as a nonattainment area for the federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3 and PM_{10} (CARB 2022b). The Sacramento – Branch Center #2 air monitoring station (3847 Branch Cener Road, Sacramento), located

approximately 2.7 miles southwest of the Project Site, monitors ambient concentrations of PM_{10}. The Sacramento-Del Paso Manor air monitoring station (2701 Avalon Drive, Sacramento), located approximately 3.5 miles northwest of the Project Site, monitors ambient concentrations of O_3 and $PM_{2.5}$. Ambient emissions concentrations vary due to localized variation in emissions sources and climate conditions, but the concentrations from this air quality monitoring station should be considered "generally" representative of ambient concentrations in the Project Area.

Table 2-2 summarizes the published data concerning O_3, $PM_{2.5}$ and PM_{10} from the Sacramento – Branch Cener #2 monitoring station and the Sacramento-Del Paso Manor monitoring station. O_3, PM_{10} and $PM_{2.5}$ are the pollutant species most potently affecting the Project region.

Table 2-2. Summary of Ambient Air Quality Data

Pollutant Standards	2019	2020	2021
O_3 - Sacramento-Del Paso Manor Monitoring Station			
Max 1-hour concentration (ppm)	0.087	0.120	0.110
Max 8-hour concentration (ppm) (state/federal)	0.069 / 0.069	0.085 / 0.085	0.091 / 0.091
Number of days above 1-hour standard (state/federal)	0 / 0	4 / 0	7 / 0
Number of days above 8-hour standard (state/federal)	0 / 0	10 / 10	18 / 17
PM_{10} - Sacramento-Branch Center #2 Monitoring Station			
Max 24-hour concentration (µg/m^3) (state/ federal)	55.0 / 53.0	203.0 / 201.0	58.0 57.0
Number of days above 24-hour standard (state/federal)	* / *	* / 7.7	25.4 / 0
$PM_{2.5}$ - Sacramento- Del Paso Manor Monitoring Station			
Max 24-hour concentration (µg/m^3) (state/federal)	41.4 / 41.4	147.3 / 147.3	95.4 / 90.0
Number of days above federal 24-hour standard	3.0	28.1	5.0

Source: CARB 2022a
Note: µg/m^3 = micrograms per cubic meter; ppm = parts per million
* = Insufficient data available

The USEPA and CARB designate air basins or portions of air basins and counties as being in "attainment" or "nonattainment" for each of the criteria pollutants. Areas that do not meet the standards are classified as nonattainment areas. The National Ambient Air Quality Standards (NAAQS) (other than O_3, PM_{10} and $PM_{2.5}$ and those based on annual averages or arithmetic mean) are not to be exceeded more than once per year. The NAAQS for O_3, PM_{10}, and $PM_{2.5}$ are based on statistical calculations over one- to three-year

periods, depending on the pollutant. The California Ambient Air Quality Standards (CAAQS) are not to be exceeded during a three-year period. The attainment status for the Sacramento County portion of the SVAB, which encompasses the Project Site, is included in Table 2-3.

Table 2-3. Attainment Status of Criteria Pollutants in the Sacramento County Portion of the SVAB

Pollutant	State Designation	Federal Designation
O_3	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Attainment	Nonattainment
CO	Attainment	Unclassified/Attainment
NO_2	Attainment	Unclassified/Attainment
SO_2	Attainment	Unclassified/Attainment

Source: CARB 2022b

The determination of whether an area meets the state and federal standards is based on air quality monitoring data. Some areas are unclassified, which means there is insufficient monitoring data for determining attainment or nonattainment. Unclassified areas are typically treated as being in attainment. Because the attainment/nonattainment designation is pollutant-specific, an area may be classified as nonattainment for one pollutant and attainment for another. Similarly, because the state and federal standards differ, an area could be classified as attainment for the federal standards of a pollutant and as nonattainment for the state standards of the same pollutant. The region is designated as a nonattainment area for the federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3 and PM_{10} (CARB 2022b).

2.1.5 Sensitive Receptors

Sensitive receptors are defined as facilities or land uses that include members of the population who are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptors to the Project Site include residences directly adjacent to the west, north, and east.

2.2 Regulatory Framework

2.2.1 Federal

2.2.1.1 Clean Air Act

The Clean Air Act (CAA) of 1970 and the CAA Amendments of 1971 required the USEPA to establish the NAAQS, with states retaining the option to adopt more stringent standards or to include other specific pollutants.

These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those "sensitive receptors" most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed.

The USEPA has classified air basins (or portions thereof) as being in attainment, nonattainment, or unclassified for each criteria air pollutant, based on whether or not the NAAQS have been achieved. If an area is designated unclassified, it is because inadequate air quality data were available as a basis for a nonattainment or attainment designation. Table 2-3 lists the federal attainment status of the SVAB for the criteria pollutants.

2.2.2 State

2.2.2.1 California Clean Air Act

The California Clean Air Act (CCAA) allows the State to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. CARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both federal and state air pollution control programs within California, including setting the CAAQS. CARB also conducts research, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. CARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hairspray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. CARB also has primary responsibility for the development of California's State Implementation Plan (SIP), for which it works closely with the federal government and the local air districts.

2.2.2.2 California State Implementation Plan

The federal CAA (and its subsequent amendments) requires each state to prepare an air quality control plan referred to as the SIP. The SIP is a living document that is periodically modified to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The CAA Amendments dictate that states containing areas violating the NAAQS revise their SIPs to

include extra control measures to reduce air pollution. The SIP includes strategies and control measures to attain the NAAQS by deadlines established by the CAA. The USEPA has the responsibility to review all SIPs to determine if they conform to the requirements of the CAA.

State law makes CARB the lead agency for all purposes related to the SIP. Local air districts and other agencies prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. To comply with California law, the SMAQMD has rolled out a series of air quality plans and reports that constitute the SIP for the Sacramento County portion of the SVAB. The most recent report, the *2021 Sacramento County Second 10-Year PM_{10} Maintenance Plan* as a comprehensive strategy to update emission inventories, demonstrates maintenance efforts and updated control measures, and establishes new motor vehicle emission budgets. Additional plans include the SMAQMD *2017 Sacramento Regional 2008 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (including 2018 updates) and the *$PM_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento $PM_{2.5}$ Nonattainment Area* (2013). These air quality planning documents present comprehensive strategies to reduce the O_3 precursor pollutants (ROG and NOx) as well as PM emissions from stationary, area, mobile, and indirect sources.

2.2.2.3 Tanner Air Toxics Act & Air Toxics "Hot Spots" Information and Assessment Act

CARB's statewide comprehensive air toxics program was established in 1983 with Assembly Bill (AB) 1807, the Toxic Air Contaminant Identification and Control Act (Tanner Air Toxics Act of 1983). AB 1807 created California's program to reduce exposure to air toxics and sets forth a formal procedure for CARB to designate substances as TACs. Once a TAC is identified, CARB adopts an airborne toxics control measure (ATCM) for sources that emit designated TACs. If there is a safe threshold for a substance at which there is no toxic effect, the control measure must reduce exposure to below that threshold. If there is no safe threshold, the measure must incorporate toxics best available control technology to minimize emissions.

CARB also administers the State's mobile source emissions control program and oversees air quality programs established by state statute, such as AB 2588, the Air Toxics "Hot Spots" Information and Assessment Act of 1987. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized by the air quality management district or air pollution control district. High priority facilities are required to perform a health risk assessment (HRA) and, if specific thresholds are exceeded, required to communicate the results to the public in the form of notices and public meetings. In September 1992, the "Hot Spots" Act was amended by SB 1731, which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

2.2.3 Local

2.2.3.1 Sacramento Metropolitan Air Quality Management District

The SMAQMD is the air pollution control agency for Sacramento County, including the Project Site. The agency's primary responsibility is ensuring that the NAAQS and CAAQS are attained and maintained in the Sacramento County portion of the SVAB. The SMAQMD coordinates the work of government agencies, businesses, and private citizens to achieve and maintain healthy air quality for the Sacramento area. The

SMAQMD develops market-based programs to reduce emissions associated with mobile sources, processes permits, ensures compliance with permit conditions and with SMAQMD rules and regulations, and conducts long-term planning related to air quality. The SMAQMD is also responsible for adopting and enforcing rules and regulations concerning air pollutant sources, issuing permits for stationary sources of air pollutants, inspecting stationary sources of air pollutants, responding to citizen complaints, monitoring ambient air quality and meteorological conditions, awarding grants to reduce motor vehicle emissions, and conducting public education campaigns, as well as many other activities.

The following is a list of noteworthy SMAQMD rules that are required of construction activities associated with the Proposed Project:

- **Rule 201: General Permit Requirements.** Any project that includes the use of equipment capable of releasing emissions to the atmosphere may require permit(s) from SMAQMD prior to equipment operation. The applicant, developer, or operator of a project that includes an emergency generator, boiler, or heater should contact the SMAQMD early to determine if a permit is required, and to begin the permit application process. Other general types of uses that require a permit include, but are not limited to, dry cleaners, gasoline stations, spray booths, and operations that generate airborne particulate emissions. Portable construction equipment (e.g. generators, compressors, pile drivers, lighting equipment, etc.) with an internal combustion engine over 50 horsepower is required to have a SMAQMD permit or a CARB portable equipment registration (PERP).
- **Rule 402: Nuisance.** The purpose of this rule is to limit emissions which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause or have natural tendency to cause injury or damage to business or property.
- **Rule 403: Fugitive Dust.** The purpose of this rule is to require that reasonable precautions be taken so as not to cause or allow the emissions of fugitive dust from non-combustion sources from being airborne beyond the property line from which the emission originates.
- **Rule 442: Architectural Coatings.** The purpose of this rule is to limit the emissions of volatile organic compounds from the use of architectural coatings supplied, sold, offered for sale, applied, solicited for application, or manufactured for use within the SMAQMD.

2.3 Air Quality Emissions Impact Assessment

2.3.1 Thresholds of Significance

The impact analysis provided below is based on the following California Environmental Quality Act (CEQA) Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to air quality if it would do any of the following:

1) Conflict with or obstruct implementation of any applicable air quality plan.

2) Result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

3) Expose sensitive receptors to substantial pollutant concentrations.

4) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people).

2.3.1.1 Sacramento Metropolitan Air Quality Management District Thresholds

The significance criteria established by the applicable air quality management or air pollution control district (SMAQMD) may be relied upon to make the above determinations. According to the SMAQMD, an air quality impact is considered significant if the Proposed Project would violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations. The SMAQMD has established thresholds of significance for air quality for construction and operational activities of land use development projects such as that proposed, as shown in Table 2-4.

Table 2-4. SMAQMD Regional Significance Thresholds

Air Pollutant	Construction Activities		Operations	
Reactive Organic Gas	-		65 pounds/day	
Carbon Monoxide	-		-	
Nitrogen Oxide	85 pounds/day		65 pounds/day	
Sulfur Oxide	-		-	
Coarse Particulate Matter (PM_{10})	*80 pounds/day (If all feasible BACT/BMP applied)	*14.6 tons/year	*80 pounds/day (If all feasible BACT/BMP applied)	*14.6 tons/year
Fine Particulate Matter ($PM_{2.5}$)	*82 pounds/day (If all feasible BACT/BMP applied)	*15 tons/year	*82 pounds/day (If all feasible BACT/BMP applied)	*15 tons/year

Source: SMAQMD 2020
Notes: BACT= best available control technology; BMP = best management practices
* = The allowable threshold level is 0 pounds/day or 0 tons/year unless all SMAQMD recommended BACT/BMP are implemented.

By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size, by itself, to result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project's individual emissions exceed its identified significance thresholds, the project would be cumulatively considerable. Projects that do not exceed any significance thresholds would not be considered cumulative considerable.

2.3.2 Methodology

Air quality impacts were assessed in accordance with methodologies recommended by the SMAQMD. Where criteria air pollutant quantification was required, emissions were modeled using the California Emissions Estimator Model (CalEEMod), version 2022.1. CalEEMod is a statewide land use emissions computer model designed to quantify potential criteria pollutant emissions associated with both construction and operations from a variety of land use projects. Project construction-generated air pollutant emissions were calculated primarily using CalEEMod model defaults for Sacramento County, though the timing of construction was adjusted to reflect the anticipated construction schedule of 2024 through 2029. Operational air pollutant emissions were based on the land use mix identified in Section 1.0 of this report and traffic trip generation rates provided by DKS Associates (2023). Two design features attributable to the Project are accounted for in the emissions modeling calculations, specifically the Project's proximity to transit and its number of affordable/below-market residential units.

2.3.3 Impact Analysis Impact Analysis

2.3.3.1 Project Construction-Generated Criteria Air Quality Emissions

Construction Significance Analysis

Construction-generated emissions are temporary and short-term but have the potential to represent a significant air quality impact. Three basic sources of short-term emissions will be generated through construction of the Proposed Project: operation of the construction vehicles (i.e., excavators, trenchers, dump trucks), the creation of fugitive dust during clearing and grading, and the use of asphalt or other oil-based substances during paving activities. Construction activities such as excavation and grading operations, construction vehicle traffic, and wind blowing over exposed soils would generate exhaust emissions and fugitive PM emissions that affect local air quality at various times during construction. Effects would be variable depending on the weather, soil conditions, the amount of activity taking place, and the nature of dust control efforts. The dry climate of the area during the summer months creates a high potential for dust generation.

Construction-generated emissions associated with the Proposed Project were calculated using the CARB-approved CalEEMod computer program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Attachment A for more information regarding the construction assumptions, including construction equipment and duration, used in this analysis. Construction activities would be subject to mitigation measure AQ-1 (presented below), which would implement the SMAQMD's Basic Construction Emission Control Practices, known as Best Management

Practices (BMPs) during the Project's construction. The application of AQ-1 ensures that the construction of the Project will not have significant air quality impacts.

Predicted maximum daily construction-generated emissions for the Proposed Project are summarized in Table 2-5. Construction-generated emissions are short-term and of temporary duration, lasting only as long as construction activities occur, but would be considered a significant air quality impact if the volume of pollutants generated exceeds the SMAQMD's thresholds of significance.

Table 2-5. Construction-Related Emissions						
Construction Year	**Pollutant**					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Daily (pounds per day)						
Calendar Year One	3.72	36.00	34.10	0.05	1.78	1.51
Calendar Year Two	5.28	22.90	39.80	0.05	3.69	1.45
Calendar Year Three	5.11	21.60	38.70	0.05	3.61	1.37
Calendar Year Four	5.01	20.80	37.80	0.05	3.54	1.31
Calendar Year Five	4.80	19.70	36.90	0.05	3.46	1.23
SMAQMD Significance Threshold	-	*85 pounds/day*	-	-	**80 pounds/day (If all feasible BACT/BMP applied)*	**82 pounds/day (If all feasible BACT/BMP applied)*
Exceed SMAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Annual (tons per year)						
Calendar Year One	0.4	3.6	3.4	<0.0	0.2	0.1
Calendar Year Two	0.6	2.8	4.4	<0.0	0.4	0.2
Calendar Year Three	0.7	2.8	4.6	<0.0	0.5	0.2
Calendar Year Four	0.6	2.7	4.5	<0.0	0.5	0.2
Calendar Year Five	0.6	2.5	4.4	<0.0	0.4	0.2
SMAQMD Significance Threshold	-	-	-	-	**14.6 tons/year*	**15 tons/year*
Exceed SMAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.
Notes: Emission reduction/credits for construction emissions are applied based on the required implementation of SMAQMD Rule 403. The specific Rule 403 measures applied in CalEEMod include sweeping/cleaning adjacent roadway access areas daily, water exposed surfaces twice daily, and limit speeds on unpaved roads to 15 miles per hour. Emissions taken of the season, summer or winter, with the highest outputs. Building construction, paving and painting assumed to occur simultaneously.
* = The allowable threshold level is 0 pounds/day or 0 tons/year unless all SMAQMD recommended BACT/BMP are implemented.

As shown in Table 2-5, emissions generated during Project construction would not exceed the SMAQMD's daily or annual thresholds of significance with the implementation of mitigation measure AQ-1. This mitigation measure ensures that the SMAQMD's BACT/BMPs are implemented; which, according to air district regulations, allows the particulate matter significance threshold to be non-zero (allowing PM_{10} to be 80 pounds/day or 14.6 tons/year and $PM_{2.5}$ to be 82 pounds/day or 15 tons/year). Without the implementation of AQ-1, the Project's construction emissions would be over the threshold of 0 pounds/day and thus have a significant effect. The City of Rancho Cordova General Plan: Air Quality Element, Policy AQ.1.2 1 promotes the thresholds and standards set out by the SMAQMD and ensures the enforcement of the air pollution control measures during construction periods. Specifically, Policy AQ.1.2.1 requires the evaluation of projects for compliance with SMAQMD thresholds of significance. With AQ-1, criteria pollutant emissions generated during Project construction would not result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is nonattainment under an applicable federal or state ambient air quality standard, and no health effects from Project criteria pollutants would occur.

AQ-1: Implement SMAQMD Basic and Enhanced Construction Emission Control Practices to Reduce Fugitive Dust.

The implementing agency will require the construction contractor(s) to implement basic and enhanced control measures to reduce construction-related fugitive dust as a standard or specification of their contract. The following measures are required for the entirety of the construction area. The implementing agency will ensure, through contract provisions and specifications, that the contractor adheres to the mitigation measures before and during construction and documents compliance with the adopted mitigation measures.

- Control of fugitive dust is required by District Rule 403 and enforced by District staff.
- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).
- All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3)

and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

- Provide current certificate(s) of compliance for CARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1].
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

2.3.3.2 Project Operation-Generated Criteria Air Quality Emissions

Operational Significance Analysis

Implementation of the Project would result in long-term operational emissions of criteria air pollutants such as PM_{10}, $PM_{2.5}$, CO, and SO_2 as well as O_3 precursors such as ROGs and NO_X. Project-generated increases in emissions would be predominantly associated with motor vehicle use. As previously described, operational air pollutant emissions were based on the land use mix identified in Section 1.0 of this report and traffic trip generation rates from Nelson/Nygaard (2023). Long-terms operational emissions attributable to the Project are identified in Table 2-6 and compared to the operational significance thresholds promulgated by the SMAQMD. The PM_{10} and $PM_{2.5}$ non-zero thresholds are reliant on the implementation of the SMAQMD's BACT/BMPs for land use development project operations. The following are the recommendations made by the SMAQMD for land use development project operations:

- Compliance with District rules that control operational PM and NOx emissions. Reference rules regarding wood burning devices, boilers, water heaters, generators and other PM control rules that may apply to equipment to be located at the project.
- Compliance with mandatory measures in the California Building Energy Efficiency Standards (Title 24, Part 6) that pertain to efficient use of energy at a residential or a non-residential land use.
- Compliance with mandatory measures in the California Green Building Code (Title 24, Part 11). Current mandatory measures related to operational PM include requirements for bicycle parking, parking for fuel efficient vehicles, electric vehicle charging, and fireplaces for non-residential projects. Residential project measures include requirements for electric vehicle charging and fireplaces.

The Proposed Project will comply with the above recommendations in order to justify the use of a non-zero operational threshold for PM_{10} and $PM_{2.5}$. As seen by Table 2-6, the air pollutant concentrations are below the SMAQMD significance threshold for the Project.

Table 2-6. Operational-Related Emissions

Emission Source	Pollutant (pounds per day)					
	ROG	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Summer Emissions						
Area	8.76	0.16	18.60	0.01	0.02	0.02
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	17.30	15.30	168.00	0.40	36.0	9.33
Total:	**26.06**	**15.46**	**186.60**	**0.41**	**36.02**	**9.35**
SMAQMD Significance Threshold	*65 pounds/day*	*65 pounds/day*	-	-	**80 pounds/day*	**82 pounds/day*
Exceed SMAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**
Winter Emissions						
Area	6.24	0.00	0.00	0.00	0.00	0.00
Energy	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	15.60	18.00	139.00	0.36	36.00	9.33
Total:	**21.84**	**18.00**	**139.00**	**0.36**	**36.00**	**9.33**
SMAQMD Significance Threshold	*65 pounds/day*	*65 pounds/day*	-	-	**80 pounds/day*	**82 pounds/day*
Exceed SMAQMD Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.
Notes: Emission projections are predominately based on the land use mix identified in Section 1.0 of this report and traffic trip generation rates from DKS Associates (2023).
* = The allowable threshold level is 0 pounds/day or 0 tons/year unless all SMAQMD recommended BACT/BMP are implemented.

As shown in Table 2-6, the Project's emissions would not exceed any SMAQMD thresholds for any criteria air pollutants during operation.

As identified in Table 2-3, the Sacramento County portion of the SVAB is listed as a nonattainment area for federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3, and PM_{10} (CARB 2022b). O_3 is a health threat to persons who already suffer from respiratory diseases and can cause severe ear, nose and throat irritation and increases susceptibility to respiratory infections. PM can adversely

affect the human respiratory system. As shown in Table 2-6, the Proposed Project would result in increased emissions of the O_3 precursor pollutants ROG and NOx, PM_{10}, and $PM_{2.5}$, however, the correlation between a project's emissions and increases in nonattainment days, or frequency or severity of related illnesses, cannot be accurately quantified. The overall strategy for reducing air pollution and related health effects in the SMAQMD is contained in the SMAQMD *2017 Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2018), *2021 Sacramento County Second 10-Year PM_{10} Maintenance Plan*, and *$PM_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento $PM_{2.5}$ Nonattainment Area* (2013). These air quality planning documents present comprehensive strategies to reduce the O_3 precursor pollutants (ROG and NOx) as well as PM emissions from stationary, area, mobile, and indirect sources. Each of these air quality planning documents provide control measures that reduce emissions to attain and maintain federal ambient air quality standards such as the application of available cleaner technologies, best management practices, incentive programs, as well as development and implementation of zero and near-zero technologies and control methods. The CEQA thresholds of significance established by the SMAQMD are designed to meet the objectives of these air quality planning documents and in doing so achieve and maintain attainment status with state and federal standards. As noted above, the Project would increase the emission of certain pollutants, but would not exceed the thresholds of significance established by the SMAQMD for purposes of reducing air pollution and its deleterious health effects.

2.3.3.3 Project Consistency with Air Quality Planning

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a SIP that demonstrates the means to attain the federal standards. The SIP must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the CCAA requires an air quality attainment plan to be prepared for areas designated as nonattainment with regard to the NAAQS and CAAQS. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

As previously mentioned, the Project Site is located within the SVAB, which is under the jurisdiction of the SMAQMD. SMAQMD is required, pursuant to the federal CAA, to reduce emissions of criteria pollutants for which the SVAB is in nonattainment. The SMAQMD is required to submit air quality plans and rate-of-progress milestone evaluations in accordance with the federal Clean Air Act. The SMAQMD air quality attainment plans and reports, which include the *2017 Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan* (2018), *2021 Sacramento County Second 10-Year PM_{10} Maintenance Plan*, and *$PM_{2.5}$ Implementation/Maintenance Plan and Re-designation Request for Sacramento $PM_{2.5}$ Nonattainment Area* (2013), present comprehensive strategies to reduce the O_3 precursor pollutants (ROG and NO_x) as well as PM emissions from stationary, area, mobile, and indirect sources.

A project is consistent with regional air quality planning efforts in part if it is consistent with the population and housing assumptions that were used in the development of the SMAQMD air quality plans and does nothing to inhibit the region's achievement of air quality standards. Growth projections in the City of Rancho

Cordova are based largely on the City of Rancho Cordova General Plan. As such, projects that propose development consistent with the growth anticipated by the General Plan would generally be consistent with the SMAQMD regional air quality planning efforts. The Project Site is located within the Folsom Boulevard Specific Plan area and has a City of Rancho Cordova General Plan land use designation of Residential Mixed-Use (FB-RMU). The site is zoned Residential Mixed-Use – Folsom Boulevard Specific Plan (RMU [FBSP]). The Folsom Boulevard Specific is the primary planning tool the City uses to guide future development and redevelopment within the Specific Plan area. It seeks to increase the density of both housing and commercial activity; increase pedestrian, bicycle, and transit trips to, from, and through the area; increase the visibility of the corridor as a destination; and change the dynamic and image to that of a high demand, thriving urban area. The RMU (FBSP) Zoning District is intended to designate property for the development of medium and high-density housing (between 6.1 and 40 dwelling units per acre) that may incorporate office and/or commercial services. While the predominant use of the development is residential, the City encourages the vertical and/or horizontal integration of commercial and/or office uses that are compatible with the residential development. The Project proposes a mix of uses onsite by developing residential, commercial, and recreational uses on infill and underutilized parcels. As such, the Project is consistent with the City's General Plan, Folsom Boulevard Specific Plan, and City Zoning Code and is therefore consistent with the types, intensity, and patterns of land use envisioned for the site. Furthermore, as shown in Tables 2-5 and 2-6, all Project emissions would fall below SMAQMD significance thresholds. For these reasons the Project would not conflict with SMAQMD's air quality planning.

It is additionally noted that the Project is considered "infill development" as it proposes to redevelop a previously developed property and enhance the physical design of the urban environment. Under Public Resources Code (PRC) section 21061.3, an "infill site" is defined as a site that "has been previously developed for qualified urban uses." In turn, a "qualified urban use" is defined, pursuant to PRC section 21072, as "a residential, commercial, or public institutional, transit or transportation passenger facility, or retail use, or any combination of those uses." Additionally, the Project Site is located in an "urbanized area," which is defined under PRC section 21071 as "an incorporated city" that meets the criteria of having a population of at least 100,000 persons. These aspects of the Project would result in the generation of a reduced amount of criteria air pollutant emissions. According to the USEPA, redevelopments (namely at brownfield sites such as the Project Site) produce 32 to 57 percent less emissions per capita relative to conventional developments (USEPA 2011); this is because the number of daily vehicle trips and daily vehicle miles traveled (VMT) associated with the redevelopment tend to be lower compared with development on vacant land.

The Proposed Project would be located in close proximity to the Mather Field/Mills Train Station, which is directly across Folsom Boulevard from the Project Site and can be accessed via a pedestrian crosswalk with stop-traffic control. The public transit accessibility would result in fewer vehicle trips and VMT compared to the statewide average and encourage walking and non-automotive forms of transportation, thus resulting in the reduction of, or no increase in, transportation-related emissions, a primary goal of SMAQMD air quality planning. Furthermore, the site is fronted by a Class II bike lane on Folsom Boulevard.

The Project Site can be identified for its "location efficiency." Location efficiency describes the location of the Project relative to the type of urban landscape its proposed to fit within, such as an "urban area," "compact infill," or "suburban center." The Project Site represents an urban/compact infill location within an

area of the city developed with residential and commercial uses. The Project Site is served by existing public transportation as previously described; it is within an active urban center surrounded with many existing offsite office, commercial, and residential buildings. The Project would locate additional residential land uses in close proximity to existing offsite office, commercial, and residential uses. Therefore, the Project would provide future Project residents with potential work opportunities and commercial service options in close proximity to the site. Additionally, the Project would locate potential employment opportunities for residents already living in the vicinity. The location efficiency of the Project Site would result in synergistic benefits that would reduce vehicle trips and VMT compared to the statewide average and would result in corresponding reduction of transportation related air pollutant emissions, a primary goal of SMAQMD air quality planning.

The Project would increase housing density in the vicinity over current conditions. Increased density reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies to reduce emissions, a primary goal of SMAQMD air quality planning.

2.3.3.4 Exposure of Sensitive Receptors to Toxic Air Contaminants

As previously described, sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over age 65, children under age 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. The nearest sensitive receptors to the Project Site include residences directly adjacent to the west, north, and east.

Construction-Generated Air Contaminants

Construction-related activities would result in temporary, short-term Proposed Project-generated emissions of DPM, ROG, NOx, CO, and PM_{10} from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; and other miscellaneous activities. The Sacramento County portion of the SVAB is listed as a nonattainment area for the federal O_3 and $PM_{2.5}$ standards and is also a nonattainment area for the state standards for O_3 and PM_{10}. Thus, existing O_3, PM_{10} and $PM_{2.5}$ levels in the SVAB are at unhealthy levels during certain periods. However, as shown in Table 2-5 the Project would not exceed the SMAQMD significance thresholds for construction emissions.

The health effects associated with O_3 are generally associated with reduced lung function. Because the Project would not involve construction activities that would result in O_3 precursor emissions (ROG or NOx) in excess of the SMAQMD thresholds, the Project is not anticipated to substantially contribute to regional O_3 concentrations and the associated health impacts.

CO tends to be a localized impact associated with congested intersections. In terms of adverse health effects, CO competes with oxygen, often replacing it in the blood, reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can include dizziness, fatigue, and impairment of central nervous system functions. The Project would not involve construction activities that would result in

CO emissions in excess of the SMAQMD thresholds. Thus, the Project's CO emissions would not contribute to the health effects associated with this pollutant.

Particulate matter (PM_{10} and $PM_{2.5}$) contains microscopic solids or liquid droplets that are so small that they can get deep into the lungs and cause serious health problems. Particulate matter exposure has been linked to a variety of problems, including premature death in people with heart or lung disease, nonfatal heart attacks, irregular heartbeat, aggravated asthma, decreased lung function, and increased respiratory symptoms such as irritation of the airways, coughing, or difficulty breathing. For construction activity, DPM is the primary TAC of concern. PM10 exhaust is considered a surrogate for DPM as all diesel exhaust is considered to be DPM and PM_{10} contains $PM_{2.5}$ as a subset. As with O_3 and NOx, the Project would not generate emissions of PM_{10} or $PM_{2.5}$ that would exceed the SMAQMD's thresholds. Accordingly, the Project's PM_{10} and $PM_{2.5}$ emissions are not expected to cause any increase in related regional health effects for these pollutants.

In summary, Project construction would not result in a potentially significant contribution to regional concentrations of nonattainment pollutants and would not result in a significant contribution to the adverse health impacts associated with those pollutants.

Operational Air Contaminants

Operation of the Proposed Project would not result in the development of any substantial sources of air toxics. There are no stationary sources associated with the operations of the Project; nor would the Project attract additional mobile sources that spend long periods queuing and idling at the site. Onsite Project emissions would not result in significant concentrations of pollutants at nearby sensitive receptors. The Project would not have a high carcinogenic or non-carcinogenic risk during operation.

Carbon Monoxide Hot Spots

It has long been recognized that CO exceedances are caused by vehicular emissions, primarily when idling at intersections. Concentrations of CO are a direct function of the number of vehicles, length of delay, and traffic flow conditions. Under certain meteorological conditions, CO concentrations close to congested intersections that experience high levels of traffic and elevated background concentrations may reach unhealthy levels, affecting nearby sensitive receptors. Given the high traffic volume potential, areas of high CO concentrations, or "hot spots," are typically associated with intersections that are projected to operate at unacceptable levels of service during the peak commute hours. It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. However, transport of this criteria pollutant is extremely limited, and CO disperses rapidly with distance from the source under normal meteorological conditions. Furthermore, vehicle emissions standards have become increasingly more stringent in the last 20 years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the Sacramento County portion of the SVAB is designated as in attainment. Detailed modeling of Project-specific CO "hot spots" is not necessary and thus this potential impact is addressed qualitatively.

A CO "hot spot" would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur. The analysis prepared for CO attainment in the South Coast Air Quality Management District's (SCAQMD's) *1992 Federal Attainment Plan for Carbon Monoxide* in Los Angeles County and a Modeling and Attainment Demonstration prepared by the SCAQMD as part of the 2003 AQMP can be used to demonstrate the potential for CO exceedances of these standards. The SCAQMD is the air pollution control officer for much of southern California. The SCAQMD conducted a CO hot spot analysis as part of the 1992 CO Federal Attainment Plan at four busy intersections in Los Angeles County during the peak morning and afternoon time periods. The intersections evaluated included Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection evaluated was at Wilshire Boulevard and Veteran Avenue, which has a traffic volume of approximately 100,000 vehicles per day. Despite this level of traffic, the CO analysis concluded that there was no violation of CO standards (SCAQMD 1992). In order to establish a more accurate record of baseline CO concentrations affecting the Los Angeles, a CO "hot spot" analysis was conducted in 2003 at the same four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards. The highest one-hour concentration was measured at 4.6 ppm at Wilshire Boulevard and Veteran Avenue and the highest eight-hour concentration was measured at 8.4 ppm at Long Beach Boulevard and Imperial Highway. Thus, there was no violation of CO standards.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD), the air pollution control officer for the San Francisco Bay Area, concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact.

The Proposed Project is anticipated to result in 4,354 daily traffic trips (DKS Associates 2023). Thus, the Proposed Project would not generate traffic volumes at any intersection of more than 100,000 vehicles per day (or 44,000 vehicles per day) and there is no likelihood of the Project traffic exceeding CO values.

2.3.3.5 Odors

Typically, odors are regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors varies considerably among the population and overall is quite subjective. Some individuals have the ability to smell minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; in fact, an odor that is offensive to one person (e.g., from a fast-food restaurant) may be perfectly acceptable to another. It is also important to note that an unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. This is because of the phenomenon known as odor fatigue, in which

a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity.

Quality and intensity are two properties present in any odor. The quality of an odor indicates the nature of the smell experience. For instance, if a person describes an odor as flowery or sweet, then the person is describing the quality of the odor. Intensity refers to the strength of the odor. For example, a person may use the word "strong" to describe the intensity of an odor. Odor intensity depends on the odorant concentration in the air. When an odorous sample is progressively diluted, the odorant concentration decreases. As this occurs, the odor intensity weakens and eventually becomes so low that the detection or recognition of the odor is quite difficult. At some point during dilution, the concentration of the odorant reaches a detection threshold. An odorant concentration below the detection threshold means that the concentration in the air is not detectable by the average human.

During construction, the Proposed Project presents the potential for generation of objectionable odors in the form of diesel exhaust in the immediate vicinity of the site. However, these emissions are short-term in nature and will rapidly dissipate and be diluted by the atmosphere downwind of the emission sources. Additionally, odors would be localized and generally confined to the construction area. Therefore, construction odors would not adversely affect a substantial number of people to odor emissions.

According to the SMAQMD, land uses commonly considered to be potential sources of obnoxious odorous emissions include wastewater treatment plants, sanitary landfills, composting/green waste facilities, recycling facilities, petroleum refineries, chemical manufacturing plants, painting/coating operations, rendering plants, and food packaging plants. The Proposed Project does not include any uses identified by the SMAQMD as being associated with odors.

3.0 GREENHOUSE GAS EMISSIONS

3.1 Greenhouse Gas Setting

Certain gases in the earth's atmosphere, classified as GHGs, play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected back toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. Because the earth has a much lower temperature than the sun, it emits lower-frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth. Without the greenhouse effect, the earth would not be able to support life as we know it.

Prominent GHGs contributing to the greenhouse effect are CO_2, methane (CH_4), and N_2O. Fluorinated gases also make up a small fraction of the GHGs that contribute to climate change. Fluorinated gases include chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, and nitrogen trifluoride; however, it is noted that these gases are not associated with typical land use development. Human-caused emissions of these GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic factors together (Intergovernmental Panel on Climate Change [IPCC] 2014).

Table 3-1 describes the primary GHGs attributed to global climate change, including their physical properties, primary sources, and contributions to the greenhouse effect.

Each GHG differs in its ability to absorb heat in the atmosphere based on the lifetime, or persistence, of the gas molecule in the atmosphere. CH_4 traps over 25 times more heat per molecule than CO_2, and N_2O absorbs 298 times more heat per molecule than CO_2 (IPCC 2014). Often, estimates of GHG emissions are presented in carbon dioxide equivalents (CO_2e), which weight each gas by its global warming potential. Expressing GHG emissions in CO_2e takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO_2 were being emitted.

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and TACs, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, or other forms. Of the total annual human-caused CO_2 emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the

last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remains stored in the atmosphere (IPCC 2013).

Table 3-1. Greenhouse Gases

Greenhouse Gas	Description
CO_2	Carbon dioxide is a colorless, odorless gas. CO_2 is emitted in a number of ways, both naturally and through human activities. The largest source of CO_2 emissions globally is the combustion of fossil fuels such as coal, oil, and gas in power plants, automobiles, industrial facilities, and other sources. A number of specialized industrial production processes and product uses such as mineral production, metal production, and the use of petroleum-based products can also lead to CO_2 emissions. The atmospheric lifetime of CO_2 is variable because it is so readily exchanged in the atmosphere.[1]
CH_4	Methane is a colorless, odorless gas and is the major component of natural gas, about 87 percent by volume. It is also formed and released to the atmosphere by biological processes occurring in anaerobic environments. Methane is emitted from a variety of both human-related and natural sources. Human-related sources include fossil fuel production, animal husbandry (intestinal fermentation in livestock and manure management), rice cultivation, biomass burning, and waste management. These activities release significant quantities of CH_4 to the atmosphere. Natural sources of CH_4 include wetlands, gas hydrates, permafrost, termites, oceans, freshwater bodies, non-wetland soils, and other sources such as wildfires. The atmospheric lifetime of CH_4 is about12 years.[2]
N_2O	Nitrous oxide is a clear, colorless gas with a slightly sweet odor. Nitrous oxide is produced by both natural and human-related sources. Primary human-related sources of N_2O are agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuels, adipic acid production, and nitric acid production. N_2O is also produced naturally from a wide variety of biological sources in soil and water, particularly microbial action in wet tropical forests. The atmospheric lifetime of N_2O is approximately 120 years.[3]

Sources: [1]USEPA 2016a, [2] USEPA 2016b, [3] USEPA 2016c

The quantity of GHGs that it takes to ultimately result in climate change is not precisely known; it is sufficient to say the quantity is enormous, and no single project alone would measurably contribute to a noticeable incremental change in the global average temperature or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

3.1.1 Sources of Greenhouse Gas Emissions

In 2022, CARB released the 2022 edition of the California GHG inventory covering calendar year 2020 emissions. In 2020, California emitted 369.2 million gross metric tons of CO_2e including from imported electricity. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2020, accounting for approximately 38 percent of total GHG emissions in the state. Continuing the downward trend from previous years, transportation emissions decreased 27 million metric

tons of CO_2e in 2020, though the intensity of this decrease was most likely from light duty vehicles after shelter-in-place orders were enacted in response to the COVID-19 pandemic. Emissions from the electricity sector account for 16 percent of the inventory and have remained at a similar level as in 2019 despite a 44 percent decrease in in-state hydropower generation (due to below average precipitation levels), which was more than compensated for by a 10 percent growth in in-state solar generation and cleaner imported electricity incentivized by California's clean energy policies. California's industrial sector accounts for the second largest source of the state's GHG emissions in 2020, accounting for 23 percent (CARB 2022c).

3.2 Regulatory Framework

3.2.1 State

3.2.1.1 Executive Order S-3-05

Executive Order (EO) S-3-05, signed by Governor Arnold Schwarzenegger in 2005, proclaims that California is vulnerable to the impacts of climate change. It declares that increased temperatures could reduce the Sierra Nevada snowpack, further exacerbate California's air quality problems, and potentially cause a rise in sea levels. To combat those concerns, the EO established total GHG emission targets for the state. Specifically, emissions are to be reduced to the 2000 level by 2010, the 1990 level by 2020, and to 80 percent below the 1990 level by 2050.

3.2.1.2 Assembly Bill 32 Climate Change Scoping Plan and Updates

In 2006, the California legislature passed Assembly Bill (AB) 32 (Health and Safety Code § 38500 et seq., or AB 32), also known as the Global Warming Solutions Act. AB 32 required CARB to design and implement feasible and cost-effective emission limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25 percent reduction in emissions). Pursuant to AB 32, CARB adopted a Scoping Plan in December 2008, which outlined measures to meet the 2020 GHG reduction goals. California exceeded the target of reducing GHG emissions to 1990 levels by the year 2017.

The Scoping Plan is required by AB 32 to be updated at least every five years. The latest update, the 2017 Scoping Plan Update, addresses the 2030 target established by Senate Bill (SB) 32 as discussed below and establishes a proposed framework of action for California to meet a 40 percent reduction in GHG emissions by 2030 compared to 1990 levels. The key programs that the Scoping Plan Update builds on include increasing the use of renewable energy in the State, the Cap-and-Trade Regulation, the Low Carbon Fuel Standard, and reduction of methane emissions from agricultural and other wastes.

3.2.1.3 Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, Governor Brown signed SB 32 and AB 197, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include § 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030.

3.2.1.4 Senate Bill X1-2 of 2011, Senate Bill 350 of 2015, and Senate Bill 100 of 2018

In 2018, SB 100 was signed codifying a goal of 60 percent renewable procurement by 2030 and 100 percent by 2045 Renewables Portfolio Standard.

3.2.1.5 Senate Bill 375

The Sustainable Communities and Climate Protection Act of 2008, which became effective in January 2009, helps facilitate AB 32's GHG reduction goals by addressing the emissions from passenger vehicles. The main objectives of the bill aim to reduce GHG emissions through extensive transportation, housing, and land use planning. SB 375 directs CARB to establish regional targets to reduce GHG emissions from passenger vehicle use. CARB administers 2035 targets for each of the regions throughout the State. The corresponding metropolitan planning organizations (MPOs) in each region are required to prepare and adopt a Sustainable Communities Strategy (SCS) that helps to adhere to the CARB administered targets. Sustainable Community Strategies play a vital role in regional transportation plans by allowing transportation, land use, and housing strategies to align with the State's GHG emission goals. Project Plans that are consistent with their region's SCS may be subject to a more streamlined CEQA process.

3.2.1.6 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings

The Building and Efficiency Standards (Energy Standards) were first adopted and put into effect in 1978 and have been updated periodically in the intervening years. These standards are a unique California asset that have placed the State on the forefront of energy efficiency, sustainability, energy independence and climate change issues. The 2022 California Building Codes include provisions related to energy efficiency to reduce energy consumption and greenhouse gas emissions from buildings. Some of the key energy efficiency components of the codes are:

1. Energy Performance Requirements: The codes specify minimum energy performance standards for the building envelope, lighting, heating and cooling systems, and other components.
2. Lighting Efficiency: The codes require that lighting systems meet minimum efficiency standards, such as the use of energy-efficient light bulbs and fixtures.
3. HVAC Systems: The codes establish requirements for heating, ventilation, and air conditioning (HVAC) systems, including the use of high-efficiency equipment, duct sealing, and controls.
4. Building Envelope: The codes include provisions for insulation, air sealing, glazing, and other building envelope components to reduce energy loss and improve indoor comfort.
5. Renewable Energy: The codes encourage the use of renewable energy systems, such as photovoltaic panels and wind turbines, to reduce dependence on non-renewable energy sources.
6. Commissioning: The codes require the commissioning of building energy systems to ensure that they are installed and operate correctly and efficiently.

Overall, the energy efficiency provisions of the 2022 California Building Codes aim to reduce the energy consumption of buildings, lower energy costs for building owners and occupants, and reduce the environmental impact of the built environment. The 2022 Building Energy Efficiency Standards improve upon the 2019 Energy Standards for new construction of, and additions and alterations to, residential and nonresidential buildings. The exact amount by which the 2022 Building Codes are more efficient compared to the 2019 Building Codes would depend on the specific provisions that have been updated and the specific building being considered. However, in general, the 2022 Building Codes have been updated to include increased requirements for energy efficiency, such as higher insulation and air sealing standards, which are intended to result in more efficient buildings. The 2022 standards are a major step toward meeting Zero Net Energy.

3.2.2 Local

3.2.2.1 Sacramento Metropolitan Air Quality Management District

To provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SMAQMD has established operational GHG reduction thresholds, as well as construction-related thresholds. The GHG targets and reduction recommendations made by the SMAQMD have taken into considerations reports and guidelines from various state agencies and organizations, such as the California Air Pollution Control Officers Association CEQA & Climate Change guidelines, the CARB Scoping Plan, the California Natural Resource Agency's CEQA Guidelines, and other reputable sources. In February 2021, the SMAQMD revised the Greenhouse Gas Emissions Chapter within their CEQA Guide.

The SMAQMD has both construction and operational thresholds for GHG emissions within their CEQA Guide. Their construction thresholds establish a bright line threshold of 1,100 metric tons/year. Similarly, SMAQMD recommends a comparison of a project's annual operational GHG emissions to a significance threshold of 1,100 metric tons per year, though coupled with implementation of SMAQMD Tier 1 Best Management Practices (BMPs). Specifically, if a project's annual operational GHG emissions are calculated to fall under 1,100 metric tons and the project implements all SMAQMD Tier 1 BMPs, GHG-related impacts would be less than significant. If the threshold is exceeded, or in the case the project does not implement the Tier 1 BMPs, then the project may have a cumulatively considerable contribution to a significant cumulative environmental impact.

The Tier 1 BMPs are:

- BMP 1 – projects shall be designed and constructed without natural gas infrastructure; and
- BMP 2 - projects shall meet the current CalGreen Tier 2 standards[1], except all electric vehicle capable spaces shall instead be electric vehicle ready.

[1] CalGreen contains voluntary "Tier 1" and "Tier 2" standards that are not mandatory statewide but could be required by a City or County. These are 'reach' standards, related to energy efficiency, that can be adopted by local jurisdictions and may be incorporated as mandatory standards in future code cycles.

If Tier 1 BMPs are not fully implemented then emissions, including natural gas emissions, should be estimated and the project should mitigate any natural gas emissions and require all prewiring necessary so that the building is ready for a future retrofit to all-electric (e.g., such that electric space heating, water heating, drying, and cooking appliances could be installed). If emissions still exceed 1,100 metric tons of CO_2e per year, then the project must implement SMAQMD's Tier 2 BMP 3:

- Office projects must achieve a 15 percent reduction in VMT per worker compared to the existing average VMT per capita for the County.
- Residential projects must achieve a 15 percent reduction in VMT per resident compared to the existing average VMT per capita in the County.
- Retail projects must achieve no net increase in total VMT.

If the project achieves BMP 3, then the operational impact is considered less than significant, and no further analysis is needed. If a project cannot incorporate the required BMPs, other reductions or purchasing and retiring GHG/carbon offsets from a registry approved by the SMAQMD may be required. Carbon offsets are instruments that can be bought, sold, and traded. Like a stock or equity that represents a unit of ownership in a company, a carbon offset represents a unit of GHG emissions reductions. Each offset is essentially a certification that a certain quantity of GHG emissions has been avoided, prevented, or sequestered. Offset registries that the SMAQMD may approve have developed a broad consensus around the standards that are necessary to ensure that offsets are environmentally sound, namely, that offsets be real, permanent, quantifiable, verifiable, enforceable, and additional. Approved registries may include but are not limited to any of the following: (i) the Climate Action Reserve, the American Carbon Registry and Verra, which are all approved by CARB; (ii) any entity approved at any time by CARB to act as an "offset project registry" under the state's cap-and-trade program; (iii) other regulatory or voluntary credits that demonstrate, based on substantial evidence, that the offsets are real, permanent, quantifiable, verifiable, enforceable, and additional.

3.2.2.2 Sacramento Metropolitan Air Quality Management District

The Sacramento Area Council of Government's (SACOG's) Metropolitan Transportation Plan/Sustainable Communities Strategy 2020 (MTP/SCS) is the latest update of a long-range policy and planning program that establishes GHG emissions goals for automobiles and light-duty trucks for and the year 2035, and thus establishes an overall GHG target for the region beyond 2020 applicable to these subsectors of the transportation sector. CARB assigned SACOG a 19 percent GHG reduction target from 2005 levels by 2035. The GHG reduction target is the percent reduction in passenger vehicle GHG emission per capita, compared to Year 2005. This change represents a reduction from just over 23 pounds per capita on a given weekday in 2005, to just under 19 pounds by 2035 (SACOG 2020).

3.2.2.3 City of Rancho Cordova Climate Action and Adaptation Plan

The City of Rancho Cordova has drafted the City Climate Action and Adaptation Plan (CAAP), which at the time of this analysis was in the public review process and therefore not yet adopted. The CAAP is intended to serve as a comprehensive roadmap to community sustainability and resilience in the city. The purposes

of the CAAP are to identify strategies and measures the City can take to reduce GHG emissions to levels that align with the State of California's goals and set forth strategies to adapt and promote resilience to the impacts of climate change. In drafting the CAAP, the City evaluated the volume of emissions generated in a baseline year (2019) and identified City-specific targets and goals that determine the amount of community-wide emissions that need to be reduced in Rancho Cordova to align with statewide GHG reduction targets for 2030 and 2045. The City then developed GHG reduction measures to achieve the City's 2030 target and make substantial progress towards the City's 2045 goal. Additionally, in preparation of the CAAP, the City conducted a climate change vulnerability assessment to better understand its vulnerability to climate hazards. This was then used to inform and develop a set of adaptation strategies, objectives, and actions to improve community resilience in the context of climate change. The successful implementation and administration of the CAAP would reduce emissions and reduce climate related risks in the city, as well as provide other co-benefits like strengthening the city's economy, improving risk management, cleaning the environment, and improving the health and wellness of residents.

The CAAP provides new development project applicants in the city the opportunity to use CEQA streamlining tools for projects that are consistent with the CAAP. Demonstrating consistency with the CAAP establishes that a project will not result in an "additional environmental effect" related to GHG emissions. A project's consistency with the CAAP will be determined through a Consistency Checklist ("Checklist"). The Checklist, which has yet to be made available at the time of this analysis, will contain GHG reduction measures applicable to development projects that are required to be implemented on a project-by-project basis to achieve the City's 2030 reduction target and make substantial progress toward the 2045 goal. Once the CAAP is adopted, new development projects will need to incorporate all potentially applicable Plan measures to demonstrate consistency with the CAAP. By incorporating applicable GHG reduction measures in the Checklist into project designs or conditions of approval, the City will ensure that new development is consistent with applicable GHG reduction measures in the CAAP and will contribute its "fair share" in achieving the identified GHG reduction targets. Projects that do not demonstrate consistency may, at the City's discretion, prepare a more comprehensive project-specific analysis of GHG emissions consistent with CEQA requirements.

3.3 Greenhouse Gas Emissions Impact Assessment

3.3.1 Thresholds of Significance

The impact analysis provided below is based on the following CEQA Guidelines Appendix G thresholds of significance. The Project would result in a significant impact to greenhouse gas emissions if it would:

1) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

2) Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases or

The Appendix G thresholds for GHG emissions do not prescribe specific methodologies for performing an assessment, do not establish specific thresholds of significance, and do not mandate specific mitigation

measures. Rather, the CEQA Guidelines emphasize the lead agency's discretion to determine the appropriate methodologies and thresholds of significance consistent with the manner in which other impact areas are handled in CEQA. With respect to GHG emissions, the CEQA Guidelines Section 15064.4(a) states that lead agencies "shall make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate" GHG emissions resulting from a project. The CEQA Guidelines note that an agency has the discretion to either quantify a project's GHG emissions or rely on a "qualitative analysis or other performance-based standards." (14 CCR 15064.4(b)). A lead agency may use a "model or methodology" to estimate GHG emissions and has the discretion to select the model or methodology it considers "most appropriate to enable decision makers to intelligently take into account the project's incremental contribution to climate change." (14 CCR 15064.4(c)). Section 15064.4(b) provides that the lead agency should consider the following when determining the significance of impacts from GHG emissions on the environment:

1. The extent a project may increase or reduce GHG emissions as compared to the existing environmental setting.
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions (14 CCR 15064.4(b)).

In addition, Section 15064.7(c) of the CEQA Guidelines specifies that "[w]hen adopting or using thresholds of significance, a lead agency may consider thresholds of significance previously adopted or recommended by other public agencies, or recommended by experts, provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence" (14 CCR 15064.7(c)). The CEQA Guidelines also clarify that the effects of GHG emissions are cumulative and should be analyzed in the context of CEQA's requirements for cumulative impact analysis (see CEQA Guidelines Section 15130). As a note, the CEQA Guidelines were amended in response to Senate Bill 97. In particular, the CEQA Guidelines were amended to specify that compliance with a GHG emissions reduction plan renders a cumulative impact insignificant.

Per CEQA Guidelines Section 15064(h)(3), a project's incremental contribution to a cumulative impact can be found not cumulatively considerable if the project would comply with an approved plan or mitigation program that provides specific requirements that would avoid or substantially lessen the cumulative problem within the geographic area of the project. To qualify, such plans or programs must be specified in law or adopted by the public agency with jurisdiction over the affected resources through a public review process to implement, interpret, or make specific the law enforced or administered by the public agency. Examples of such programs include a "water quality control plan, air quality attainment or maintenance plan, integrated waste management plan, habitat conservation plan, natural community conservation plans [and] plans or regulations for the reduction of greenhouse gas emissions." Put another way, CEQA Guidelines Section 15064(h)(3) allows a lead agency to make a finding of less than significant for GHG emissions if a project complies with adopted programs, plans, policies and/or other regulatory strategies to reduce GHG emissions.

The local air quality agency regulating the SVAB is the SMAQMD, the regional air pollution control officer for the basin. As previously stated, to provide guidance to local lead agencies on determining significance for GHG emissions in CEQA documents, SMAQMD has set thresholds and required BMPs to implement throughout the Project construction and operations. The numeric bright line thresholds and BMPs described in Section 3.2.2.1 above were developed to be consistent with CEQA requirements for developing significance thresholds, are supported by substantial evidence, and provide guidance to CEQA practitioners and lead agencies with regard to determining whether GHG emissions from a proposed project are significant.

The significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b)(2) by considering whether the Project complies with applicable plans, policies, regulations and requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. The City Rancho Cordova may set a project-specific threshold based on the context of each particular project, including using the SMAQMD expert recommendation. For the Proposed Project, the SMAQMD's 1,100 metric tons of CO_2e per year threshold and implementation of SMAQMD BMPs are used as the significance threshold for the Project. Additionally, the Project is assessed for consistency with SACOG's MTP/SCS. As previously described, the MTP/SCS is the latest update of a long-range policy and planning program that establishes GHG emissions goals for automobiles and light-duty trucks for the year 2035, and thus establishes an overall GHG target for the region beyond 2020 applicable to these subsectors of the transportation sector. CARB assigned SACOG a 19 percent GHG reduction target from 2005 levels by 2035 (SACOG 2020).

3.3.2 Methodology

GHG impacts were assessed in accordance with methodologies recommended by the SMAQMD. Where GHG emission quantification was required, emissions were modeled using the CalEEMod software, version 2022.1. CalEEMod is a statewide land use emissions computer model designed to quantify potential GHG emissions associated with both construction and operations from a variety of land use projects. Project construction generated GHG emissions were calculated primarily using CalEEMod model defaults for Sacramento County, though the timing of construction was adjusted to reflect the anticipated construction schedule of 2024 through 2029. Operational GHG emissions were based on the land use mix identified in Section 1.0 of this report and traffic trip generation rates provided by Nelson/Nygaard (2023). Two design features attributable to the Project are accounted for in the emissions modeling calculations, specifically the Project's proximity to transit and its number of affordable/below-market residential units.

3.3.3 Impact Analysis

3.3.3.1 Generation of GHG Emissions

Construction

Construction-related activities that would generate GHG emissions include worker commute trips, haul trucks carrying supplies and materials to and from the Project Site, and off-road construction equipment (e.g., dozers, loaders, excavators). Table 3-2 illustrates the specific construction generated GHG emissions

that would result from construction of the Project. Once construction is complete, the generation of these GHG emissions would cease.

Table 3-2. Construction-Related Greenhouse Gas Emissions

Emissions Source	CO_2e (Metric Tons/ Year)
Calendar Year One	499
Calendar Year Two	890
Calendar Year Three	973
Calendar Year Four	963
Calendar Year Five	939
SMAQMD Annual Construction Significance Threshold	*1,100*
Exceed SMAQMD Threshold?	**No**

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

As shown in Table 3-2, Project construction would result in the maximum generation of 973 metric tons of CO_2e over the third calendar year of construction, which is below the SMAQMD significance threshold. Once construction is complete, the generation of these GHG emissions would cease.

Operational Significance Analysis

Operation of the Project would result in an increase in GHG emissions primarily associated with motor vehicle trips and onsite energy sources. Long-term operational GHG emissions attributed to the Project are identified in Table 3-3.

As previously described, SMAQMD specifies that all projects must adhere to the Tier 1 BMP requirements in order to be considered less than significant. In order to ensure compliance with the SMAQMD guidelines, this Project is subject to mitigation measure GHG-1 (see below), which will ensure that Tier 1 BMPs are implemented. The long-term Project operational GHG emissions identified in Table 3-3 account for SMAQMD Tier 1 BMP 1, which requires that all development be designed and constructed without natural gas infrastructure. Due to limitations in the modeling software, GHG-reductions resulting from Tier 1 BMP 2, which requires projects to meet the current CalGreen Tier 2 standards with the exception that all electric vehicle capable spaces be electric vehicle ready, are unable to be quantified.

Table 3-3. Operational-Related Greenhouse Gas Emissions	
Emissions Source	**CO_2e (Metric Tons/ Year)**
Area	8
Energy	608
Mobile	4,441
Waste	190
Water	19
Refrigeration	2
Total	**5,268**
SMAQMD Annual Operational Significance Threshold	*1,100*
Exceed SMAQMD Threshold?	**Yes**

Source: CalEEMod version 2022.1. Refer to Attachment A for Model Data Outputs.

Notes: Emission projections are predominately based on the land use mix identified in Section 1.0 of this report and traffic trip generation rates from DKS Associates(2023). SMAQMD Tier 1 BMP 1, which requires that all development be designed and constructed without natural gas infrastructure, is included in the modeling calculations per mitigation measure GHG-1.

As shown in Table 3-3, the Proposed Project's operational GHG emissions would be approximately 5,268 metric tons of CO_2e per year, which exceeds the SMAQMD significance threshold of 1,100 metric tons of CO_2e per year. Projects that exceed 1,100 metric tons of CO_2e per year after implementation of the Tier 1 BMPs must also implement SMAQMD Tier 2 BMPs. As previously discussed, the SMAQMD's Tier 2 BMP are as follows:

- Office projects must achieve a 15 percent reduction in VMT per worker compared to the existing average VMT per capita for the County.
- Residential projects must achieve a 15 percent reduction in VMT per resident compared to the existing average VMT per capita in the County.
- Retail projects must achieve no net increase in total VMT.

If the project achieves this SMAQMD Tier 2 BMP, then the operational impact is considered less than significant, and no further analysis is needed. If a project cannot incorporate the required BMPs, other reductions or purchasing and retiring GHG/carbon offsets from a registry approved by the SMAQMD may be required. Carbon offsets are instruments that can be bought, sold, and traded. Like a stock or equity that represents a unit of ownership in a company, a carbon offset represents a unit of GHG emissions reductions. Each offset is essentially a certification that a certain quantity of GHG emissions has been avoided, prevented, or sequestered. Offset registries that the SMAQMD may approve have developed a broad consensus around the standards that are necessary to ensure that offsets are environmentally sound, namely that offsets be real, permanent, quantifiable, verifiable, enforceable, and additional. Approved

registries may include but are not limited to any of the following: (i) the Climate Action Reserve, the American Carbon Registry, and Verra, which are all approved by CARB; (ii) any entity approved at any time by CARB to act as an "offset project registry" under the state's cap-and-trade program; (iii) other regulatory or voluntary credits that demonstrate, based on substantial evidence, that the offsets are real, permanent, quantifiable, verifiable, enforceable, and additional.

Therefore, in addition to mitigation measure GHG-1, mitigation measure GHG-2 is required in order for the Project's contribution of GHG emissions to be considered less than significant.

Mitigation Measures

GHG-1: Implement SMAQMD Tier 1 Best Management Practices.

The implementing agency will require the Project to implement Sacramento Metropolitan Air Quality Management District Tier 1 Best Management Practices:

- **BMP 1** - projects shall be designed and constructed without natural gas infrastructure.
- **BMP 2** - projects shall meet the current CalGreen Tier 2 standards, except all electric vehicle capable spaces shall instead be electric vehicle ready.

GHG-2: Implement SMAQMD Tier 2 Best Management Practices.

The implementing agency will require the Project to implement Sacramento Metropolitan Air Quality Management District Tier 2 Best Management Practices:

- **BMP 3** - The Project applicant shall coordinate with the City of Rancho Cordova to implement feasible transportation demand management (TDM) strategies, which would decrease the vehicle miles traveled generated by the Project as follows:

  1. The Project office space component must achieve a 15 percent reduction in VMT per worker compared to the existing average VMT per capita for Sacramento County.
  2. The Project residential component must achieve a 15 percent reduction in VMT per resident compared to the existing average VMT per capita in Sacramento County.
  3. The Project retail component must achieve no net increase in total VMT.

Examples of potential measures include (but are not limited to): paid parking, employee telecommuting, employee shuttle service, expansion of transit service coverage / subsidized transit fares, enhanced bicycle and pedestrian connections, and flexible work schedules.

In the case that the necessary VMT reductions are infeasible, the purchasing and retiring GHG/carbon offsets from a SMAQMD-approved registry is required. Approved registries may include but are not limited to any of the following: (i) the Climate Action Reserve, the American Carbon Registry and Verra; (ii) any entity approved at any time by the California Air Resources Board to act as an "offset project registry" under the state's cap-and-trade program; (iii) other

regulatory or voluntary credits that demonstrate, based on substantial evidence, that the offsets are real, permanent, quantifiable, verifiable, enforceable, and additional.

Adherence to both mitigation measures GHG-1 and GHG-2 are required in order for the Project's contribution of GHG emissions to be considered less than significant.

3.3.3.2 Conflict with any Applicable Plan, Policy, or Regulation of an Agency Adopted for the Purpose of Reducing the Emissions of Greenhouse Gases

As previously described, SACOG's MTP/SCS establishes GHG emissions goals for automobiles and light-duty trucks. As shown in Table 3-3, GHG emissions resulting from Project-related transportation sources are one of the most potent sources of emissions, and therefore comparison to the MTP/SCS is an appropriate indicator of whether the Project is consistent with the MTP/SCS. Since the development site is classified as a "Center and Corridor Community" in the MTP/SCS (SACOG 2020, Appendix D), it is included in an area where urban development is predicted by SACOG. According to the MTP/SCS, land uses in Center and Corridor Communities are typically higher density and more mixed than surrounding land uses. Centers and Corridors are identified in local plans as historic downtowns, main streets, suburban or urban commercial corridors, rail station areas, central business districts, or town centers. They typically have more compact development patterns, a greater mix of uses, and a wider variety of transportation infrastructure compared to the communities surrounding them. Some have frequent transit service, either bus or rail, and all have pedestrian and bicycling infrastructure that is more supportive of walking and bicycling than other Community Types. The Project is consistent with the "Center and Corridor Community" classification in the MTP/SCS, and it can be assumed that regional mobile emissions will decrease in line with the goals of the MTP/SCS with implementation of the future development within the Project Area.

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LIST OF ATTACHMENTS

Attachment A – CalEEMod Output File for Criteria Pollutant and Greenhouse Gas Emissions

ATTACHMENT A

CalEEMod Output Files – Criteria Air Pollutant and Greenhouse Gas Emissoins

Mills Crossing Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Mills Crossing
Construction Start Date	1/2/2024
Operational Year	2029
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.70
Precipitation (days)	3.00
Location	38.58510137581632, -121.31208673995633
County	Sacramento
City	Rancho Cordova
Air District	Sacramento Metropolitan AQMD
Air Basin	Sacramento Valley
TAZ	608
EDFZ	13
Electric Utility	Sacramento Municipal Utility District
Gas Utility	Pacific Gas & Electric
App Version	2022.1.1.14

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Medical Office Building	30.0	1000sqft	0.69	30,000	0.00	—	—	—
Library	15.0	1000sqft	0.34	15,000	0.00	—	—	—
Strip Mall	35.0	1000sqft	0.80	35,000	0.00	—	—	—
Strip Mall	52.5	1000sqft	1.21	52,500	0.00	—	—	—
High Turnover (Sit Down Restaurant)	7.50	1000sqft	0.17	7,500	0.00	—	—	—
Condo/Townhouse	60.0	Dwelling Unit	1.50	63,600	0.00	—	168	—
City Park	2.50	Acre	2.50	0.00	100,000	100,000	—	—
Unenclosed Parking with Elevator	325	Space	1.17	130,000	—	—	—	—
Apartments Mid Rise	60.0	Dwelling Unit	1.50	57,600	—	—	168	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-10-A	Water Exposed Surfaces
Construction	C-11	Limit Vehicle Speeds on Unpaved Roads
Transportation	T-3	Provide Transit-Oriented Development
Transportation	T-4	Integrate A ordable and Below Market Rate Housing

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unmit.	5.28	36.0	39.8	0.05	1.60	2.86	3.69	1.47	0.69	1.51	—	8,426	8,426	0.31	0.37	14.8	8,560
Mit.	5.28	36.0	39.8	0.05	1.60	2.86	3.69	1.47	0.69	1.51	—	8,426	8,426	0.31	0.37	14.8	8,560
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.15	36.0	36.0	0.05	1.60	2.86	3.70	1.47	0.69	1.51	—	8,118	8,118	0.33	0.37	0.38	8,238
Mit.	5.15	36.0	36.0	0.05	1.60	2.86	3.70	1.47	0.69	1.51	—	8,118	8,118	0.33	0.37	0.38	8,238
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.58	19.7	25.2	0.04	0.87	2.04	2.57	0.80	0.49	0.98	—	5,786	5,786	0.23	0.27	4.15	5,875
Mit.	3.58	19.7	25.2	0.04	0.87	2.04	2.57	0.80	0.49	0.98	—	5,786	5,786	0.23	0.27	4.15	5,875
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.65	3.60	4.60	0.01	0.16	0.37	0.47	0.15	0.09	0.18	—	958	958	0.04	0.04	0.69	973
Mit.	0.65	3.60	4.60	0.01	0.16	0.37	0.47	0.15	0.09	0.18	—	958	958	0.04	0.04	0.69	973
% Reduced	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

2024	3.72	36.0	34.1	0.05	1.60	0.18	1.78	1.47	0.04	1.51	—	5,498	5,498	0.22	0.05	0.83	5,520
2025	5.28	22.5	39.8	0.05	0.83	2.86	3.69	0.77	0.69	1.45	—	8,426	8,426	0.31	0.37	14.8	8,560
2026	5.11	21.2	38.7	0.05	0.74	2.86	3.61	0.69	0.69	1.37	—	8,337	8,337	0.31	0.37	13.5	8,468
2027	5.01	20.4	37.8	0.05	0.68	2.86	3.54	0.62	0.69	1.31	—	8,253	8,253	0.30	0.36	12.2	8,379
2028	4.80	19.3	36.9	0.05	0.59	2.86	3.46	0.55	0.69	1.23	—	8,157	8,157	0.29	0.28	11.0	8,259
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.71	36.0	33.8	0.05	1.60	0.18	1.78	1.47	0.04	1.51	—	5,476	5,476	0.22	0.05	0.02	5,496
2025	5.15	22.9	36.0	0.05	0.83	2.86	3.70	0.77	0.69	1.45	—	8,118	8,118	0.33	0.37	0.38	8,238
2026	5.02	21.6	35.1	0.05	0.75	2.86	3.61	0.69	0.69	1.37	—	8,037	8,037	0.32	0.37	0.35	8,157
2027	4.83	20.8	34.4	0.05	0.68	2.86	3.54	0.62	0.69	1.31	—	7,959	7,959	0.31	0.36	0.32	8,075
2028	4.72	19.7	33.8	0.05	0.59	2.86	3.46	0.55	0.69	1.23	—	7,869	7,869	0.31	0.36	0.28	7,985
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.08	19.7	18.7	0.03	0.87	0.11	0.98	0.80	0.03	0.83	—	3,002	3,002	0.12	0.03	0.23	3,013
2025	3.33	15.5	24.0	0.03	0.58	1.75	2.33	0.54	0.42	0.96	—	5,299	5,299	0.21	0.23	3.90	5,377
2026	3.58	15.3	25.2	0.04	0.53	2.04	2.57	0.49	0.49	0.98	—	5,786	5,786	0.23	0.27	4.15	5,875
2027	3.45	14.7	24.7	0.04	0.48	2.04	2.52	0.45	0.49	0.93	—	5,729	5,729	0.22	0.25	3.76	5,814
2028	3.32	13.8	23.9	0.04	0.42	2.01	2.43	0.39	0.48	0.87	—	5,586	5,586	0.21	0.25	3.34	5,670
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.38	3.60	3.41	< 0.005	0.16	0.02	0.18	0.15	< 0.005	0.15	—	497	497	0.02	< 0.005	0.04	499
2025	0.61	2.84	4.37	0.01	0.11	0.32	0.43	0.10	0.08	0.17	—	877	877	0.03	0.04	0.65	890
2026	0.65	2.80	4.60	0.01	0.10	0.37	0.47	0.09	0.09	0.18	—	958	958	0.04	0.04	0.69	973
2027	0.63	2.69	4.51	0.01	0.09	0.37	0.46	0.08	0.09	0.17	—	948	948	0.04	0.04	0.62	963
2028	0.61	2.51	4.37	0.01	0.08	0.37	0.44	0.07	0.09	0.16	—	925	925	0.04	0.04	0.55	939

2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.72	36.0	34.1	0.05	1.60	0.18	1.78	1.47	0.04	1.51	—	5,498	5,498	0.22	0.05	0.83	5,520
2025	5.28	22.5	39.8	0.05	0.83	2.86	3.69	0.77	0.69	1.45	—	8,426	8,426	0.31	0.37	14.8	8,560
2026	5.11	21.2	38.7	0.05	0.74	2.86	3.61	0.69	0.69	1.37	—	8,337	8,337	0.31	0.37	13.5	8,468
2027	5.01	20.4	37.8	0.05	0.68	2.86	3.54	0.62	0.69	1.31	—	8,253	8,253	0.30	0.36	12.2	8,379
2028	4.80	19.3	36.9	0.05	0.59	2.86	3.46	0.55	0.69	1.23	—	8,157	8,157	0.29	0.28	11.0	8,259
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	3.71	36.0	33.8	0.05	1.60	0.18	1.78	1.47	0.04	1.51	—	5,476	5,476	0.22	0.05	0.02	5,496
2025	5.15	22.9	36.0	0.05	0.83	2.86	3.70	0.77	0.69	1.45	—	8,118	8,118	0.33	0.37	0.38	8,238
2026	5.02	21.6	35.1	0.05	0.75	2.86	3.61	0.69	0.69	1.37	—	8,037	8,037	0.32	0.37	0.35	8,157
2027	4.83	20.8	34.4	0.05	0.68	2.86	3.54	0.62	0.69	1.31	—	7,959	7,959	0.31	0.36	0.32	8,075
2028	4.72	19.7	33.8	0.05	0.59	2.86	3.46	0.55	0.69	1.23	—	7,869	7,869	0.31	0.36	0.28	7,985
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.08	19.7	18.7	0.03	0.87	0.11	0.98	0.80	0.03	0.83	—	3,002	3,002	0.12	0.03	0.23	3,013
2025	3.33	15.5	24.0	0.03	0.58	1.75	2.33	0.54	0.42	0.96	—	5,299	5,299	0.21	0.23	3.90	5,377
2026	3.58	15.3	25.2	0.04	0.53	2.04	2.57	0.49	0.49	0.98	—	5,786	5,786	0.23	0.27	4.15	5,875
2027	3.45	14.7	24.7	0.04	0.48	2.04	2.52	0.45	0.49	0.93	—	5,729	5,729	0.22	0.25	3.76	5,814
2028	3.32	13.8	23.9	0.04	0.42	2.01	2.43	0.39	0.48	0.87	—	5,586	5,586	0.21	0.25	3.34	5,670
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.38	3.60	3.41	< 0.005	0.16	0.02	0.18	0.15	< 0.005	0.15	—	497	497	0.02	< 0.005	0.04	499
2025	0.61	2.84	4.37	0.01	0.11	0.32	0.43	0.10	0.08	0.17	—	877	877	0.03	0.04	0.65	890
2026	0.65	2.80	4.60	0.01	0.10	0.37	0.47	0.09	0.09	0.18	—	958	958	0.04	0.04	0.69	973

2027	0.63	2.69	4.51	0.01	0.09	0.37	0.46	0.08	0.09	0.17	—	948	948	0.04	0.04	0.62	963
2028	0.61	2.51	4.37	0.01	0.08	0.37	0.44	0.07	0.09	0.16	—	925	925	0.04	0.04	0.55	939

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	26.0	15.5	186	0.40	0.28	35.8	36.0	0.27	9.08	9.35	364	44,456	44,820	34.6	1.67	120	46,301
Mit.	23.2	13.0	159	0.33	0.24	29.9	30.2	0.23	7.61	7.83	364	37,834	38,198	34.3	1.41	103	39,580
% Reduced	11%	16%	15%	16%	15%	16%	16%	15%	16%	16%	—	15%	15%	1%	15%	14%	15%
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	21.9	18.0	139	0.36	0.26	35.8	36.0	0.24	9.08	9.33	364	40,859	41,224	34.7	1.82	16.7	42,650
Mit.	19.3	15.1	117	0.30	0.22	29.9	30.2	0.20	7.61	7.81	364	34,812	35,176	34.4	1.54	16.3	36,512
% Reduced	12%	16%	16%	16%	16%	16%	16%	16%	16%	16%	—	15%	15%	1%	15%	3%	14%
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	22.3	12.9	117	0.26	0.20	24.7	24.9	0.19	6.27	6.46	364	30,151	30,516	34.3	1.33	45.5	31,815
Mit.	20.0	10.7	99.6	0.22	0.17	20.5	20.7	0.16	5.21	5.37	364	25,700	26,065	34.1	1.12	40.2	27,292
% Reduced	11%	17%	15%	17%	16%	17%	17%	15%	17%	17%	—	15%	15%	1%	15%	12%	14%
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.07	2.35	21.4	0.05	0.04	4.51	4.54	0.03	1.14	1.18	60.3	4,992	5,052	5.68	0.22	7.53	5,267
Mit.	3.64	1.96	18.2	0.04	0.03	3.75	3.78	0.03	0.95	0.98	60.3	4,255	4,315	5.64	0.19	6.65	4,518

% Reduced	11%	17%	15%	17%	16%	17%	17%	15%	17%	17%	—	15%	15%	1%	15%	12%	14%

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	17.3	15.3	168	0.40	0.26	35.8	36.0	0.24	9.08	9.33	—	40,674	40,674	1.55	1.57	106	41,287
Area	8.76	0.16	18.6	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	66.5	66.5	< 0.005	< 0.005	—	66.7
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,662	3,662	0.13	0.02	—	3,671
Water	—	—	—	—	—	—	—	—	—	—	36.8	53.0	89.8	0.13	0.08	—	117
Waste	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Total	26.0	15.5	186	0.40	0.28	35.8	36.0	0.27	9.08	9.35	364	44,456	44,820	34.6	1.67	120	46,301
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	15.6	18.0	139	0.36	0.26	35.8	36.0	0.24	9.08	9.33	—	37,144	37,144	1.72	1.72	2.74	37,702
Area	6.24	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,662	3,662	0.13	0.02	—	3,671
Water	—	—	—	—	—	—	—	—	—	—	36.8	53.0	89.8	0.13	0.08	—	117
Waste	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Total	21.9	18.0	139	0.36	0.26	35.8	36.0	0.24	9.08	9.33	364	40,859	41,224	34.7	1.82	16.7	42,650
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.3	12.7	104	0.26	0.18	24.7	24.9	0.17	6.27	6.45	—	26,390	26,390	1.31	1.23	31.5	26,821

Area	7.96	0.11	12.7	< 0.005	0.01	—	0.01	0.02	—	0.02	0.00	45.5	45.5	< 0.005	< 0.005	—	45.7
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,662	3,662	0.13	0.02	—	3,671
Water	—	—	—	—	—	—	—	—	—	—	36.8	53.0	89.8	0.13	0.08	—	117
Waste	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Total	22.3	12.9	117	0.26	0.20	24.7	24.9	0.19	6.27	6.46	364	30,151	30,516	34.3	1.33	45.5	31,815
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.62	2.33	19.0	0.05	0.03	4.51	4.54	0.03	1.14	1.18	—	4,369	4,369	0.22	0.20	5.22	4,441
Area	1.45	0.02	2.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	7.54	7.54	< 0.005	< 0.005	—	7.57
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	606	606	0.02	< 0.005	—	608
Water	—	—	—	—	—	—	—	—	—	—	6.09	8.77	14.9	0.02	0.01	—	19.4
Waste	—	—	—	—	—	—	—	—	—	—	54.2	0.00	54.2	5.42	0.00	—	190
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.31	2.31
Total	4.07	2.35	21.4	0.05	0.04	4.51	4.54	0.03	1.14	1.18	60.3	4,992	5,052	5.68	0.22	7.53	5,267

2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	14.5	12.8	141	0.33	0.22	29.9	30.2	0.20	7.61	7.81	—	34,052	34,052	1.30	1.32	88.6	34,565
Area	8.76	0.16	18.6	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	66.5	66.5	< 0.005	< 0.005	—	66.7
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,662	3,662	0.13	0.02	—	3,671
Water	—	—	—	—	—	—	—	—	—	—	36.8	53.0	89.8	0.13	0.08	—	117
Waste	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Total	23.2	13.0	159	0.33	0.24	29.9	30.2	0.23	7.61	7.83	364	37,834	38,198	34.3	1.41	103	39,580

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	13.1	15.1	117	0.30	0.22	29.9	30.2	0.20	7.61	7.81	—	31,097	31,097	1.44	1.44	2.30	31,564
Area	6.24	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,662	3,662	0.13	0.02	—	3,671
Water	—	—	—	—	—	—	—	—	—	—	36.8	53.0	89.8	0.13	0.08	—	117
Waste	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Total	19.3	15.1	117	0.30	0.22	29.9	30.2	0.20	7.61	7.81	364	34,812	35,176	34.4	1.54	16.3	36,512
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	12.0	10.6	86.9	0.21	0.15	20.5	20.7	0.14	5.21	5.36	—	21,939	21,939	1.10	1.02	26.2	22,298
Area	7.96	0.11	12.7	< 0.005	0.01	—	0.01	0.02	—	0.02	0.00	45.5	45.5	< 0.005	< 0.005	—	45.7
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	3,662	3,662	0.13	0.02	—	3,671
Water	—	—	—	—	—	—	—	—	—	—	36.8	53.0	89.8	0.13	0.08	—	117
Waste	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Total	20.0	10.7	99.6	0.22	0.17	20.5	20.7	0.16	5.21	5.37	364	25,700	26,065	34.1	1.12	40.2	27,292
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.19	1.94	15.9	0.04	0.03	3.75	3.77	0.03	0.95	0.98	—	3,632	3,632	0.18	0.17	4.34	3,692
Area	1.45	0.02	2.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	7.54	7.54	< 0.005	< 0.005	—	7.57
Energy	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	606	606	0.02	< 0.005	—	608
Water	—	—	—	—	—	—	—	—	—	—	6.09	8.77	14.9	0.02	0.01	—	19.4
Waste	—	—	—	—	—	—	—	—	—	—	54.2	0.00	54.2	5.42	0.00	—	190
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.31	2.31
Total	3.64	1.96	18.2	0.04	0.03	3.75	3.78	0.03	0.95	0.98	60.3	4,255	4,315	5.64	0.19	6.65	4,518

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	6.82	5.96	0.01	0.29	—	0.29	0.27	—	0.27	—	938	938	0.04	0.01	—	942
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.24	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	155	155	0.01	< 0.005	—	156
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.97	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	174	174	0.01	0.01	0.71	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.72	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.02	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.3	43.3	< 0.005	< 0.005	0.08	44.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.18	7.18	< 0.005	< 0.005	0.01	7.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.2. Demolition (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.62	24.9	21.7	0.03	1.06	—	1.06	0.98	—	0.98	—	3,425	3,425	0.14	0.03	—	3,437
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	6.82	5.96	0.01	0.29	—	0.29	0.27	—	0.27	—	938	938	0.04	0.01	—	942
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.24	1.09	< 0.005	0.05	—	0.05	0.05	—	0.05	—	155	155	0.01	< 0.005	—	156
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.05	0.97	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	174	174	0.01	0.01	0.71	176
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.72	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.02	156

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.20	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	43.3	43.3	< 0.005	< 0.005	0.08	44.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	7.18	7.18	< 0.005	< 0.005	0.01	7.28
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.00	9.85	9.02	0.01	0.44	—	0.44	0.40	—	0.40	—	1,451	1,451	0.06	0.01	—	1,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.80	1.65	< 0.005	0.08	—	0.08	0.07	—	0.07	—	240	240	0.01	< 0.005	—	241
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	1.14	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	203	203	0.01	0.01	0.83	206
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	0.83	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	180	180	< 0.005	0.01	0.02	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	50.6	50.6	< 0.005	< 0.005	0.10	51.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.37	8.37	< 0.005	< 0.005	0.02	8.49

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.65	36.0	32.9	0.05	1.60	—	1.60	1.47	—	1.47	—	5,296	5,296	0.21	0.04	—	5,314
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.00	9.85	9.02	0.01	0.44	—	0.44	0.40	—	0.40	—	1,451	1,451	0.06	0.01	—	1,456
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.18	1.80	1.65	< 0.005	0.08	—	0.08	0.07	—	0.07	—	240	240	0.01	< 0.005	—	241
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.06	1.14	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	203	203	0.01	0.01	0.83	206
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.08	0.83	0.00	0.00	0.18	0.18	0.00	0.04	0.04	—	180	180	< 0.005	0.01	0.02	182
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.23	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	50.6	50.6	< 0.005	< 0.005	0.10	51.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.37	8.37	< 0.005	< 0.005	0.02	8.49
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	3.03	3.13	< 0.005	0.14	—	0.14	0.13	—	0.13	—	492	492	0.02	< 0.005	—	494
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.55	0.57	< 0.005	0.03	—	0.03	0.02	—	0.02	—	81.5	81.5	< 0.005	< 0.005	—	81.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.72	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.02	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.3	26.3	< 0.005	< 0.005	0.05	26.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.36	4.36	< 0.005	< 0.005	0.01	4.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.6. Grading (2024) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.90	18.2	18.8	0.03	0.84	—	0.84	0.77	—	0.77	—	2,958	2,958	0.12	0.02	—	2,969
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32	3.03	3.13	< 0.005	0.14	—	0.14	0.13	—	0.13	—	492	492	0.02	< 0.005	—	494
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.55	0.57	< 0.005	0.03	—	0.03	0.02	—	0.02	—	81.5	81.5	< 0.005	< 0.005	—	81.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.07	0.72	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	154	154	< 0.005	0.01	0.02	156
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.12	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.3	26.3	< 0.005	< 0.005	0.05	26.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.36	4.36	< 0.005	< 0.005	0.01	4.42
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.7. Grading (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.75	1.93	< 0.005	0.08	—	0.08	0.07	—	0.07	—	319	319	0.01	< 0.005	—	320
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.32	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.7	52.7	< 0.005	< 0.005	—	52.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	151	151	< 0.005	0.01	0.02	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.7	16.7	< 0.005	< 0.005	0.03	16.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.76	2.76	< 0.005	< 0.005	0.01	2.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Grading (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.74	16.3	17.9	0.03	0.72	—	0.72	0.66	—	0.66	—	2,959	2,959	0.12	0.02	—	2,970
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.19	1.75	1.93	< 0.005	0.08	—	0.08	0.07	—	0.07	—	319	319	0.01	< 0.005	—	320
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.32	0.35	< 0.005	0.01	—	0.01	0.01	—	0.01	—	52.7	52.7	< 0.005	< 0.005	—	52.9
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	151	151	< 0.005	0.01	0.02	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	16.7	16.7	< 0.005	< 0.005	0.03	16.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	2.76	2.76	< 0.005	< 0.005	0.01	2.80
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	6.34	7.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,455	1,455	0.06	0.01	—	1,460
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.16	1.44	< 0.005	0.05	—	0.05	0.04	—	0.04	—	241	241	0.01	< 0.005	—	242
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.55	11.3	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	2,135	2,135	0.03	0.08	8.20	2,166
Vendor	0.07	2.99	1.11	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,651	1,651	0.11	0.24	4.29	1,731
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.70	8.35	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,895	1,895	0.05	0.08	0.21	1,919
Vendor	0.06	3.20	1.14	0.01	0.02	0.43	0.46	0.02	0.12	0.14	—	1,650	1,650	0.11	0.24	0.11	1,726
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.38	5.17	0.00	0.00	1.15	1.15	0.00	0.27	0.27	—	1,180	1,180	0.02	0.05	2.14	1,196
Vendor	0.04	1.91	0.68	0.01	0.01	0.26	0.28	0.01	0.07	0.08	—	1,001	1,001	0.07	0.15	1.12	1,048
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.08	0.07	0.94	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	195	195	< 0.005	0.01	0.36	198
Vendor	0.01	0.35	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	166	166	0.01	0.02	0.19	174
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.13	10.4	13.0	0.02	0.43	—	0.43	0.40	—	0.40	—	2,398	2,398	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.68	6.34	7.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,455	1,455	0.06	0.01	—	1,460
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	1.16	1.44	< 0.005	0.05	—	0.05	0.04	—	0.04	—	241	241	0.01	< 0.005	—	242

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.79	0.55	11.3	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	2,135	2,135	0.03	0.08	8.20	2,166
Vendor	0.07	2.99	1.11	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,651	1,651	0.11	0.24	4.29	1,731
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.71	0.70	8.35	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,895	1,895	0.05	0.08	0.21	1,919
Vendor	0.06	3.20	1.14	0.01	0.02	0.43	0.46	0.02	0.12	0.14	—	1,650	1,650	0.11	0.24	0.11	1,726
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.43	0.38	5.17	0.00	0.00	1.15	1.15	0.00	0.27	0.27	—	1,180	1,180	0.02	0.05	2.14	1,196
Vendor	0.04	1.91	0.68	0.01	0.01	0.26	0.28	0.01	0.07	0.08	—	1,001	1,001	0.07	0.15	1.12	1,048
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.94	0.00	0.00	0.21	0.21	0.00	0.05	0.05	—	195	195	< 0.005	0.01	0.36	198
Vendor	0.01	0.35	0.12	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	—	166	166	0.01	0.02	0.19	174
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Building Construction (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.48	10.6	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	2,093	2,093	0.03	0.07	7.48	2,122
Vendor	0.06	2.80	1.07	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,618	1,618	0.11	0.24	3.90	1,697
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.68	0.63	7.79	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,859	1,859	0.04	0.08	0.19	1,882
Vendor	0.06	3.00	1.09	0.01	0.02	0.43	0.46	0.02	0.12	0.14	—	1,617	1,617	0.11	0.24	0.10	1,692
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.39	5.68	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,362	1,362	0.03	0.05	2.31	1,381
Vendor	0.04	2.11	0.77	0.01	0.02	0.31	0.33	0.02	0.08	0.10	—	1,155	1,155	0.08	0.17	1.20	1,210
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	1.04	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	226	226	< 0.005	0.01	0.38	229
Vendor	0.01	0.38	0.14	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	191	191	0.01	0.03	0.20	200
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Building Construction (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.07	9.85	13.0	0.02	0.38	—	0.38	0.35	—	0.35	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77	7.04	9.26	0.02	0.27	—	0.27	0.25	—	0.25	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	1.28	1.69	< 0.005	0.05	—	0.05	0.05	—	0.05	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.75	0.48	10.6	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	2,093	2,093	0.03	0.07	7.48	2,122
Vendor	0.06	2.80	1.07	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,618	1,618	0.11	0.24	3.90	1,697
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.68	0.63	7.79	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,859	1,859	0.04	0.08	0.19	1,882
Vendor	0.06	3.00	1.09	0.01	0.02	0.43	0.46	0.02	0.12	0.14	—	1,617	1,617	0.11	0.24	0.10	1,692
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.48	0.39	5.68	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,362	1,362	0.03	0.05	2.31	1,381
Vendor	0.04	2.11	0.77	0.01	0.02	0.31	0.33	0.02	0.08	0.10	—	1,155	1,155	0.08	0.17	1.20	1,210

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.07	1.04	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	226	226	< 0.005	0.01	0.38	229
Vendor	0.01	0.38	0.14	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	191	191	0.01	0.03	0.20	200
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.48	9.98	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	2,055	2,055	0.03	0.07	6.79	2,084
Vendor	0.06	2.63	1.03	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,581	1,581	0.10	0.23	3.50	1,656
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.62	7.31	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,826	1,826	0.04	0.08	0.18	1,850
Vendor	0.06	2.81	1.05	0.01	0.02	0.43	0.46	0.02	0.12	0.14	—	1,581	1,581	0.10	0.23	0.09	1,652
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.39	5.35	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,338	1,338	0.02	0.05	2.10	1,356
Vendor	0.04	1.97	0.74	0.01	0.02	0.31	0.32	0.02	0.08	0.10	—	1,129	1,129	0.07	0.17	1.08	1,181
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.98	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	222	222	< 0.005	0.01	0.35	225
Vendor	0.01	0.36	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	187	187	0.01	0.03	0.18	196
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.14. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.03	9.39	12.9	0.02	0.34	—	0.34	0.31	—	0.31	—	2,397	2,397	0.10	0.02	—	2,405
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.71	9.24	0.02	0.24	—	0.24	0.22	—	0.22	—	1,712	1,712	0.07	0.01	—	1,718
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.22	1.69	< 0.005	0.04	—	0.04	0.04	—	0.04	—	283	283	0.01	< 0.005	—	284
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.73	0.48	9.98	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	2,055	2,055	0.03	0.07	6.79	2,084
Vendor	0.06	2.63	1.03	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,581	1,581	0.10	0.23	3.50	1,656
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.59	0.62	7.31	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,826	1,826	0.04	0.08	0.18	1,850
Vendor	0.06	2.81	1.05	0.01	0.02	0.43	0.46	0.02	0.12	0.14	—	1,581	1,581	0.10	0.23	0.09	1,652
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.39	5.35	0.00	0.00	1.35	1.35	0.00	0.32	0.32	—	1,338	1,338	0.02	0.05	2.10	1,356
Vendor	0.04	1.97	0.74	0.01	0.02	0.31	0.32	0.02	0.08	0.10	—	1,129	1,129	0.07	0.17	1.08	1,181
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.98	0.00	0.00	0.25	0.25	0.00	0.06	0.06	—	222	222	< 0.005	0.01	0.35	225
Vendor	0.01	0.36	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	187	187	0.01	0.03	0.18	196
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	6.29	9.11	0.02	0.21	—	0.21	0.19	—	0.19	—	1,689	1,689	0.07	0.01	—	1,695
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	1.15	1.66	< 0.005	0.04	—	0.04	0.04	—	0.04	—	280	280	0.01	< 0.005	—	281
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.64	0.41	9.37	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	2,013	2,013	0.02	0.01	6.14	2,024
Vendor	0.06	2.46	0.99	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,539	1,539	0.10	0.23	3.10	1,613
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.55	6.90	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,788	1,788	0.04	0.08	0.16	1,812
Vendor	0.06	2.63	1.02	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,539	1,539	0.10	0.23	0.08	1,610
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.34	4.96	0.00	0.00	1.34	1.34	0.00	0.31	0.31	—	1,293	1,293	0.02	0.05	1.87	1,310
Vendor	0.04	1.82	0.70	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,084	1,084	0.07	0.16	0.95	1,135

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.91	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	214	214	< 0.005	0.01	0.31	217
Vendor	0.01	0.33	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.02	—	179	179	0.01	0.03	0.16	188
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.99	8.92	12.9	0.02	0.30	—	0.30	0.28	—	0.28	—	2,397	2,397	0.10	0.02	—	2,406
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.70	6.29	9.11	0.02	0.21	—	0.21	0.19	—	0.19	—	1,689	1,689	0.07	0.01	—	1,695
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	1.15	1.66	< 0.005	0.04	—	0.04	0.04	—	0.04	—	280	280	0.01	< 0.005	—	281
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.64	0.41	9.37	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	2,013	2,013	0.02	0.01	6.14	2,024
Vendor	0.06	2.46	0.99	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,539	1,539	0.10	0.23	3.10	1,613
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.58	0.55	6.90	0.00	0.00	1.90	1.90	0.00	0.45	0.45	—	1,788	1,788	0.04	0.08	0.16	1,812
Vendor	0.06	2.63	1.02	0.01	0.02	0.43	0.45	0.02	0.12	0.14	—	1,539	1,539	0.10	0.23	0.08	1,610
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.41	0.34	4.96	0.00	0.00	1.34	1.34	0.00	0.31	0.31	—	1,293	1,293	0.02	0.05	1.87	1,310
Vendor	0.04	1.82	0.70	0.01	0.02	0.30	0.32	0.02	0.08	0.10	—	1,084	1,084	0.07	0.16	0.95	1,135
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.07	0.06	0.91	0.00	0.00	0.24	0.24	0.00	0.06	0.06	—	214	214	< 0.005	0.01	0.31	217
Vendor	0.01	0.33	0.13	< 0.005	< 0.005	0.06	0.06	< 0.005	0.01	0.02	—	179	179	0.01	0.03	0.16	188
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.17. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.52	6.06	0.01	0.21	—	0.21	0.19	—	0.19	—	917	917	0.04	0.01	—	920
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.83	1.11	< 0.005	0.04	—	0.04	0.04	—	0.04	—	152	152	0.01	< 0.005	—	152
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.90	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	170	170	< 0.005	0.01	0.65	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	151	151	< 0.005	0.01	0.02	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.41	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	94.1	94.1	< 0.005	< 0.005	0.17	95.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.6	15.6	< 0.005	< 0.005	0.03	15.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.18. Paving (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.80	7.45	9.98	0.01	0.35	—	0.35	0.32	—	0.32	—	1,511	1,511	0.06	0.01	—	1,517
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	4.52	6.06	0.01	0.21	—	0.21	0.19	—	0.19	—	917	917	0.04	0.01	—	920
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.83	1.11	< 0.005	0.04	—	0.04	0.04	—	0.04	—	152	152	0.01	< 0.005	—	152
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.90	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	170	170	< 0.005	0.01	0.65	173
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.67	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	151	151	< 0.005	0.01	0.02	153
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.41	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	94.1	94.1	< 0.005	< 0.005	0.17	95.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	15.6	15.6	< 0.005	< 0.005	0.03	15.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.19. Paving (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	5.08	7.10	0.01	0.23	—	0.23	0.21	—	0.21	—	1,079	1,079	0.04	0.01	—	1,083
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.93	1.30	< 0.005	0.04	—	0.04	0.04	—	0.04	—	179	179	0.01	< 0.005	—	179
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.62	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.02	150

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.45	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.18	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.0	18.0	< 0.005	< 0.005	0.03	18.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.20. Paving (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.76	7.12	9.94	0.01	0.32	—	0.32	0.29	—	0.29	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.54	5.08	7.10	0.01	0.23	—	0.23	0.21	—	0.21	—	1,079	1,079	0.04	0.01	—	1,083
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.93	1.30	< 0.005	0.04	—	0.04	0.04	—	0.04	—	179	179	0.01	< 0.005	—	179
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.85	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	167	167	< 0.005	0.01	0.60	169
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.62	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	148	148	< 0.005	0.01	0.02	150
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.03	0.45	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	109	109	< 0.005	< 0.005	0.18	110
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	18.0	18.0	< 0.005	< 0.005	0.03	18.2
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.21. Paving (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	4.96	7.11	0.01	0.21	—	0.21	0.20	—	0.20	—	1,079	1,079	0.04	0.01	—	1,083
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.91	1.30	< 0.005	0.04	—	0.04	0.04	—	0.04	—	179	179	0.01	< 0.005	—	179
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.80	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.54	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.58	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	146	146	< 0.005	0.01	0.01	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.43	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	0.17	108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	0.03	17.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.22. Paving (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	6.94	9.95	0.01	0.30	—	0.30	0.27	—	0.27	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.53	4.96	7.11	0.01	0.21	—	0.21	0.20	—	0.20	—	1,079	1,079	0.04	0.01	—	1,083
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10	0.91	1.30	< 0.005	0.04	—	0.04	0.04	—	0.04	—	179	179	0.01	< 0.005	—	179
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.04	0.80	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	164	164	< 0.005	0.01	0.54	166
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.58	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	146	146	< 0.005	0.01	0.01	148
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.43	0.00	0.00	0.11	0.11	0.00	0.03	0.03	—	107	107	< 0.005	< 0.005	0.17	108
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.7	17.7	< 0.005	< 0.005	0.03	17.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.23. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	4.67	6.98	0.01	0.18	—	0.18	0.17	—	0.17	—	1,065	1,065	0.04	0.01	—	1,068
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.85	1.27	< 0.005	0.03	—	0.03	0.03	—	0.03	—	176	176	0.01	< 0.005	—	177
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.03	0.75	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.49	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.55	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.40	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.15	105
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.02	17.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.24. Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.69	6.63	9.91	0.01	0.26	—	0.26	0.24	—	0.24	—	1,511	1,511	0.06	0.01	—	1,516
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.48	4.67	6.98	0.01	0.18	—	0.18	0.17	—	0.17	—	1,065	1,065	0.04	0.01	—	1,068
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.85	1.27	< 0.005	0.03	—	0.03	0.03	—	0.03	—	176	176	0.01	< 0.005	—	177
Paving	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.03	0.75	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	161	161	< 0.005	< 0.005	0.49	161
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.05	0.04	0.55	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	143	143	< 0.005	0.01	0.01	145
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.40	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	103	103	< 0.005	< 0.005	0.15	105
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.07	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.1	17.1	< 0.005	< 0.005	0.02	17.3
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.25. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.54	0.69	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.0	81.0	< 0.005	< 0.005	—	81.3
Architectural Coatings	1.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.5
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.11	2.27	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	427	427	0.01	0.02	1.64	433
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.14	0.14	1.67	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	379	379	0.01	0.02	0.04	384
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	1.03	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	236	236	< 0.005	0.01	0.43	239
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.1	39.1	< 0.005	< 0.005	0.07	39.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.26. Architectural Coating (2025) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.54	0.69	< 0.005	0.02	—	0.02	0.02	—	0.02	—	81.0	81.0	< 0.005	< 0.005	—	81.3
Architectural Coatings	1.29	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	13.4	13.4	< 0.005	< 0.005	—	13.5
Architectural Coatings	0.24	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.11	2.27	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	427	427	0.01	0.02	1.64	433
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.14	0.14	1.67	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	379	379	0.01	0.02	0.04	384
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	1.03	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	236	236	< 0.005	0.01	0.43	239
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.19	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	39.1	39.1	< 0.005	< 0.005	0.07	39.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.27. Architectural Coating (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.61	0.81	< 0.005	0.02	—	0.02	0.02	—	0.02	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	1.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.10	2.12	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	419	419	0.01	0.01	1.50	424
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.14	0.13	1.56	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	372	372	0.01	0.02	0.04	376
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	1.14	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	272	272	0.01	0.01	0.46	276
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.1	45.1	< 0.005	< 0.005	0.08	45.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.28. Architectural Coating (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.12	0.86	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.61	0.81	< 0.005	0.02	—	0.02	0.02	—	0.02	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	1.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.10	2.12	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	419	419	0.01	0.01	1.50	424
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.14	0.13	1.56	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	372	372	0.01	0.02	0.04	376
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.08	1.14	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	272	272	0.01	0.01	0.46	276
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.21	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	45.1	45.1	< 0.005	< 0.005	0.08	45.7
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.29. Architectural Coating (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.59	0.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	1.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.10	2.00	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	411	411	0.01	0.01	1.36	417
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.12	1.46	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	365	365	0.01	0.02	0.04	370
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	1.07	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	268	268	< 0.005	0.01	0.42	271
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	44.3	44.3	< 0.005	< 0.005	0.07	44.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.30. Architectural Coating (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.83	1.13	< 0.005	0.02	—	0.02	0.02	—	0.02	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.59	0.80	< 0.005	0.01	—	0.01	0.01	—	0.01	—	95.4	95.4	< 0.005	< 0.005	—	95.7
Architectural Coatings	1.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.11	0.15	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.8	15.8	< 0.005	< 0.005	—	15.8
Architectural Coatings	0.28	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.15	0.10	2.00	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	411	411	0.01	0.01	1.36	417
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.12	1.46	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	365	365	0.01	0.02	0.04	370
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	1.07	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	268	268	< 0.005	0.01	0.42	271
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.20	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	44.3	44.3	< 0.005	< 0.005	0.07	44.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.31. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.57	0.79	< 0.005	0.01	—	0.01	0.01	—	0.01	—	94.1	94.1	< 0.005	< 0.005	—	94.4
Architectural Coatings	1.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.6	15.6	< 0.005	< 0.005	—	15.6
Architectural Coatings	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.08	1.87	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	403	403	< 0.005	< 0.005	1.23	405
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.11	1.38	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	358	358	0.01	0.02	0.03	362
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.99	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	259	259	< 0.005	0.01	0.37	262
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	42.8	42.8	< 0.005	< 0.005	0.06	43.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.32. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.11	0.81	1.12	< 0.005	0.02	—	0.02	0.01	—	0.01	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	2.13	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.57	0.79	< 0.005	0.01	—	0.01	0.01	—	0.01	—	94.1	94.1	< 0.005	< 0.005	—	94.4
Architectural Coatings	1.50	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.10	0.14	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.6	15.6	< 0.005	< 0.005	—	15.6
Architectural Coatings	0.27	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.08	1.87	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	403	403	< 0.005	< 0.005	1.23	405
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.12	0.11	1.38	0.00	0.00	0.38	0.38	0.00	0.09	0.09	—	358	358	0.01	0.02	0.03	362
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.99	0.00	0.00	0.27	0.27	0.00	0.06	0.06	—	259	259	< 0.005	0.01	0.37	262
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.18	0.00	0.00	0.05	0.05	0.00	0.01	0.01	—	42.8	42.8	< 0.005	< 0.005	0.06	43.4
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.39	0.35	3.79	0.01	0.01	0.81	0.81	0.01	0.20	0.21	—	918	918	0.04	0.04	2.39	932
Library	0.20	0.17	1.91	< 0.005	< 0.005	0.41	0.41	< 0.005	0.10	0.11	—	463	463	0.02	0.02	1.20	470
Strip Mall	2.27	2.01	22.0	0.05	0.03	4.68	4.71	0.03	1.19	1.22	—	5,318	5,318	0.20	0.21	13.8	5,398

High Turnover (Sit Down Restaurant)	12.1	10.7	117	0.28	0.18	24.9	25.1	0.17	6.33	6.50	—	28,357	28,357	1.08	1.10	73.7	28,785
Condo/Townhouse	1.38	1.26	13.8	0.03	0.02	2.96	2.99	0.02	0.75	0.77	—	3,369	3,369	0.13	0.13	8.77	3,419
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	0.92	0.84	9.23	0.02	0.01	1.98	1.99	0.01	0.50	0.52	—	2,250	2,250	0.08	0.09	5.86	2,283
Total	17.3	15.3	168	0.40	0.26	35.8	36.0	0.24	9.08	9.33	—	40,674	40,674	1.55	1.57	106	41,287
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.35	0.41	3.15	0.01	0.01	0.81	0.81	0.01	0.20	0.21	—	838	838	0.04	0.04	0.06	851
Library	0.18	0.21	1.59	< 0.005	< 0.005	0.41	0.41	< 0.005	0.10	0.11	—	423	423	0.02	0.02	0.03	429
Strip Mall	2.06	2.36	18.2	0.05	0.03	4.68	4.71	0.03	1.19	1.22	—	4,856	4,856	0.23	0.23	0.36	4,929
High Turnover (Sit Down Restaurant)	11.0	12.6	97.3	0.25	0.18	24.9	25.1	0.17	6.33	6.50	—	25,896	25,896	1.20	1.20	1.91	26,286
Condo/Townhouse	1.25	1.48	11.4	0.03	0.02	2.96	2.99	0.02	0.75	0.77	—	3,076	3,076	0.14	0.14	0.23	3,122
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Apartment Mid Rise	0.84	0.99	7.62	0.02	0.01	1.98	1.99	0.01	0.50	0.52	—	2,054	2,054	0.09	0.09	0.15	2,085
Total	15.6	18.0	139	0.36	0.26	35.8	36.0	0.24	9.08	9.33	—	37,144	37,144	1.72	1.72	2.74	37,702
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.06	0.07	0.57	< 0.005	< 0.005	0.15	0.15	< 0.005	0.04	0.04	—	141	141	0.01	0.01	0.17	144
Library	0.03	0.04	0.29	< 0.005	< 0.005	0.07	0.07	< 0.005	0.02	0.02	—	71.4	71.4	< 0.005	< 0.005	0.09	72.5
Strip Mall	0.38	0.40	3.31	0.01	0.01	0.85	0.86	0.01	0.22	0.22	—	820	820	0.04	0.04	0.99	832
High Turnover (Sit Down Restaurant)	1.76	1.40	11.4	0.03	0.02	2.53	2.55	0.02	0.64	0.66	—	2,470	2,470	0.14	0.12	2.93	2,513
Condo/Townhouse	0.23	0.25	2.08	0.01	< 0.005	0.54	0.55	< 0.005	0.14	0.14	—	519	519	0.02	0.02	0.63	527
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	0.15	0.17	1.39	< 0.005	< 0.005	0.36	0.36	< 0.005	0.09	0.09	—	347	347	0.01	0.01	0.42	352
Total	2.62	2.33	19.0	0.05	0.03	4.51	4.54	0.03	1.14	1.18	—	4,369	4,369	0.22	0.20	5.22	4,441

4.1.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	0.33	0.29	3.22	0.01	< 0.005	0.69	0.69	< 0.005	0.17	0.18	—	781	781	0.03	0.03	2.03	792
Library	0.17	0.15	1.63	< 0.005	< 0.005	0.35	0.35	< 0.005	0.09	0.09	—	394	394	0.02	0.02	1.02	400
Strip Mall	1.93	1.71	18.7	0.04	0.03	3.98	4.01	0.03	1.01	1.04	—	4,524	4,524	0.17	0.18	11.8	4,592
High Turnover (Sit Down Restaurant)	10.3	9.11	99.6	0.24	0.15	21.2	21.4	0.14	5.39	5.53	—	24,122	24,122	0.92	0.93	62.7	24,486
Condo/Townhouse	1.17	1.07	11.8	0.03	0.02	2.52	2.54	0.02	0.64	0.66	—	2,866	2,866	0.11	0.11	7.46	2,908
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	0.56	0.51	5.61	0.01	0.01	1.20	1.21	0.01	0.31	0.31	—	1,366	1,366	0.05	0.05	3.56	1,387
Total	14.5	12.8	141	0.33	0.22	29.9	30.2	0.20	7.61	7.81	—	34,052	34,052	1.30	1.32	88.6	34,565
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.30	0.35	2.68	0.01	< 0.005	0.69	0.69	< 0.005	0.17	0.18	—	713	713	0.03	0.03	0.05	724
Library	0.15	0.17	1.35	< 0.005	< 0.005	0.35	0.35	< 0.005	0.09	0.09	—	360	360	0.02	0.02	0.03	365
Strip Mall	1.75	2.01	15.5	0.04	0.03	3.98	4.01	0.03	1.01	1.04	—	4,131	4,131	0.19	0.19	0.31	4,193
High Turnover (Sit Down Restaurant)	9.33	10.7	82.8	0.22	0.15	21.2	21.4	0.14	5.39	5.53	—	22,029	22,029	1.02	1.02	1.63	22,360
Condo/Townhouse	1.06	1.26	9.71	0.03	0.02	2.52	2.54	0.02	0.64	0.66	—	2,617	2,617	0.12	0.12	0.19	2,656

City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	0.51	0.60	4.63	0.01	0.01	1.20	1.21	0.01	0.31	0.31	—	1,248	1,248	0.06	0.06	0.09	1,266
Total	13.1	15.1	117	0.30	0.22	29.9	30.2	0.20	7.61	7.81	—	31,097	31,097	1.44	1.44	2.30	31,564
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.06	0.06	0.49	< 0.005	< 0.005	0.13	0.13	< 0.005	0.03	0.03	—	120	120	0.01	0.01	0.15	122
Library	0.03	0.03	0.25	< 0.005	< 0.005	0.06	0.06	< 0.005	0.02	0.02	—	60.7	60.7	< 0.005	< 0.005	0.07	61.7
Strip Mall	0.32	0.34	2.82	0.01	0.01	0.73	0.73	< 0.005	0.18	0.19	—	697	697	0.03	0.03	0.84	708
High Turnover (Sit Down Restaurant)	1.50	1.19	9.69	0.02	0.02	2.15	2.17	0.02	0.55	0.56	—	2,101	2,101	0.12	0.10	2.49	2,138
Condo/Townhouse	0.19	0.21	1.77	< 0.005	< 0.005	0.46	0.46	< 0.005	0.12	0.12	—	442	442	0.02	0.02	0.53	448
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	0.09	0.10	0.84	< 0.005	< 0.005	0.22	0.22	< 0.005	0.06	0.06	—	211	211	0.01	0.01	0.25	214
Total	2.19	1.94	15.9	0.04	0.03	3.75	3.77	0.03	0.95	0.98	—	3,632	3,632	0.18	0.17	4.34	3,692

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	772	772	0.03	< 0.005	—	774
Library	—	—	—	—	—	—	—	—	—	—	—	170	170	0.01	< 0.005	—	170
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1,025	1,025	0.04	< 0.005	—	1,027
High Turnover (Sit Down Restauran)	—	—	—	—	—	—	—	—	—	—	—	317	317	0.01	< 0.005	—	317
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	575	575	0.02	< 0.005	—	576
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	376	376	0.01	< 0.005	—	377
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	428	428	0.01	< 0.005	—	428
Total	—	—	—	—	—	—	—	—	—	—	—	3,662	3,662	0.13	0.02	—	3,671
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	772	772	0.03	< 0.005	—	774
Library	—	—	—	—	—	—	—	—	—	—	—	170	170	0.01	< 0.005	—	170

Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1,025	1,025	0.04	< 0.005	—	1,027
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	317	317	0.01	< 0.005	—	317
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	575	575	0.02	< 0.005	—	576
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	376	376	0.01	< 0.005	—	377
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	428	428	0.01	< 0.005	—	428
Total	—	—	—	—	—	—	—	—	—	—	—	3,662	3,662	0.13	0.02	—	3,671
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	128	128	< 0.005	< 0.005	—	128
Library	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	170	170	0.01	< 0.005	—	170
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	52.4	52.4	< 0.005	< 0.005	—	52.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	95.2	95.2	< 0.005	< 0.005	—	95.4
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	62.3	62.3	< 0.005	< 0.005	—	62.4

Apartment Mid Rise	—	—	—	—	—	—	—	—	—	—	—	70.8	70.8	< 0.005	< 0.005	—	70.9
Total	—	—	—	—	—	—	—	—	—	—	—	606	606	0.02	< 0.005	—	608

4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	772	772	0.03	< 0.005	—	774
Library	—	—	—	—	—	—	—	—	—	—	—	170	170	0.01	< 0.005	—	170
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1,025	1,025	0.04	< 0.005	—	1,027
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	317	317	0.01	< 0.005	—	317
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	575	575	0.02	< 0.005	—	576
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	376	376	0.01	< 0.005	—	377
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	428	428	0.01	< 0.005	—	428
Total	—	—	—	—	—	—	—	—	—	—	—	3,662	3,662	0.13	0.02	—	3,671
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	772	772	0.03	< 0.005	—	774
Library	—	—	—	—	—	—	—	—	—	—	—	170	170	0.01	< 0.005	—	170
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	1,025	1,025	0.04	< 0.005	—	1,027
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	317	317	0.01	< 0.005	—	317
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	575	575	0.02	< 0.005	—	576
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	376	376	0.01	< 0.005	—	377
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	428	428	0.01	< 0.005	—	428
Total	—	—	—	—	—	—	—	—	—	—	—	3,662	3,662	0.13	0.02	—	3,671
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	128	128	< 0.005	< 0.005	—	128
Library	—	—	—	—	—	—	—	—	—	—	—	28.1	28.1	< 0.005	< 0.005	—	28.2
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	170	170	0.01	< 0.005	—	170
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	52.4	52.4	< 0.005	< 0.005	—	52.5
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	95.2	95.2	< 0.005	< 0.005	—	95.4
City Park	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00

Unenclos Parking with Elevator	—	—	—	—	—	—	—	—	—	—	—	62.3	62.3	< 0.005	< 0.005	—	62.4
Apartmen ts Mid Rise	—	—	—	—	—	—	—	—	—	—	—	70.8	70.8	< 0.005	< 0.005	—	70.9
Total	—	—	—	—	—	—	—	—	—	—	—	606	606	0.02	< 0.005	—	608

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Library	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restauran t)	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/To wnhouse	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unenclos ed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Library	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Library	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

High Turnover (Sit Down Restaurant)	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Library	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Library	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Library	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Strip Mall	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
High Turnover (Sit Down Restaurant)	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Condo/Townhouse	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
City Park	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

4.3. Area Emissions by Source

4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consumer Products	5.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.52	0.16	18.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	66.5	66.5	< 0.005	< 0.005	—	66.7
Total	8.76	0.16	18.6	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	66.5	66.5	< 0.005	< 0.005	—	66.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	5.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6.24	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.31	0.02	2.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.54	7.54	< 0.005	< 0.005	—	7.57
Total	1.45	0.02	2.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	7.54	7.54	< 0.005	< 0.005	—	7.57

4.3.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	5.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	2.52	0.16	18.6	< 0.005	0.02	—	0.02	0.02	—	0.02	—	66.5	66.5	< 0.005	< 0.005	—	66.7
Total	8.76	0.16	18.6	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	66.5	66.5	< 0.005	< 0.005	—	66.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Consumer Products	5.65	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.58	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	6.24	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00

Consumer Products	1.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.11	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.31	0.02	2.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	7.54	7.54	< 0.005	< 0.005	—	7.57
Total	1.45	0.02	2.32	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	7.54	7.54	< 0.005	< 0.005	—	7.57

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	8.04	10.5	18.5	0.03	0.02	—	24.4
Library	—	—	—	—	—	—	—	—	—	—	1.00	1.30	2.31	< 0.005	< 0.005	—	3.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	13.9	18.0	31.8	0.05	0.03	—	42.1
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	4.86	6.32	11.2	0.02	0.01	—	14.8
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	4.52	5.87	10.4	0.02	0.01	—	13.7
City Park	—	—	—	—	—	—	—	—	—	—	0.00	5.14	5.14	< 0.005	< 0.005	—	5.15

Unenclosed	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	4.52	5.87	10.4	0.02	0.01	—	13.7
Total	—	—	—	—	—	—	—	—	—	—	36.8	53.0	89.8	0.13	0.08	—	117
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	8.04	10.5	18.5	0.03	0.02	—	24.4
Library	—	—	—	—	—	—	—	—	—	—	1.00	1.30	2.31	< 0.005	< 0.005	—	3.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	13.9	18.0	31.8	0.05	0.03	—	42.1
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	4.86	6.32	11.2	0.02	0.01	—	14.8
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	4.52	5.87	10.4	0.02	0.01	—	13.7
City Park	—	—	—	—	—	—	—	—	—	—	0.00	5.14	5.14	< 0.005	< 0.005	—	5.15
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	4.52	5.87	10.4	0.02	0.01	—	13.7
Total	—	—	—	—	—	—	—	—	—	—	36.8	53.0	89.8	0.13	0.08	—	117
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	1.33	1.73	3.06	< 0.005	< 0.005	—	4.05
Library	—	—	—	—	—	—	—	—	—	—	0.17	0.22	0.38	< 0.005	< 0.005	—	0.50

Strip Mall	—	—	—	—	—	—	—	—	—	—	2.29	2.98	5.27	0.01	0.01	—	6.97
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	0.81	1.05	1.85	< 0.005	< 0.005	—	2.45
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	0.75	0.97	1.72	< 0.005	< 0.005	—	2.27
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.85	0.85	< 0.005	< 0.005	—	0.85
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	0.75	0.97	1.72	< 0.005	< 0.005	—	2.27
Total	—	—	—	—	—	—	—	—	—	—	6.09	8.77	14.9	0.02	0.01	—	19.4

4.4.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	8.04	10.5	18.5	0.03	0.02	—	24.4
Library	—	—	—	—	—	—	—	—	—	—	1.00	1.30	2.31	< 0.005	< 0.005	—	3.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	13.9	18.0	31.8	0.05	0.03	—	42.1
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	4.86	6.32	11.2	0.02	0.01	—	14.8

Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	4.52	5.87	10.4	0.02	0.01	—	13.7
City Park	—	—	—	—	—	—	—	—	—	—	0.00	5.14	5.14	< 0.005	< 0.005	—	5.15
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	4.52	5.87	10.4	0.02	0.01	—	13.7
Total	—	—	—	—	—	—	—	—	—	—	36.8	53.0	89.8	0.13	0.08	—	117
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	8.04	10.5	18.5	0.03	0.02	—	24.4
Library	—	—	—	—	—	—	—	—	—	—	1.00	1.30	2.31	< 0.005	< 0.005	—	3.05
Strip Mall	—	—	—	—	—	—	—	—	—	—	13.9	18.0	31.8	0.05	0.03	—	42.1
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	4.86	6.32	11.2	0.02	0.01	—	14.8
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	4.52	5.87	10.4	0.02	0.01	—	13.7
City Park	—	—	—	—	—	—	—	—	—	—	0.00	5.14	5.14	< 0.005	< 0.005	—	5.15
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	4.52	5.87	10.4	0.02	0.01	—	13.7

Total	—	—	—	—	—	—	—	—	—	—	36.8	53.0	89.8	0.13	0.08	—	117
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	1.33	1.73	3.06	< 0.005	< 0.005	—	4.05
Library	—	—	—	—	—	—	—	—	—	—	0.17	0.22	0.38	< 0.005	< 0.005	—	0.50
Strip Mall	—	—	—	—	—	—	—	—	—	—	2.29	2.98	5.27	0.01	0.01	—	6.97
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	0.81	1.05	1.85	< 0.005	< 0.005	—	2.45
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	0.75	0.97	1.72	< 0.005	< 0.005	—	2.27
City Park	—	—	—	—	—	—	—	—	—	—	0.00	0.85	0.85	< 0.005	< 0.005	—	0.85
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	0.75	0.97	1.72	< 0.005	< 0.005	—	2.27
Total	—	—	—	—	—	—	—	—	—	—	6.09	8.77	14.9	0.02	0.01	—	19.4

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	611
Library	—	—	—	—	—	—	—	—	—	—	7.44	0.00	7.44	0.74	0.00	—	26.0
Strip Mall	—	—	—	—	—	—	—	—	—	—	49.5	0.00	49.5	4.95	0.00	—	173
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	48.1	0.00	48.1	4.81	0.00	—	168
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	23.9	0.00	23.9	2.39	0.00	—	83.7
City Park	—	—	—	—	—	—	—	—	—	—	0.12	0.00	0.12	0.01	0.00	—	0.41
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	23.9	0.00	23.9	2.39	0.00	—	83.7
Total	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	611
Library	—	—	—	—	—	—	—	—	—	—	7.44	0.00	7.44	0.74	0.00	—	26.0
Strip Mall	—	—	—	—	—	—	—	—	—	—	49.5	0.00	49.5	4.95	0.00	—	173
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	48.1	0.00	48.1	4.81	0.00	—	168
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	23.9	0.00	23.9	2.39	0.00	—	83.7

City Park	—	—	—	—	—	—	—	—	—	—	0.12	0.00	0.12	0.01	0.00	—	0.41
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	23.9	0.00	23.9	2.39	0.00	—	83.7
Total	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	28.9	0.00	28.9	2.89	0.00	—	101
Library	—	—	—	—	—	—	—	—	—	—	1.23	0.00	1.23	0.12	0.00	—	4.31
Strip Mall	—	—	—	—	—	—	—	—	—	—	8.20	0.00	8.20	0.82	0.00	—	28.7
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	7.96	0.00	7.96	0.80	0.00	—	27.9
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	3.96	0.00	3.96	0.40	0.00	—	13.9
City Park	—	—	—	—	—	—	—	—	—	—	0.02	0.00	0.02	< 0.005	0.00	—	0.07
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	3.96	0.00	3.96	0.40	0.00	—	13.9
Total	—	—	—	—	—	—	—	—	—	—	54.2	0.00	54.2	5.42	0.00	—	190

4.5.1. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	611
Library	—	—	—	—	—	—	—	—	—	—	7.44	0.00	7.44	0.74	0.00	—	26.0
Strip Mall	—	—	—	—	—	—	—	—	—	—	49.5	0.00	49.5	4.95	0.00	—	173
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	48.1	0.00	48.1	4.81	0.00	—	168
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	23.9	0.00	23.9	2.39	0.00	—	83.7
City Park	—	—	—	—	—	—	—	—	—	—	0.12	0.00	0.12	0.01	0.00	—	0.41
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	23.9	0.00	23.9	2.39	0.00	—	83.7
Total	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	175	0.00	175	17.5	0.00	—	611
Library	—	—	—	—	—	—	—	—	—	—	7.44	0.00	7.44	0.74	0.00	—	26.0
Strip Mall	—	—	—	—	—	—	—	—	—	—	49.5	0.00	49.5	4.95	0.00	—	173

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	48.1	0.00	48.1	4.81	0.00	—	168
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	23.9	0.00	23.9	2.39	0.00	—	83.7
City Park	—	—	—	—	—	—	—	—	—	—	0.12	0.00	0.12	0.01	0.00	—	0.41
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	23.9	0.00	23.9	2.39	0.00	—	83.7
Total	—	—	—	—	—	—	—	—	—	—	328	0.00	328	32.7	0.00	—	1,146
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	28.9	0.00	28.9	2.89	0.00	—	101
Library	—	—	—	—	—	—	—	—	—	—	1.23	0.00	1.23	0.12	0.00	—	4.31
Strip Mall	—	—	—	—	—	—	—	—	—	—	8.20	0.00	8.20	0.82	0.00	—	28.7
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	7.96	0.00	7.96	0.80	0.00	—	27.9
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	3.96	0.00	3.96	0.40	0.00	—	13.9
City Park	—	—	—	—	—	—	—	—	—	—	0.02	0.00	0.02	< 0.005	0.00	—	0.07
Unenclosed Parking with Elevator	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Apartments	—	—	—	—	—	—	—	—	—	—	3.96	0.00	3.96	0.40	0.00	—	13.9
Total	—	—	—	—	—	—	—	—	—	—	54.2	0.00	54.2	5.42	0.00	—	190

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.77	0.77
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.54	0.54
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.7	11.7
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.46	0.46
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.41	0.41
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.77	0.77
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.54	0.54
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.7	11.7
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.46	0.46
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.41	0.41
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.94	1.94
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.31	2.31

4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.77	0.77
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.54	0.54
High Turnover (Sit Down Restauran)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.7	11.7
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.46	0.46
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.41	0.41
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.77	0.77
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.54	0.54

High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	11.7	11.7
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.46	0.46
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.41	0.41
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	14.0	14.0
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
Library	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.01	0.01
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.09	0.09
High Turnover (Sit Down Restaurant)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.94	1.94
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08
City Park	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.07	0.07
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.31	2.31

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/2/2024	5/20/2024	5.00	100	—
Site Preparation	Site Preparation	5/21/2024	10/7/2024	5.00	100	—
Grading	Grading	10/8/2024	2/24/2025	5.00	100	—
Building Construction	Building Construction	2/25/2025	12/25/2028	5.00	1,000	—
Paving	Paving	2/25/2025	12/25/2028	5.00	1,000	—
Architectural Coating	Architectural Coating	2/25/2025	12/25/2028	5.00	1,000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38

Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00	7.00	84.0	0.37
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	14.3	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT

Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	188	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	57.1	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	37.6	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	15.0	14.3	LDA,LDT1,LDT2
Demolition	Vendor	—	8.80	HHDT,MHDT
Demolition	Hauling	0.00	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	17.5	14.3	LDA,LDT1,LDT2
Site Preparation	Vendor	—	8.80	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	15.0	14.3	LDA,LDT1,LDT2
Grading	Vendor	—	8.80	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	188	14.3	LDA,LDT1,LDT2
Building Construction	Vendor	57.1	8.80	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	14.3	LDA,LDT1,LDT2
Paving	Vendor	—	8.80	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT

Architectural Coating	—	—	—	—
Architectural Coating	Worker	37.6	14.3	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	8.80	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	245,430	81,810	212,293	70,255	3,058

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (sq. ft.)	Acres Paved (acres)
Paving	0.00	0.00	0.00	0.00	1.17

5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Medical Office Building	0.00	0%

Library	0.00	0%
Strip Mall	0.00	0%
Strip Mall	0.00	0%
High Turnover (Sit Down Restaurant)	0.00	0%
Condo/Townhouse	—	0%
City Park	0.00	0%
Unenclosed Parking with Elevator	1.17	100%
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	375	0.01	< 0.005
2025	0.00	375	0.01	< 0.005
2026	0.00	375	0.01	< 0.005
2027	0.00	375	0.01	< 0.005
2028	0.00	375	0.01	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Medical Office Building	99.0	99.0	99.0	36,135	1,138	1,138	1,138	415,335
Library	49.9	49.9	49.9	18,232	574	574	574	209,555
Strip Mall	116	116	116	42,285	1,332	1,332	1,332	486,025
Strip Mall	458	458	458	167,097	5,262	5,262	5,262	1,920,608

High Turnover (Sit Down Restaurant)	3,059	3,059	3,059	1,116,517	13,304	35,159	35,159	7,135,201
Condo/Townhouse	343	343	343	125,268	4,181	4,181	4,181	1,526,145
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	229	229	229	83,658	2,792	2,792	2,792	1,019,209

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Medical Office Building	84.2	84.2	84.2	30,738	968	968	968	353,305
Library	42.5	42.5	42.5	15,509	488	488	488	178,258
Strip Mall	98.5	98.5	98.5	35,970	1,133	1,133	1,133	413,438
Strip Mall	389	389	389	142,141	4,476	4,476	4,476	1,633,766
High Turnover (Sit Down Restaurant)	2,602	2,602	2,602	949,766	11,317	29,908	29,908	6,069,564
Condo/Townhouse	292	292	292	106,559	3,557	3,557	3,557	1,298,216
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	139	139	139	50,811	1,696	1,696	1,696	619,031

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)

Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	60
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	60
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.1.2. Mitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0

Electric Fireplaces	0
No Fireplaces	60
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	60
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
245430	81,810	212,293	70,255	3,058

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.10.4. Landscape Equipment - Mitigated

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Medical Office Building	752,082	375	0.0129	0.0017	0.00
Library	165,539	375	0.0129	0.0017	0.00
Strip Mall	399,221	375	0.0129	0.0017	0.00
Strip Mall	598,832	375	0.0129	0.0017	0.00
High Turnover (Sit Down Restaurant)	308,299	375	0.0129	0.0017	0.00
Condo/Townhouse	559,693	375	0.0129	0.0017	0.00
City Park	0.00	375	0.0129	0.0017	0.00
Unenclosed Parking with Elevator	366,340	375	0.0129	0.0017	0.00
Apartments Mid Rise	416,315	375	0.0129	0.0017	0.00

5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Medical Office Building	752,082	375	0.0129	0.0017	0.00
Library	165,539	375	0.0129	0.0017	0.00

Strip Mall	399,221	375	0.0129	0.0017	0.00
Strip Mall	598,832	375	0.0129	0.0017	0.00
High Turnover (Sit Down Restaurant)	308,299	375	0.0129	0.0017	0.00
Condo/Townhouse	559,693	375	0.0129	0.0017	0.00
City Park	0.00	375	0.0129	0.0017	0.00
Unenclosed Parking with Elevator	366,340	375	0.0129	0.0017	0.00
Apartments Mid Rise	416,315	375	0.0129	0.0017	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Medical Office Building	3,764,416	0.00
Library	469,334	0.00
Strip Mall	2,592,538	0.00
Strip Mall	3,888,807	0.00
High Turnover (Sit Down Restaurant)	2,276,503	0.00
Condo/Townhouse	2,115,540	0.00
City Park	0.00	3,103,632
Unenclosed Parking with Elevator	0.00	0.00
Apartments Mid Rise	2,115,540	0.00

5.12.2. Mitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Medical Office Building	3,764,416	0.00
Library	469,334	0.00

Strip Mall	2,592,538	0.00
Strip Mall	3,888,807	0.00
High Turnover (Sit Down Restaurant)	2,276,503	0.00
Condo/Townhouse	2,115,540	0.00
City Park	0.00	3,103,632
Unenclosed Parking with Elevator	0.00	0.00
Apartments Mid Rise	2,115,540	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Medical Office Building	324	—
Library	13.8	—
Strip Mall	36.8	—
Strip Mall	55.1	—
High Turnover (Sit Down Restaurant)	89.2	—
Condo/Townhouse	44.4	—
City Park	0.21	—
Unenclosed Parking with Elevator	0.00	—
Apartments Mid Rise	44.4	—

5.13.2. Mitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Medical Office Building	324	—
Library	13.8	—
Strip Mall	36.8	—

Strip Mall	55.1	—
High Turnover (Sit Down Restaurant)	89.2	—
Condo/Townhouse	44.4	—
City Park	0.21	—
Unenclosed Parking with Elevator	0.00	—
Apartments Mid Rise	44.4	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Library	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Library	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Library	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Library	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0

Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.14.2. Mitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00

Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Library	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
Library	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Library	Stand-alone retail refrigerators and freezers	R-134a	1,430	< 0.005	1.00	0.00	1.00
Library	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
High Turnover (Sit Down Restaurant)	Household refrigerators and/or freezers	R-134a	1,430	0.00	0.60	0.00	1.00
High Turnover (Sit Down Restaurant)	Other commercial A/C and heat pumps	R-410A	2,088	1.80	4.00	4.00	18.0
High Turnover (Sit Down Restaurant)	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0

Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00
City Park	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
City Park	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.15.2. Mitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

5.18.2.2. Mitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	23.1	annual days of extreme heat
Extreme Precipitation	5.35	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	0	0	N/A
Extreme Precipitation	2	0	0	N/A
Sea Level Rise	N/A	N/A	N/A	N/A

Wildfire	1	0	0	N/A
Flooding	0	0	0	N/A
Drought	0	0	0	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	2	1	1	3
Extreme Precipitation	2	1	1	3
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	1	1	1	2
Flooding	1	1	1	2
Drought	1	1	1	2
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	59.7
AQ-PM	36.3
AQ-DPM	68.6
Drinking Water	98.5
Lead Risk Housing	91.7
Pesticides	2.52
Toxic Releases	18.4
Traffic	12.1
Effect Indicators	—
CleanUp Sites	79.7
Groundwater	59.6
Haz Waste Facilities/Generators	1.80
Impaired Water Bodies	51.2
Solid Waste	0.00
Sensitive Population	—
Asthma	78.2
Cardio-vascular	81.5
Low Birth Weights	74.9
Socioeconomic Factor Indicators	—
Education	45.2
Housing	30.2
Linguistic	30.0
Poverty	74.5

Unemployment	51.3

7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	36.86641858
Employed	45.74618247
Median HI	40.57487489
Education	—
Bachelor's or higher	47.15770563
High school enrollment	6.377518286
Preschool enrollment	42.38419094
Transportation	—
Auto Access	51.48209932
Active commuting	63.67252663
Social	—
2-parent households	25.85653792
Voting	59.43795714
Neighborhood	—
Alcohol availability	57.35916848
Park access	81.35506224
Retail density	53.20159117
Supermarket access	5.82574105
Tree canopy	92.68574362
Housing	—
Homeownership	50.21172847

Housing habitability	50.07057616
Low-inc homeowner severe housing cost burden	68.95932247
Low-inc renter severe housing cost burden	18.9272424
Uncrowded housing	40.60053895
Health Outcomes	—
Insured adults	24.03438984
Arthritis	0.0
Asthma ER Admissions	27.9
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	11.1
Cognitively Disabled	58.3
Physically Disabled	22.7
Heart Attack ER Admissions	18.2
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	94.1
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0

No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	40.5
Elderly	55.7
English Speaking	48.0
Foreign-born	38.7
Outdoor Workers	13.3
Climate Change Adaptive Capacity	—
Impervious Surface Cover	60.9
Traffic Density	38.8
Traffic Access	57.1
Other Indices	—
Hardship	62.7
Other Decision Support	—
2016 Voting	34.7

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	69.0
Healthy Places Index Score for Project Location (b)	36.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Square footage, acreage, and land uses depicted in the Project Description were adapted to CalEEMod. The designations are shown below: Medical Office Building = Health and Wellness Clinic Library = Events and Meeting Space Strip Mall = Arts Center Strip Mall = Community Commercial Building High Turnover Restaurant = Commercial Retail Condo/Townhouse = Townhome Housing Apartments Mid Rise = Affordable Multifamily housing City Park = Public Open Space Unenclosed Parking with Elevator = Parking Structure
Construction: Construction Phases	Construction occurs from 2024-2029 per the PD
Construction: Dust From Material Movement	no information per the PD
Construction: Demolition	no information per the PD
Operations: Vehicle Data	Trip Rates adjusted from Nelson/Nygaard 2023 to reflect higher square footage of buildings
Operations: Energy Use	No natural gas per SMAQMD BMP 1

Appendices

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Appendix 5.2-1 Biological Resource Assessment

Biological Resources Assessment for the Mills Crossing Project

Sacramento County, California

Prepared For:

PlaceWorks, Inc.

Prepared By:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS
2525 Warren Drive
Rocklin, California 95677

March 16, 2023

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LIST OF ACRONYMS AND ABBREVIATIONS

Term	Description
BCC	Birds of Conservation Concern
BRA	Biological Resources Assessment
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DPS	Distinct Population Segment
ESA	Endangered Species Act
ESU	Evolutionarily Significant Unit
MBTA	Migratory Bird Treaty Act
NMFS	National Marine Fisheries Service
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
Project	Mills Crossing Project
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Application
SSC	Species of Special Concern
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WBWG	Western Bat Working Group

1.0 INTRODUCTION

At the request of PlaceWorks, Inc., ECORP Consulting, Inc. conducted a Biological Resources Assessment (BRA) for the proposed Mills Crossing Project (Project) located in Sacramento County, California. The purpose of the assessment was to collect information on the biological resources present or with the potential to occur in the Study Area and to assess any potential biological constraints related to Project activities.

1.1 Project Area Location

The approximately 9.77-acre Study Area is located in the city of Rancho Cordova, Sacramento County, California. The Study Area corresponds to a portion of the unsectioned Rancho de los Americanos land grant within the "Carmichael, California" 7.5-minute quadrangle (U.S. Geological Survey [USGS] 1961, photorevised 1980; Figure 1). The approximate center of the Project Area is located at latitude 38.585407° and longitude -121.312575° within the Lower American River Watershed (Hydrologic Unit Code #18020111; Natural Resources Conservation Service, et al. 2016).

1.2 Project Description

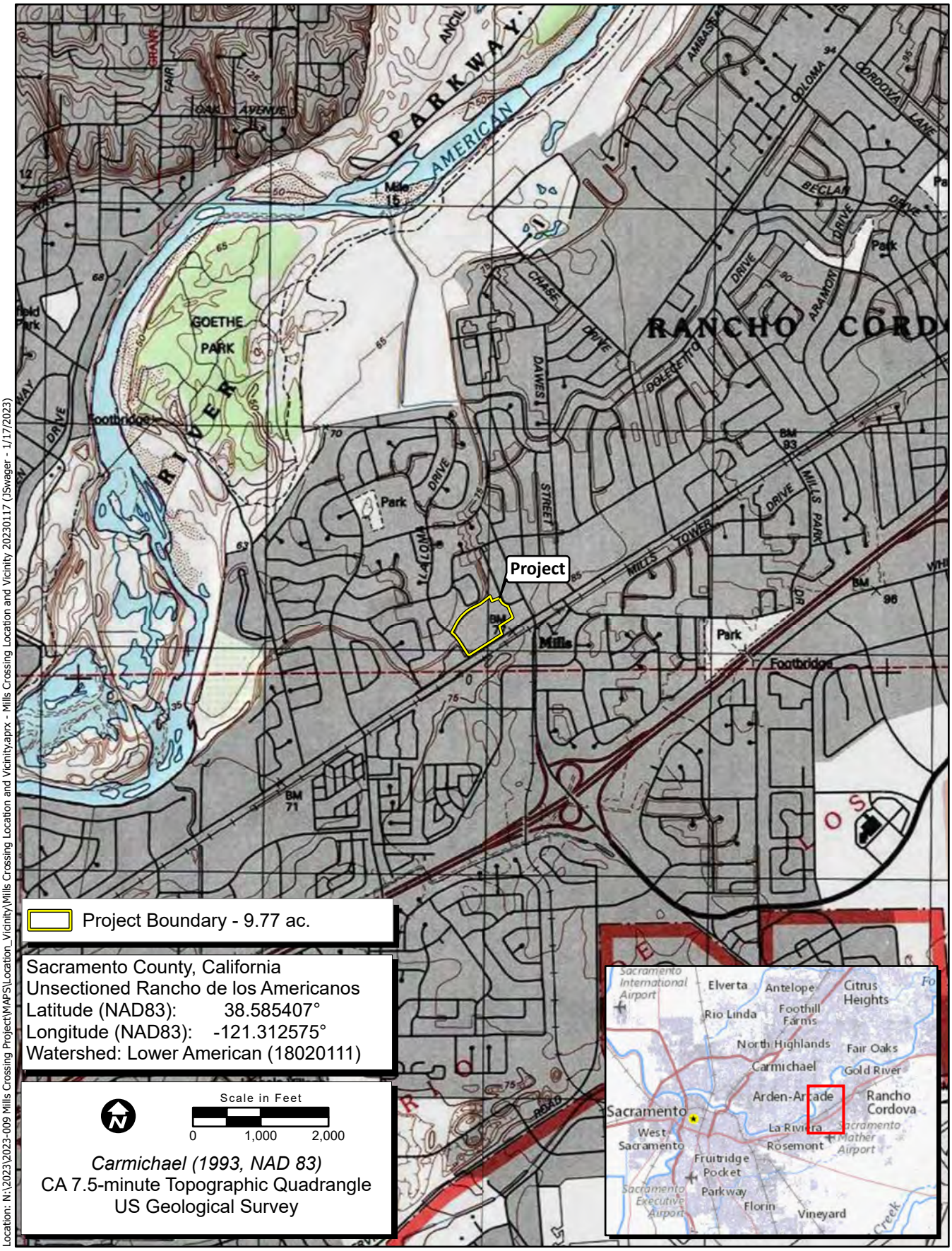
The proposed Project entails the construction of a community center with a health and wellness center, parking structure, muti-family housing, single family housing, arts center and theater, and community events and meeting center.

1.3 Purpose of this Biological Resources Assessment

The purpose of this BRA is to assess the potential for occurrence of special-status plant and animal species or their habitats, and sensitive biological resources such as wetlands within the Study Area. This assessment does not include determinate presence-absence field surveys for special-status species or an Aquatic Resources Delineation meeting U.S. Army Corps of Engineers (USACE) standards. The conclusions and recommendations presented in this report are based upon a review of the available literature and the field assessment.

For the purposes of this assessment, special-status species are defined as plants or animals that:

- are listed, proposed for listing, or candidates for future listing as threatened or endangered under the federal Endangered Species Act (ESA);
- are listed or candidates for future listing as threatened or endangered under the California ESA;
- meet the definitions of endangered or rare under Section 15380 of the California Environmental Quality Act (CEQA) Guidelines;
- are identified as a species of special concern (SSC) by the California Department of Fish and Wildlife (CDFW);



Location: N:\2023\2023-009 Mills Crossing Project\MAPS\Location_Vicinity\Mills Crossing Location and Vicinity.aprx - Mills Crossing Location and Vicinity 20230117 (JSwager - 1/17/2023)

Map Date: 1/17/2023

Sources: ESRI, USGS, Sacramento County, Placeworks

Figure 1. Study Area Location and Vicinity

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- are included on the CDFW Watch List (WL);
- are birds identified as Birds of Conservation Concern (BCC) by the U.S. Fish and Wildlife Service (USFWS 2022);
- are plants considered by the California Native Plant Society (CNPS) to be "rare, threatened, or endangered in California" (California Rare Plant Rank [CRPR] 1 and 2), plants listed by CNPS as species about which more information is needed to determine their status (CRPR 3), and plants of limited distribution (CRPR 4);
- are plants listed as rare under the California Native Plant Protection Act (NPPA; California Fish and Game Code, Section 1900 et seq.); or
- are fully protected in California in accordance with the California Fish and Game Code, Sections 3511 (birds), 4700 (mammals), 5050 (amphibians and reptiles), and 5515 (fishes).

Only species that fall into one of the above-listed groups were considered for this assessment. Other species without special status that are sometimes found in database or literature searches were not included in this analysis.

2.0 REGULATORY SETTING

2.1 Federal Regulations

2.1.1 Federal Endangered Species Act

The federal ESA protects plants and animals that are listed as endangered or threatened by the USFWS and the National Marine Fisheries Service (NMFS). Section 9 of ESA prohibits the taking of listed wildlife, where take is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land and removing, cutting, digging up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (16 U.S. Code 1538). Under Section 7 of ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a Biological Opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of ESA provides for issuance of incidental take permits where no other federal actions are necessary provided a Habitat Conservation Plan is developed.

2.1.2 Critical Habitat

Critical Habitat is defined in Section 3 of the ESA as (1) the specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the ESA, on which are found those physical or biological features essential to the conservation of the species and that may require special management considerations or protection; and (2) specific areas outside the geographical area occupied

by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For inclusion in a Critical Habitat designation, habitat within the geographical area occupied by the species at the time it was listed must first have features that are essential to the conservation of the species. Critical Habitat designations identify, to the extent known and using the best scientific data available, habitat areas that provide essential life cycle needs of the species (areas on which are found the primary physical and biological features). Primary physical and biological features are features essential to the conservation of the species and that may require special management considerations or protection. These include but are not limited to the following:

- Space for individual and population growth and for normal behavior;
- Food, water, air, light, minerals, or other nutritional or physiological requirements;
- Cover or shelter;
- Sites for breeding, reproduction, or rearing (or development) of offspring; or
- Habitats that are protected from disturbance or are representative of the historic, geographical, and ecological distributions of a species.

2.1.3 Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) implements international treaties between the United States and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities such as hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR part 13 General Permit Procedures and 50 CFR part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

2.1.4 Federal Clean Water Act

The purpose of the federal Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into "Waters of the U.S." without a permit from the USACE. The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b).

Substantial impacts to wetlands (over 0.5 acre of impact) may require an individual permit. Projects that only minimally affect wetlands (less than 0.5 acre of impact) may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is

required for Section 404 permit actions; this certification or waiver is issued by the Regional Water Quality Control Board (RWQCB).

2.2 State and Local Regulations

2.2.1 California Fish and Game Code

2.2.1.1 California Endangered Species Act

The California ESA (California Fish and Game Code Sections 2050-2116) generally parallels the main provisions of the ESA, but unlike its federal counterpart, the California ESA applies the take prohibitions to species proposed for listing (called *candidates* by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." The California ESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with CDFW to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered, threatened or candidate species or result in destruction or adverse modification of essential habitat.

2.2.1.2 Fully Protected Species

The State of California first began to designate species as "fully protected" prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code Sections 4700 for mammals, 3511 for birds, 5050 for reptiles and amphibians, and 5515 for fish) provide that fully protected species may not be taken or possessed at any time. Furthermore, the CDFW prohibits any state agency from issuing incidental take permits for fully protected species. The CDFW will issue licenses or permits for take of these species for necessary scientific research or live capture and relocation pursuant to the permit.

2.2.1.3 Native Plant Protection Act

The NPPA of 1977 was created with the intent to "preserve, protect and enhance rare and endangered plants in this State." The NPPA is administered by CDFW and provided in California Fish and Game Code Sections 1900-1913. The Fish and Wildlife Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The California ESA of 1984 (California Fish and Game Code Section 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

2.2.1.4 Protected Birds

Sections 3800, 3513, and 3503 of the California Fish and Game Code specifically protect birds. Section 3800 states that it is unlawful to take nongame birds, such as those occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds, except when in accordance with regulations of the commission or a mitigation plan approved by CDFW for mining operations. Section 3513 specifically prohibits the take or possession of any migratory nongame bird as designated in the MBTA.

Section 3503 of the California Fish and Game Code prohibits the take, possession, or needless destruction of the nest or eggs of any bird. Additionally, Subsection 3503.5 prohibits the take, possession, or destruction of any birds and their nests in the orders Strigiformes (owls) or Falconiformes (hawks and eagles). These provisions, along with the federal MBTA, serve to protect nesting native birds.

2.2.1.5 California Lake or Streambed Alteration Notification/Agreement

Section 1602 of the California Fish and Game Code requires that a Streambed Alteration Application (SAA) be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." The CDFW reviews the proposed actions and, if necessary, submits proposed measures to protect affected fish and wildlife resources to the applicant. The SAA is the final proposal mutually agreed upon by CDFW and the Applicant. Projects that require an SAA often also require a permit from the USACE under Section 404 of the CWA.

2.2.2 Species of Special Concern

The CDFW defines SSC as a species, subspecies, or distinct population of an animal native to California that are not legally protected under ESA, the California ESA or the California Fish and Game Code, but currently satisfy one or more of the following criteria:

- The species has been completely extirpated from the state or, as in the case of birds, it has been extirpated from its primary seasonal or breeding role;
- The species is listed as federally (but not state) threatened or endangered, or meets the state definition of threatened or endangered but has not formally been listed;
- The species has or is experiencing serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for state threatened or endangered status;
- The species has naturally small populations that exhibit high susceptibility to risk from any factor that if realized, could lead to declines that would qualify it for state threatened or endangered status.

SSC are typically associated with habitats that are threatened. Project-related impacts to SSC or their habitats may be considered "significant" under CEQA.

2.2.3 Watch List Species

The CDFW maintains a list consisting of taxa that were previously designated as "Species of Special Concern" but no longer merit that status, or which do not yet meet SSC criteria, but for which there is concern and a need for additional information to clarify status.

Depending on the policy of the lead agency, projects that result in substantial impacts to species on the WL may be considered significant under CEQA.

2.2.4 California Rare Plant Ranks

The CNPS maintains the Inventory of Rare and Endangered Plants of California (CNPS 2023), which provides a list of plant species native to California that are threatened with extinction, have limited distributions, and/or low populations. Plant species meeting one of these criteria are assigned to one of six CRPRs. The rank system was developed in collaboration with government, academia, nongovernmental organizations, and private sector botanists, and is jointly managed by CDFW and the CNPS. The CRPRs are currently recognized in the California Natural Diversity Database (CNDDB). The following are definitions of the CNPS CRPRs:

- Rare Plant Rank 1A – presumed extirpated in California and either rare or extinct elsewhere
- Rare Plant Rank 1B – rare, threatened, or endangered in California and elsewhere
- Rare Plant Rank 2A – presumed extirpated in California, but more common elsewhere
- Rare Plant Rank 2B – rare, threatened, or endangered in California but more common elsewhere
- Rare Plant Rank 3 – a review list of plants about which more information is needed
- Rare Plant Rank 4 – a watch list of plants of limited distribution

Additionally, the CNPS has defined Threat Ranks that are added to the CRPR as an extension. Threat Ranks designate the level of threat on a scale of 1 through 3, with 1 being the most threatened and 3 being the least threatened. Threat Ranks are generally present for all plants ranked 1B, 2B, or 4, and for the majority of plants ranked 3. Plant species ranked 1A and 2A (presumed extirpated in California), and some species ranked 3, which lack threat information, do not typically have a Threat Rank extension. The following are definitions of the CNPS Threat Ranks:

- Threat Rank 0.1 – Seriously threatened in California (more than 80 percent of occurrences threatened/high degree and immediacy of threat)
- Threat Rank 0.2 – Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat)
- Threat Rank 0.3 – Not very threatened in California (less than 20 percent of occurrences threatened/low degree and immediacy of threat or no current threats known)

Factors such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Rank; and differences in Threat Ranks do not constitute additional or

different protection (CNPS 2023a). Depending on the policy of the lead agency, substantial impacts to plants ranked 1A, 1B, or 2 are typically considered significant under CEQA Guidelines Section 15380. Significance under CEQA is typically evaluated on a case-by-case basis for plants ranked 3 or 4.

2.2.5 Sensitive Natural Communities

The CDFW maintains the California Natural Community List (CDFW 2023a), which provides a list of vegetation alliances, associations, and special stands as defined in *A Manual of California Vegetation Online* (CNPS 2022) along with their respective state and global rarity ranks. Natural communities with a state rarity rank of S1, S2, or S3 are considered sensitive natural communities. Depending on the policy of the lead agency, impacts to sensitive natural communities may be considered significant under CEQA.

2.2.6 Porter-Cologne Water Quality Act

The RWQCB implements water quality regulations under the federal CWA and the Porter-Cologne Water Quality Act. These regulations require compliance with the National Pollutant Discharge Elimination System (NPDES), including compliance with the California Storm Water NPDES General Construction Permit for discharges of stormwater runoff associated with construction activities. General Construction Permits for projects that disturb 1 or more acres of land require development and implementation of a Stormwater Pollution Prevention Plan. Under the Porter-Cologne Water Quality Act, the RWQCB also regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the water of the state" [Water Code 13260(a)]. Waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" [Water Code 13050 (e)]. The RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into Waters of the State that are not regulated by USACE due to a lack of connectivity with a navigable water body. The RWQCB may require issuance of Waste Discharge Requirements for these activities.

2.2.7 California Environmental Quality Act

In accordance with CEQA Guidelines Section 15380, a species or subspecies not specifically protected under the federal or California ESAs or NPPA may be considered endangered, rare, or threatened for CEQA review purposes if the species meets certain criteria specified in the Guidelines. These criteria include definitions similar to definitions used in the federal ESA, California ESA, and NPPA. Section 15380 was included in the CEQA Guidelines primarily to address situations in which a project under review may have a significant effect on a species that has not been listed under the federal ESA, California ESA, or NPPA, but that may meet the definition of endangered, rare, or threatened. Animal species identified as SSC by CDFW, and plants identified by the CNPS as rare, threatened, or endangered, may meet the CEQA definition of rare or endangered.

2.2.7.1 California Environmental Quality Act Significance Criteria

Sections 15063-15065 of the CEQA Guidelines address how an impact is identified as significant. Generally, impacts to listed (rare, threatened, or endangered) species are considered significant. Assessment of "impact significance" to populations of nonlisted species (e.g., SSC) usually considers the

proportion of the species' range that will be affected by a project, impacts to habitat, and the regional and population level effects.

Specifically, Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant under CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish or result in the permanent loss of an important resource on a population-wide or region-wide basis.

2.2.8 Rancho Cordova General Plan

The Natural Resources Element of the Rancho Cordova General Plan (City of Rancho Cordova 2006) includes goals and policies for protection of natural resources. The following goals are relevant to biological resources:

- Goal NR.1: Protect and preserve diverse wildlife and plant habitats, including habitat for special status species.
- Goal NR.2: Preserve the City's rich and diverse natural wetlands.
- Goal NR.3: Preserve and maintain creek corridors and wetland preserves.
- Goal NR.4: Encourage the planting a preservation of high-quality trees throughout the City.

2.2.9 Rancho Cordova - Preservation and Protection of Private Trees (Chapter 19.12)

It is the intent of this chapter within the Rancho Cordova Municipal Code (2022) to establish regulations for the protection, removal, and preservation of landmark trees and protected trees, as defined herein, within the city in order to retain as many trees as possible consistent with the purpose hereof and the reasonable economic enjoyment of all property in the city. For the purpose of this chapter, "protected tree" means the following:

- Native oak – Quercus lobata, valley oak; Quercus wislizenii, interior live oak; Quercus douglasii, blue oak; or Quercus morehus, oracle oak – having a trunk diameter of at least six inches or greater; or
- Any tree species other than a native oak having a trunk diameter of at least 12 inches or greater on nonresidential property; or

- Any tree species other than a native oak having a trunk diameter of at least 24 inches or greater on residential property; or
- Any tree planted as a requirement tree for site development, tree permit condition, landscape plan removal replacement, or other designated condition by the public works director or planning director.
- "Protected tree" does not include any trees for sale within the city sold by a nursery.

3.0 METHODS

3.1 Literature Review

The following resources were reviewed to determine the special-status species that have been documented within or in the vicinity of the Study Area (Appendix A).

- The CDFW CNDDB for the "Carmichael, California" 7.5-minute USGS quadrangle and the eight surrounding USGS quadrangles (CDFW 2023b);
- The USFWS Information, Planning, and Consultation System Resource Report List for the Study Area (USFWS 2023);
- The CNPS Rare Plant Inventory for the "Carmichael, California" 7.5-minute USGS quadrangle and the eight surrounding quadrangles (CNPS 2023a); and
- The NMFS species list for the "Carmichael, California" 7.5-minute quadrangle.

Aerial imagery and site or species-specific background information, as cited throughout this document, were reviewed to determine the potential for occurrence of sensitive biological resources in the Study Area.

3.2 Site Surveys

3.2.1 Reconnaissance Site Survey

ECORP biologist Rachel Bennett and Keith Kwan conducted a reconnaissance-level field survey for the Study Area on February 7, 2023. The Study Area was surveyed on foot using a georeferenced digital map and aerial imagery to ensure total site coverage. Special attention was given to identifying areas with the potential to support special-status species, aquatic resources, or sensitive habitats. The following biological resource information was collected:

- Location and extent of potential aquatic resources;
- Vegetation communities and their distribution within the Study Area;
- Plant and wildlife species directly observed onsite;
- Burrows or other special habitat features; and

- Representative photographs (Appendix B).

3.3 EVALUATION OF SPECIAL-STATUS SPECIES

Each of the special-status species identified during the literature review (Appendix A) was evaluated for its potential to occur in the Study Area. Species were assessed based on the following criteria:

- **Present** – Species was observed during field surveys or is known to occur within the Study Area based on documented occurrences within the CNDDB or other literature.
- **Potential to Occur** – Habitat (including soil and elevation requirements) for the species occurs within the Study Area based on field assessment and literature research, and the species is known to occur in the vicinity of the Study Area.
- **Low Potential to Occur** – Marginal or limited amounts of habitat occur, or the species is not known to occur in the vicinity of the Study Area based on CNDDB records and other available documentation.
- **Absent** – No suitable habitat (including soils and elevation requirements) or the species is not known to occur in the vicinity of the Study Area based on CNDDB records and other documentation.

4.0 RESULTS

4.1 Site Characteristics and Land Use

The Study Area is located on leveled flat terrain with elevations ranging from 77 to 82 feet above mean sea level. Historically, the site was developed and had several structures and associated parking lots until 2019. The largest structure, which occupied a majority of the site was demolished between 2007-2009. The Study Area currently includes the previously developed area and surrounding ruderal grassland. There are currently no buildings onsite, but the building foundations and paved areas remain. A few scattered trees are found in weedy patches around the perimeter of the Study Area.

4.2 Soils

According to the Web Soil Survey (Natural Resources Conservation Service 2023), two map unit, or soil type, has been mapped within the Study Area (Figure 2):

- 102 – Americanos-Urban Land complex, 0 to 2 percent slopes
- 227 - Urban Land

Map Features

Approximate Project Boundary - 9.77 ac.

NRCS Soil Types

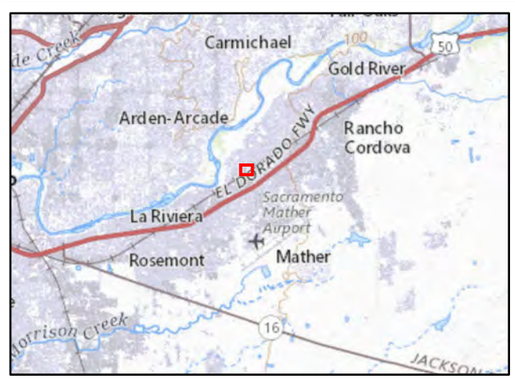
Series Number - Series Name

102 - Americanos-Urban land complex, 0 to 2 percent slopes

227 - Urban land

Natural Resources Conservation Service (NRCS) Soil Survey Geographic (SSURGO) Database for Sacramento County, CA

Sources: Esri Imagery, Vivid Advanced, MAXAR (4/26/2022)



Location: N:\2023\2023-009 Mills Crossing Project\MAPS\Soils_and_Geology\Mills Crossing Soils aprx - Mills Crossing Soils 20230126 (kturnquist - 1/26/2023)

Map Date: 1/26/2023

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Scale in Feet
0 150

Figure 2. Natural Resources Conservation Service Soil Types
2023-009 Mills Crossing

4.3 Land Cover Types and Vegetation Communities

Land cover types and vegetation communities found within the Study Area include developed/disturbed, and ruderal grassland. These are described in further detail below.

4.3.1 Developed/Disturbed

The developed/disturbed areas make up a significant portion of the Study Area. These areas have the concrete foundations and asphalt parking areas and road with small patches of weedy vegetation, which were probably the landscaped areas.

4.3.2 Ruderal Grassland

The ruderal grassland is found within the disturbed areas, and along the eastern portion of the Study Area. These weedy areas include wild oats (*Avena* sp.), mustard (*Brassica* sp.), radish (*Raphanus* sp.), filaree (E*rodium* spp.), *yellow star-thistle* (*Centaurea solstitialis*), prickly lettuce (*Lactuca serriola*), vetch (Vicia sp.), cheeseweed (*Malva parvifolia*), cranesbill (*Geranium dissectum*, clover (*Trifolium* sp.), and groundsel (*Senecio vulgare)*. The eastern portion of the Study Area appears to have been mass graded but does not appear to have been developed, based on Google Earth aerial photographs.

4.4 Aquatic Resource Assessment

A preliminary aquatic resources assessment was conducted to identify potential Waters of the U.S./State within the Study Area concurrent with the reconnaissance-level field assessment. No aquatic resources were identified onsite and therefore there are no potential Waters of the U.S./State. Evaluation of Species Identified in the Literature Search

A list of the special-status plant and wildlife species identified in the literature search as potentially occurring within the Study Area is provided in Table 1. This table includes the listing status for each species, a brief habitat description, and a determination on the potential to occur in or near the Study Area. Following the table is a brief description of each species with potential to occur.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area

Common Name (*Scientific Name*)	Status			Habitat Description	Observation Period	Potential to Occur On-Site
	ESA	CESA	Other			
Plants						
Valley brodiaea (*Brodiaea rosea* ssp. *vallicola*)	–	–	4.2	Occurs in old alluvial terraces and silt, sandy, or gravelly soils in vernal pools and swales within valley and foothill grassland (35'–1,100').	April–May	Absent. No suitable habitat within the Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area

Common Name (*Scientific Name*)	Status			Habitat Description	Observation Period	Potential to Occur On-Site
	ESA	CESA	Other			
Parry's rough tarplant (*Centromadia parryi* ssp. *rudis*)	–	–	4.2	Alkaline, vernally mesic areas, and seeps in valley and foothill grassland and vernal pools, sometimes found on roadsides (0'–330').	May–October	Absent. No suitable habitat within the Study Area.
Brandegee's clarkia (*Clarkia biloba* ssp. *brandegeeae*)	–	–	4.2	Chaparral, cismontane woodlands, and lower montane coniferous forest often along roadcuts (245'–3,000').	May–July	Absent. No suitable habitat within the Study Area.
Peruvian dodder *(Cuscuta obtusiflora* var. *glandulosa*)	–	–	2B.2	Freshwater marshes and swamps (50'–920').	July–October	Absent. No suitable habitat within the Study Area.
Dwarf downingia (*Downingia pusilla*)	–	–	2B.2	Mesic areas in valley and foothill grassland, and vernal pools. Species has also been found in disturbed areas such as tire ruts and scraped depressions (CDFW 2023) (5'–1,460').	March–May	Absent. No suitable habitat within the Study Area.
Stinkbells (*Fritillaria agrestis*)	–	–	4.2	Clay and sometimes serpentinite soils in chaparral, cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland (35'–5,100').	March–June	Absent. No suitable habitat within the Study Area.
Boggs Lake hedge-hyssop (*Gratiola heterosepala*)	–	CE	1B.2	Marshes, swamps, lake margins, and vernal pools (35'–7,790').	April–August	Absent. No suitable habitat within the Study Area.
Hogwallow starfish (*Hesperevax caulescens*)	–	–	4.2	Sometimes alkaline in mesic areas with clay soil within valley and foothill grassland and	March–June	Absent. No suitable habitat within the Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area

Common Name (*Scientific Name*)	Status			Habitat Description	Observation Period	Potential to Occur On-Site
	ESA	CESA	Other			
				shallow vernal pools (0'–1,655').		
Woolly rose-mallow (*Hibiscus lasiocarpos* var. *occidentalis*)	–	–	1B.2	Marshes and freshwater swamps. Often in riprap on sides of levees (0'–395').	June–September	Absent. No suitable habitat within the Study Area.
Ahart's dwarf rush (*Juncus leiospermus* var. *ahartii*)	–	–	1B.2	Mesic areas in valley and foothill grassland. Species has an affinity for slight disturbance such as farmed fields (USFWS 2005) (100'–750').	March–May	Absent. No suitable habitat within the Study Area.
Alkali-sink goldfields (*Lasthenia chrysantha*)	–	–	1B.1	Alkaline vernal pools (0'–655').	February–April	Absent. No suitable habitat within the Study Area.
Legenere (*Legenere limosa*)	–	–	1B.1	Various seasonally inundated areas including wetlands, wetland swales, marshes, vernal pools, artificial ponds, and floodplains of intermittent drainages (USFWS 2005) (5'–2,885').	April–June	Absent. No suitable habitat within the Study Area.
Heckard's pepper-grass (*Lepidium latipes* var. *heckardii)*	–	–	1B.2	Alkaline flats within valley and foothill grasslands (5'–655').	March–May	Absent. No suitable habitat within the Study Area.
Hoary navarretia (*Navarretia eriocephala*)	–	––	4.3	Vernally mesic areas in cismontane woodland and valley and foothill grassland (345'–1,310').	May–June	Absent. No suitable habitat within the Study Area.
Pincushion navarretia (*Navarretia myersii* ssp. *myersii*)	–	–	1B.1	Often acidic soils in vernal pools (65'–1,085').	April–May	Absent. No suitable habitat within the Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area

Common Name (*Scientific Name*)	Status			Habitat Description	Observation Period	Potential to Occur On-Site
	ESA	CESA	Other			
Slender Orcutt grass (*Orcuttia tenuis*)	FT	CE	1B.1	Vernal pools, often gravelly (115'–5,775').	May–September	Absent. No suitable habitat within the Study Area.
Sacramento Orcutt grass (*Orcuttia viscida*)	FE	CE	1B.1	Vernal pools (100'–330').	April–July	Absent. No suitable habitat within the Study Area.
Sanford's arrowhead (*Sagittaria sanfordii)*	–	–	1B.2	Shallow marshes and freshwater swamps (0'–2,135').	May–October	Absent. No suitable habitat within the Study Area.
Saline clover (*Trifolium hydrophilum*)	–	–	1B.2	Marshes and swamps, mesic and alkaline areas in valley and foothill grassland, and vernal pools (0'–985').	April–June	Absent. No suitable habitat within the Study Area.
Invertebrates						
Conservancy fairy shrimp (*Branchinecta lynchi*)	FE	–	–	Vernal pools/wetlands.	November-April	Absent. No suitable habitat within Study Area.
Vernal pool fairy shrimp (*Branchinecta lynchi*)	FT	–	–	Vernal pools/wetlands.	November-April	Absent. No suitable habitat within Study Area.
Crotch bumble bee *(Bombus crotchii)*	–	CC	–	Primarily nests underground in open grassland and scrub habitats from the California coast east to the Sierra Cascade and south to Mexico.	March - September	Absent. No suitable habitat within Study Area.
Monarch butterfly *(Danaus plexippus)*	FC	–	–	Adult monarchs west of the Rocky Mountains typically overwinter in sheltered wooded groves of Monterey pine, Monterey cypress, and gum eucalyptus along coastal California, then disperse in spring throughout	Any season	Absent. No suitable habitat within Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
				California, Nevada, Arizona, and parts of Oregon and Washington. Adults require milkweed and additional nectar sources during the breeding season. Larval caterpillars feed exclusively on milkweed.		
Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*)	FT	–	–	Elderberry shrubs.	Any season	Absent. No suitable habitat (Elderberry shrubs) within Study Area.
Vernal pool tadpole shrimp (*Lepidurus packardi*)	FE	–	–	Vernal pools/wetlands.	November-April	Absent. No suitable habitat within Study Area.
Fish						
Green sturgeon (Distinct Population Segment, [DPS]) (*Acipenser medirostris* pop. 1)	FT	–	SSC	Anadromous; undammed cold-water rivers having relatively deep pools with large substrates.	N/A	Absent. No suitable habitat within Study Area.
Delta smelt (*Hypomesus transpacificus*)	FT	CE	–	Sacramento-San Joaquin Delta.	N/A	Absent. No suitable habitat within Study Area.
River lamprey (*Lampetra ayresii*)	–	–	SSC	Spawning adults in clear gravel riffles of streams; feeding adults in estuaries and ocean. Ammocoetes in sandy and muddy pools of spawning streams.	N/A	Absent. No suitable habitat within Study Area.
Pacific lamprey (*Lampetra tridentata*)	–	–	SSC	Anadromous; undammed streams rivers, streams, and	N/A	Absent. No suitable habitat within Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
				creeks with gravel spawning substrates.		
Hardhead (*Mylopharodon conocephalus*)	–	–	SSC	Relatively undisturbed streams at low to mid elevations in the Sacramento-San Joaquin and Russian River drainages. In the San Joaquin River, scattered populations found in tributary streams, but only rarely in the valley reaches of the San Joaquin River.	N/A	Absent. No suitable habitat within Study Area.
Steelhead (CA Central Valley Evolutionarily Significant Unit [ESU]) (*Oncorhynchus mykiss*)	FT	–	–	Undammed rivers, streams, creeks	N/A	Absent. No suitable habitat within Study Area.
Chinook salmon (Central Valley fall/late fall-run ESU) (*Oncorhynchus tshawytscha*)	–	–	SSC	Undammed rivers, streams, creeks in the Sacramento and San Joaquin River systems.	N/A	Absent. No suitable habitat within Study Area.
Chinook salmon (Central Valley spring-run ESU) (*Oncorhynchus tshawytscha*)	FT	CT	–	Undammed rivers, streams, creeks in the Sacramento and San Joaquin River systems.	N/A	Absent. No suitable habitat within Study Area.
Chinook salmon (Sacramento River winter-run ESU) *(Oncorhynchus tshawytscha)*	FE	CE	–	Undammed reaches of the mainstem and tributaries to the Sacramento River downstream of Shasta Reservoir.	N/A	Absent. No suitable habitat within Study Area.
Sacramento splittail (*Pogonichthys macrolepidotus*)	–	–	SSC	San Francisco Bay estuary and Central Valley lakes and rivers. Spawns in upstream floodplains	N/A	Absent. No suitable habitat within Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area

Common Name (*Scientific Name*)	Status			Habitat Description	Observation Period	Potential to Occur On-Site
	ESA	CESA	Other			
				and backwater sloughs.		
Longfin smelt (*Spirinchus thaleichthys*)	FC	CT	SSC	Freshwater and coastal estuaries.	N/A	Absent. No suitable habitat within Study Area.
Amphibians						
California tiger salamander (Central California DPS) (*Ambystoma californiense*)	FT	CT	WL	Vernal pools, wetlands (breeding) and adjacent grassland or oak woodland; needs underground refuge (e.g., ground squirrel and/or gopher burrows). Largely terrestrial as adults.	March-May	Absent. No suitable habitat within Study Area.
Western spadefoot (*Spea hammondii*)	–	–	SSC	California endemic species of vernal pools, swales, wetlands and adjacent grasslands throughout the Central Valley.	March-May	Absent. No suitable habitat within Study Area.
Reptiles						
Northwestern pond turtle (*Actinemys marmorata*)	–	–	SSC	Requires basking sites and upland habitats up to 0.5 km from water for egg laying. Uses ponds, streams, detention basins, and irrigation ditches.	April-September	Absent. No suitable habitat within Study Area.
Blainville's (Coast) horned lizard (*Phrynosoma blainvillii*)	–	–	SSC	Formerly a wide-spread horned lizard found in a wide variety of habitats, often in lower elevation areas with sandy washes and scattered low bushes. Also occurs in Sierra Nevada foothills. Requires open areas	April-October	Absent. No suitable habitat within Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
				for basking, but with bushes or grass clumps for cover, patches of loamy soil or sand for burrowing and an abundance of ants (Stebbins and McGinnis 2012). In the northern Sacramento area, this species appears restricted to the foothills between 1000 to 3000 feet from Cameron Park (El Dorado County) north and west to Grass Valley and Nevada City.		
Giant garter snake (*Thamnophis gigas*)	FT	CT	–	Freshwater ditches, sloughs, and marshes in the Central Valley. Almost extirpated from the southern parts of its range.	April-October	Absent. No suitable habitat within Study Area.
Birds						
Western grebe *(Aechmophorus occidentalis)*	–	–	BCC	Winters on salt or brackish bays, estuaries, sheltered sea coasts, freshwater lakes, and rivers. Nests on freshwater lakes and marshes with open water bordered by emergent vegetation.	Nesting: June-August	Absent. No suitable habitat within Study Area.
Clark's grebe *(Aechmophorus clarkii)*	–	–	BCC	Winters on salt or brackish bays, estuaries, sheltered sea coasts, freshwater lakes, and rivers. Breeds on freshwater to brackish marshes, lakes, reservoirs and ponds, with a preference for large	Nesting: June-August	Absent. No suitable habitat within Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
				stretches of open water fringed with emergent vegetation.		
Yellow-billed cuckoo (*Coccyzus americanus*)	FT	CE	–	Breeds in California, Arizona, Utah, Colorado, and Wyoming. In California, they nest along the upper Sacramento River and the South Fork Kern River from Isabella Reservoir to Canebrake Ecological Reserve. Other known nesting locations include Feather River (Butte, Yuba, Sutter counties), Prado Flood Control Basin (San Bernardino and Riverside counties), Amargosa River and Owens Valley (Inyo County), Santa Clara River (Los Angeles County), Mojave River and Colorado River (San Bernardino County). Nests in riparian woodland. Winters in South America.	June 15-August 15	Absent. No suitable habitat within Study Area.
Black swift *(Cypseloides niger)*	–	–	BCC, SSC	In California, nests from Cascade-Sierra Nevada region south to Tulare and Mono counties; coastal ranges (Santa Cruz south to San Luis Obispo counties), San Gabriel, San Bernardino, and San Jacinto Mountains. Nests on ledges or shallow caves on steep rock faces,	Nesting: May-September	Absent. No suitable habitat within Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area

Common Name (*Scientific Name*)	Status			Habitat Description	Observation Period	Potential to Occur On-Site
	ESA	CESA	Other			
				usually behind waterfalls. Winter range, unknown, but thought to be northern and western South America, and West Indies.		
Vaux's swift *(Chaetura vauxi)*	–	–	BCC, SSC	In California, breeds along the coastal zone from Del Norte County south to Santa Cruz County; Yosemite National Park, possibly Warner and Whites Mountains and Sequoia National Park Nest in late stage coniferous forests and deciduous forests mixed with coniferous. Winters from central Mexico to South America.	May-August	Absent. No suitable nesting habitat within Study Area.
Greater sandhill crane *(Antigone canadensis tabida)*	–	CT	CFP	Breeds in NE California, Nevada, Oregon, Washington, and BC, Canada; winters from CA to Florida. In winter, they forage in burned grasslands, pastures, and feed on waste grain in a variety of agricultural settings (i.e., corn, wheat, milo, rice, oats, and barley), tilled fields, recently planted fields, alfalfa fields, row crops and burned rice fields.	March-August (breeding); September-March (wintering)	Absent. No suitable habitat within Study Area.
Marbled godwit (*Limosa fedoa*)	–	–	BCC	Nests in Montana, North and South Dakota, Minnesota,	Migrant/ Wintering CA: August-April	Absent. No suitable habitat within Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
				into Canada. Winter range along Pacific Coast from British Columbia south to Central America, with small numbers wintering in interior California. Wintering habitat includes coastal mudflats, meadows, estuaries, sandy beaches, sandflats, and salt ponds.		
Short-billed Dowitcher *(Limnodromus griseus)*	–	–	BCC	Nests in Canada, southern Alaska; winters in coastal California south to South America; wintering habitat includes coastal mudflats and brackish lagoons.	Migrant/ Wintering: late-August-May	Absent. No suitable habitat within Study Area.
California gull (nesting colony) *(Larus californicus)*	–	–	BCC, CDFW WL	Nesting occurs in the Great Basin, Great Plains, Mono Lake, and south San Francisco Bay. Winters along Pacific Coast from southern British Columbia south to Baja California and Mexico. In California, winters along coast and inland (Central Valley, Salton Sea).	Nesting: April-August	Absent. No suitable habitat within Study Area.
Black tern *(Chlidonias niger)*	–	–	BCC, SSC	Breeding range includes northeastern California, Central Valley, Great Plains of U.S. and Canada; winters in Central and South America; nesting habitat includes shallow	Nesting: May-August	Absent. No suitable habitat within Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
				freshwater marsh with emergent vegetation, prairie sloughs, lake margins, river islands, and cultivated rice fields.		
California least tern *(Sternula antillarum browni)*	FE	CE	CFP	Nests along Pacific Coast from San Francisco Bay south the Mexico; nests colonially, on sand or dried mudflats, sand or shell islands, and gravel and sand pits and rarely in agricultural fields, parking lots, airports, and flat/graveled rooftops.	April-August	Absent. No suitable habitat within Study Area.
Double-crested cormorant *(Nannopterum auritum)*	–	–	CDFW WL	Nests near ponds, lakes, artificial impoundments, slow-moving rivers, lagoons, estuaries, and open coastlines and typically forages in shallow water. Non-nesters are found in many coastal and inland waters.	April-August	Absent. No suitable habitat within Study Area.
Least bittern *(Ixobrychus exilis)*	–	–	SSC	Freshwater and brackish marshes with dense, tall aquatic and semiaquatic vegetation intersperse with clumps of woody vegetation and open water, and rarely salt marshes and mangrove swamps.	April-July	Absent. No suitable habitat within Study Area.
Osprey (nesting) (*Pandion haliaetus*)	–	–	CDFW WL	Nesting habitat requires close proximity to	March-September	Absent. No suitable habitat within Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
				accessible fish, open nest site free of mammalian predators, and extended ice-free season. The nest in large trees, snags, cliffs, transmission/communication towers, artificial nest platforms, channel markers/buoys.		
White-tailed kite (nesting) (*Elanus leucurus*)	–	–	CFP	Nesting occurs within trees in low elevation grassland, agricultural, wetland, oak woodland, riparian, savannah, and urban habitats.	March-August	Potential to Occur. Trees onsite and adjacent to the Study Area provide suitable nesting habitat.
Golden eagle (nesting and wintering) (*Aquila chrysaetos*)	–	–	BCC, CFP	Nesting habitat includes mountainous canyon land, rimrock terrain of open desert and grasslands, riparian, oak woodland/savannah, and chaparral. Nesting occurs on cliff ledges, river banks, trees, and human-made structures (e.g., windmills, platforms, and transmission towers). Breeding occurs throughout California, except the immediate coast, Central Valley floor, Salton Sea region, and the Colorado River region, where they can be found during winter.	Nest: (February-August); winter CV (October-February)	Absent. No suitable habitat within Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
Northern harrier (*Circus hudsonius*)	–	–	SSC	Nests on the ground in open wetlands, marshy meadows, wet/lightly grazed pastures, (rarely) freshwater/brackish marshes, tundra, grasslands, prairies, croplands, desert, shrub-steppe, and (rarely) riparian woodland communities.	April-September	Absent. No suitable habitat within Study Area.
Cooper's hawk (nesting) (*Accipiter cooperii*)	–	–	CDFW WL	Nests in trees in riparian woodlands in deciduous, mixed and evergreen forests, as well as urban landscapes	March-July	Potential to Occur. Trees onsite and adjacent to the Study Area provide suitable nesting habitat.
Bald eagle (nesting and wintering) (*Haliaeetus leucocephalus)*	Delisted	CE	CFP, BCC	Typically nests in forested areas near large bodies of water in the northern half of California; nest in trees and rarely on cliffs; wintering habitat includes forest and woodland communities near water bodies (e.g., rivers, lakes), wetlands, flooded agricultural fields, open grasslands.	February – September (nesting); October-March (wintering)	Absent. No suitable habitat within Study Area
Swainson's hawk (nesting) (*Buteo swainsoni*)	–	CT	BCC	Nesting occurs in trees in agricultural, riparian, oak woodland, scrub, and urban landscapes. Forages over grassland, agricultural lands, particularly during disking/harvesting, irrigated pastures	March-August	Absent. There is no suitable nesting or foraging habitat present.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area

Common Name (*Scientific Name*)	Status			Habitat Description	Observation Period	Potential to Occur On-Site
	ESA	CESA	Other			
Ferruginous hawk (wintering) (*Buteo regalis*)	–	–	BCC, CDFW WL	Rarely breeds in California (Lassen County); winter range includes grassland and shrubsteppe habitats from Northern California (except northeast and northwest corners) south to Mexica and east to Oklahoma, Nebraska, and Texas.	September-March	Absent. No suitable habitat within Study Area
Burrowing owl (burrow sites) (*Athene cunicularia*)	–	–	BCC, SSC	Nests in burrows or burrow surrogates in open, treeless, areas within grassland, steppe, and desert biomes. Often with other burrowing mammals (e.g., prairie dogs, California ground squirrels). May also use human-made habitat such as agricultural fields, golf courses, cemeteries, roadside, airports, vacant urban lots, and fairgrounds.	February-August	Potential to Occur. Suitable habitat present within the Study Area.
Short-eared owl (*Asio flammeus*)	–	–	BCC, SSC	Nests in large expanses of prairie, coastal grasslands, heathlands, shrub-steppe, tundra, and agricultural areas.	March-July (breeding); August-March (wintering in Central Valley)	Absent. No suitable habitat within Study Area
Nuttall's woodpecker *(Dryobates nuttallii)*	–	–	BCC	Resident from northern California south to Baja California. Nests in tree cavities in oak woodlands and riparian woodlands.	Nesting: April – July.	Potential to Occur. Oak trees onsite represent suitable nesting habitat.
Merlin *(Falco columbarius)*	–	–	CDFW WL	Breeds in Oregon, Washington north into Canada. Winters in southern Canada	September-April (wintering in the Central Valley);	Absent. No suitable habitat within Study Area

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
				to South America, including California. Breeds near forest openings, fragmented woodlots, and riparian areas. Wintering habitat includes wide variety, open forests, grasslands, tidal flats, plains, and urban settings.	does not breed in California	
American peregrine falcon *(Falco peregrinus anatum)*	Delisted	Delisted	BCC, CFP	In California, breeds in coastal region, northern California, and Sierra Nevada. Nesting habitat includes cliff ledges and human-made ledges on towers and buildings. Wintering habitat includes areas where there are large concentrations of shorebirds, waterfowl, pigeons or doves.	CA Residents nest in February-June	Absent. No suitable habitat within Study Area
Prairie falcon (*Falco mexicanus*)	–	–	BCC, CDFW WL	Found in open habitat at all elevations up to 3,350 meters (Steenhof 2013). Nests on cliffs and bluffs in arid plains and steppes; In California, nesting throughout state except northwest corner, along immediate coast, and the Central Valley floor. Winters throughout California, in open habitats, such as grasslands in Central Valley.	March-July (breeding); September-February (wintering in Central Valley)	Absent. No suitable habitat within Study Area

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area

Common Name (*Scientific Name*)	Status			Habitat Description	Observation Period	Potential to Occur On-Site
	ESA	CESA	Other			
Olive-sided flycatcher *(Contopus cooperi)*	–	–	SSC, BCC	Nests in montane and northern coniferous forests, in forest openings, forest edges, semiopen forest stands. In California, nests in coastal forests, Cascade and Sierra Nevada region. Winters in Central to South America.	Nesting: May - August	Absent. No suitable habitat within Study Area
Loggerhead shrike (*Lanius ludovicianus*)	–	–	BCC, SSC	Found throughout California in open country with short vegetation, pastures, old orchards, grasslands, agricultural areas, open woodlands. Not found in heavily forested habitats.	March-July	Absent. No suitable habitat within Study Area
Yellow-billed magpie (nesting) (*Pica nuttalli*)	–	–	BCC	Endemic to California; found in the Central Valley and coast range south of San Francisco Bay and north of Los Angeles County; nesting habitat includes oak savannah with large in large expanses of open ground; also found in urban parklike settings.	April-June	Potential to Occur. Trees onsite provide suitable nesting habitat.
Oak titmouse (*Baeolophus inornatus*)	–	–	BCC	Nests in tree cavities within dry oak or oak-pine woodland and riparian; where oaks are absent, they nest in juniper woodland, open forests (e.g., gray, Jeffrey, Coulter, pinyon pines and Joshua tree).	Nesting: March - July	Potential to Occur. Oak trees onsite represent suitable nesting habitat.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
Bank swallow (nesting) (*Riparia riparia*)	–	CT	–	Nests colonially along coasts, rivers, streams, lakes, reservoirs, and wetlands in vertical banks, cliffs, and bluffs in alluvial, friable soils. May also nest in sand, gravel quarries and road cuts. In California, breeding range includes northern and central California.	May-July	Absent. No suitable habitat within Study Area
Purple martin (nesting) (*Progne subis*)	–	–	SSC	In California, breeds along coast range, Cascade-northern Sierra Nevada region and isolated population in Sacramento. Nesting habitat includes montane forests, Pacific lowlands with dead snags; the isolated Sacramento population nests in weep holes under elevated highways/bridges. Winters in South America.	May-Aug	Absent. No suitable habitat within Study Area
Wrentit (*Chamaea fasciata*)	–	–	BCC	Coastal sage scrub, northern coastal scrub, chaparral, dense understory of riparian woodlands, riparian scrub, coyote brush and blackberry thickets, and dense thickets in suburban parks and gardens. Nesting: March-August	March – August (Nesting)	Absent. No suitable habitat within Study Area

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area

Common Name (*Scientific Name*)	Status			Habitat Description	Observation Period	Potential to Occur On-Site
	ESA	CESA	Other			
Song sparrow "Modesto" (*Melospiza melodia heermanni*)	–	–	BCC, SSC	Resident in central and southwest California, including Central Valley; nests in marsh, scrub habitat	April-June	Absent. No suitable habitat within Study Area
Yellow-breasted chat (*Icteria virens*)	–	–	SSC	In California, breeds in Klamath Mountains, inner Northern Coast Range south to San Francisco Bay, locally distributed from Santa Clara County south to San Diego County Sacramento and San Joaquin valleys, along west slope of Sierra Nevada from the Feather River to Kern River, Mono and Inyo counties. In the west, nesting habitat includes dense riparian and shrubby.	May-August	Absent. No suitable habitat within Study Area
Yellow-headed blackbird (*Xanthocephalus xanthocephalus*)	–	–	SSC	In California, breeds in the Great Basin region, along Colorado River south to Baja California, Salton Sea, Kern, Ventura, Riverside, San Diego and possibly Orange, Lake counties and locally in the Central Valley, Nests are constructed over deep water in emergent vegetation of prairie wetlands, quaking aspen parklands, mountain meadows, forest edges, large lakes.	April-July	Absent. No suitable habitat within Study Area

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area

Common Name (*Scientific Name*)	Status			Habitat Description	Observation Period	Potential to Occur On-Site
	ESA	CESA	Other			
Tricolored blackbird (nesting colony) (*Agelaius tricolor*)	–	–	BCC, SSC	Breeds locally west of Cascade-Sierra Nevada and southeastern deserts from Humboldt and Shasta counties south to San Bernardino, Riverside and San Diego Counties. Central California, Sierra Nevada foothills and Central Valley, Siskiyou, Modoc and Lassen Counties. Nests colonially in freshwater marsh, blackberry bramble, milk thistle, triticale fields, weedy (mustard, mallow) fields, giant cane, safflower, stinging nettles, tamarisk, riparian scrublands and forests, fiddleneck and fava bean fields.	March-August	Absent. No suitable habitat within Study Area
Bullock's oriole (*Icterus bullockii*)	–	–	BCC	Breeding habitat includes riparian and oak woodlands.	Nesting: March-July	Potential to Occur. Oak trees onsite represent suitable nesting habitat.
Saltmarsh common yellowthroat (*Geothlypis trichas sinuosa*)	–	–	BCC, SSC	Breeds in salt marshes of San Francisco Bay; winters San Francisco south along coast to San Diego County.	Nesting: March-July	Absent. No suitable habitat within Study Area
Yellow warbler (*Setophaga petechia*)	–	–	SSC, BCC	Breeding range includes most of California, except Central Valley (isolated breeding locales on Valley floor, Stanislaus, Colusa, and Butte	May-August	Absent. No suitable habitat within Study Area

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
				counties), Sierra Nevada range above tree line, and southeastern deserts. Nesting habitat includes riparian vegetation near streams and meadows. Winters in Mexico south to South America.		
Lawrence's goldfinch (*Spinus lawrencei*)	–	–	BCC	Breeds in Sierra Nevada and inner Coast Range foothills surrounding the Central Valley and the southern Coast Range to Santa Barbara County east through southern California to the Mojave Desert and Colorado Desert into the Peninsular Range. Nests in arid and open woodlands with chaparral or other brushy areas, tall annual weed fields, and a water source (e.g., small stream, pond, lake), and to a lesser extent riparian woodland, coastal scrub, evergreen forests, pinyon-juniper woodland, planted conifers, and ranches or rural residences near weedy fields and water.	Nesting: March-September	Absent. No suitable nesting habitat within the Study Area.
Grasshopper sparrow (*Ammodramus savannarum*)	–	–	SSC	In California, breeding range includes most coastal counties south to Baja California;	May-August	Absent. No suitable nesting habitat within the Study Area.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area						
Common Name (*Scientific Name*)	**Status**			**Habitat Description**	**Observation Period**	**Potential to Occur On-Site**
	ESA	**CESA**	**Other**			
				western Sacramento Valley and western edge of Sierra Nevada region. Nests in moderately open grasslands and prairies with patchy bare ground. Avoids grasslands with extensive shrub cover; more likely to occupy large tracts of habitat than small fragments; removal of grass cover by grazing often detrimental.		
Belding's savannah sparrow (*Passerculus sandwichensis beldingi*)	–	CE	BCC	Resident coastally from Point Conception south into Baja California; coastal salt marsh.	Year-round resident; nests March-August	Absent. No suitable nesting habitat within the Study Area.
Mammals						
American badger *(Taxidea taxus)*	–	–	SSC	Drier open stages of most shrub, forest, and herbaceous habitats with friable soils.	Year round resident (breeds summer-early fall).	Absent. No suitable habitat within Study Area.
Pallid bat (*Antrozous pallidus*)	–	–	SSC	Crevices in rocky outcrops and cliffs, caves, mines, trees (e.g., basal hollows of redwoods, cavities of oaks, exfoliating pine and oak bark, deciduous trees in riparian areas, and fruit trees in orchards). Also roosts in various human structures such as bridges, barns, porches, bat boxes, and human-occupied as well as vacant buildings (Western	April-September	Potential to Occur. Trees onsite provide potential roosting habitat.

Table 1. Evaluation of Special-Status Plant and Wildlife Species for the Project Area

Common Name (*Scientific Name*)	Status			Habitat Description	Observation Period	Potential to Occur On-Site
	ESA	CESA	Other			
				Bat Working Group [WBWG] 2023).		
Western red bat *(Lasiurus blossevillii)*	–	–	SSC	Roosts in foliage of trees or shrubs; Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. There may be an association with intact riparian habitat (particularly willows, cottonwoods, and sycamores) (WBWG 2023).	April-September	Low Potential to Occur. Trees onsite provide marginal roosting habitat.

Status Codes:

FESA Federal Endangered Species Act
CESA California Endangered Species Act
FE FESA listed, Endangered.
FT FESA listed, Threatened.
BCC USFWS Bird of Conservation Concern (USFWS 2002).
CR CESA- or NPPA-listed, Rare.
CT CESA- or NPPA-listed, Threatened.
CC Candidate for CESA listing as Endangered or Threatened.
CE CESA or NPPA listed, Endangered.
CFP California Fish and Game Code Fully Protected Species (Sections 3511-birds, 4700-mammals, 5050-reptiles/amphibians).
CDFW WL CDFW Watch List
SSC CDFW Species of Special Concern (CDFW, updated July 2017).
1B CRPR/Rare or Endangered in California and elsewhere.
2B Plants rare, threatened, or endangered in California but more common elsewhere.
3 CRPR/Plants About Which More Information is Needed – A Review List.
4 CRPR/Plants of Limited Distribution – A Watch List.
0.1 Threat Rank/Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
0.2 Threat Rank/Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
0.3 Threat Rank/Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)
Delisted Formally Delisted (delisted species are monitored for 5 years).

4.4.1 Plants

A total of 10 special-status plant species were identified as having the potential to occur within the Study Area based on the literature review (Table 3). Upon further analysis and after the reconnaissance site visit, all 10 species were determined to be absent due to the lack of suitable habitat or the Study Area was

outside the known range for the species. No further discussion of these species is provided in this analysis.

4.4.2 Invertebrates

A total of six special-status invertebrate species were identified as having the potential to occur within the Study Area based on the literature review (Table 1). Upon further analysis and after the reconnaissance site visit, all six species were determined to be absent due to the lack of suitable habitat within the Study Area. No further discussion of these species is provided in this analysis.

4.4.3 Fish

Eleven special-status fish species were identified as having the potential to occur within the Study Area based on the literature review (Table 1). Upon further analysis and after the reconnaissance site visit, all 11 species were determined to be absent due to the lack of suitable habitat within the Study Area. No further discussion of these species is provided in this analysis.

4.4.4 Amphibians

Two special-status amphibian species were identified as having the potential to occur within the Study Area based on the literature review (Table 1). Upon further analysis and after the reconnaissance site visit, both species were determined to be absent due to the lack of suitable habitat within the Study Area. No further discussion of these species is provided in this analysis.

4.4.5 Reptiles

Three special-status reptile species were identified as having the potential to occur within the Study Area based on the literature review (Table 1). Upon further analysis and after the reconnaissance site visit, all three species were determined to be absent due to the lack of suitable habitat within the Study Area. No further discussion of these species is provided in this analysis.

4.4.6 Birds

A total of 44 special-status bird species were identified as having the potential to occur within the Study Area based on the literature review (Table 1). Upon further analysis and after the reconnaissance site visit, 37 species were determined to be absent due to lack of suitable habitat. No further discussion of these species is provided in this analysis. Brief descriptions of the remaining seven species that have the potential to occur within the Study Areas are presented below.

4.4.6.1 White-Tailed Kite

White-tailed kite is not listed pursuant to either the California or federal ESAs; however, the species is fully protected pursuant to Section 3511 of the California Fish and Game Code. This species is a common resident in the Central Valley and the entire length of the California coast, and all areas up to the Sierra Nevada foothills and southeastern deserts (Dunk 2020). In northern California, white-tailed kite nesting occurs from March through early August, with nesting activity peaking from March through June. Nesting

occurs in trees within riparian, oak woodland, savannah, and agricultural communities that are near foraging areas such as low elevation grasslands, agricultural, meadows, farmlands, savannahs, and emergent wetlands (Dunk 2020).

There are eight CNDDB occurrences of this species within five miles of the Study Area (CDFW 2023b). The trees onsite and adjacent provide suitable nesting habitat. White-tailed kite has potential to occur.

4.4.6.2 Cooper's Hawk

The Cooper's hawk (*Accipiter cooperii*) is not listed pursuant to either the California or federal Endangered Species Acts. However, it is a CDFW watch list species. Typical nesting and foraging habitats include riparian woodland, dense oak woodland, and other woodlands near water. Cooper's hawk nest throughout California from Siskiyou County to San Diego County and includes the Central Valley (Rosenfield et al. 2020). Breeding occurs during March through July, with a peak from May through July.

There is one CNDDB occurrence of this species within five miles of the Study Area (CDFW 2023b). The trees onsite and adjacent provide suitable nesting habitat. Cooper's hawk has potential to occur.

4.4.6.3 Burrowing Owl

The burrowing owl (*Athene cunicularia*) is not listed pursuant to either the California or federal Endangered Species Acts; however, it is designated as a bird of conservation concern by the USFWS and a species of special concern by the CDFW. Burrowing owls inhabit dry open rolling hills, grasslands, desert floors, and open bare ground with gullies and arroyos. They can also inhabit developed areas such as golf courses, cemeteries, roadsides within cities, airports, vacant lots in residential areas, school campuses, and fairgrounds (Poulin et al. 2020). This species typically uses burrows created by fossorial mammals, most notably the California ground squirrel (*Spermophilus beecheyi*) but may also use man-made structures such as concrete culverts or pipes; concrete, asphalt, or wood debris piles; or openings beneath concrete or asphalt pavement (California Department of Fish and Game [CDFG] 2012). The breeding season typically occurs between February 1 and August 31 (California Burrowing Owl Consortium 1993; CDFG 2012).

There are eight CNDDB occurrences of this species within five miles of the Study Area (CDFW 2023b). No California ground squirrel burrows were found during the site reconnaissance, but several cracks in the old foundations and pavement onsite were observed. While no evidence of burrowing owl presence was found, the site reconnaissance did not constitute a protocol level survey or burrowing owl habitat assessment. The Study Area provides suitable habitat. Burrowing owl has potential to occur.

4.4.6.4 Nuttall's Woodpecker

The Nuttall's woodpecker (*Dryobates nuttallii*) is not listed and protected under either state or federal Endangered Species Acts but is considered a USFWS bird of conservation concern. They are resident from Siskiyou County south to Baja California. Nuttall's woodpeckers nest in tree cavities primarily within oak woodlands, but also can be found in riparian woodlands (Lowther et al. 2020). Breeding occurs during April through July.

There are no CNDDB occurrences of this species within five miles of the Study Area (CDFW 2023b). The oak trees on site provide suitable nesting habitat. Nuttall's woodpecker has potential to occur.

4.4.6.5 Yellow-billed Magpie

The yellow-billed magpie (*Pica nuttalli*) is not listed pursuant to either the California or federal Endangered Species Acts but is considered a USFWS bird of conservation concern. This endemic species is a yearlong resident of the Central Valley and Coast Ranges from San Francisco Bay to Santa Barbara County. Yellow-billed magpies build large, bulky nests in trees in a variety of open woodland habitats, typically near grassland, pastures or cropland. Nest building begins in late-January to mid-February, which may take up to 6-8 weeks to complete, with eggs laid during April-May, and fledging during May-June (Koenig and Reynolds 2020). The young leave the nest about 30 days after hatching (Koenig and Reynolds 2020). Yellow-billed magpies are highly susceptible to West Nile Virus, which may have been the cause of death to thousands of magpies during 2004-2006 (Koenig and Reynolds 2020).

There are no CNDDB occurrences of this species within five miles of the Study Area (CDFW 2023b). The trees onsite and adjacent provide suitable nesting habitat. Yellow-billed magpie has potential to occur.

4.4.6.6 Oak Titmouse

Oak titmouse (*Baeolophus inornatus*) are not listed and protected under either state or federal Endangered Species Acts but are considered a USFWS bird of conservation concern. Oak titmouse breeding range includes southwestern Oregon south through California's Coast, Transverse and Peninsular ranges, western foothills of the Sierra Nevada, into Baja California; they are absent from the humid northwestern coastal region and the San Joaquin Valley (Cicero et al. 2020). They are found in dry oak or oak-pine woodlands but may also use scrub oaks or other brush near woodlands (Cicero et al. 2020). Nesting occurs during March through July.

There are no CNDDB occurrences of this species within five miles of the Study Area (CDFW 2023b). The trees onsite provide suitable nesting habitat. Oak titmouse has potential to occur.

4.4.6.7 Bullock's Oriole

The Bullock's oriole (*Icterus bullockii*) is not listed pursuant to either the California or federal Endangered Species Acts but is currently a species of bird of conservation concern according to the USFWS. In California, Bullock's orioles are found throughout the state except the higher elevations of mountain ranges and the eastern deserts (Small 1994). They are found in riparian and oak woodlands where nests are built in deciduous trees, but may also use orchards, conifers, and eucalyptus trees (Flood et al 2020). Nesting occurs from March through July.

There are no CNDDB occurrences of this species within five miles of the Study Area (CDFW 2023b). The trees onsite provide suitable nesting habitat. Bullock's oriole has potential to occur.

4.4.7 Mammals

One special-status mammal, American badger, was identified as having the potential to occur within the Study Area based on the literature review (Table 1). Upon further analysis and after the reconnaissance site visit, American badger was determined to be absent due to the lack of suitable habitat. No further discussion of this species is provided in this analysis.

4.4.8 Bats

Two special-status bat species were identified as having the potential to occur within the Study Area based on the literature review (Table 1). Upon further analysis and after the reconnaissance site visit, both species were determined to have some potential to occur. Brief descriptions of these species are provided below.

4.4.8.1 Pallid Bat

The pallid bat (*Antrozous pallidus*) is not listed pursuant to either the federal or California ESAs; however, this species is considered an SSC by CDFW. The pallid bat is a large, light-colored bat with long, prominent ears and pink, brown, or grey wing and tail membranes. This species ranges throughout North America from the interior of British Columbia, south to Mexico, and east to Texas. The pallid bat inhabits low elevation (below 6,000 feet) rocky arid deserts and canyonlands, shrub-steppe grasslands, karst formations, and higher elevation coniferous forest (above 7,000 feet). This species roosts alone or in groups in the crevices of rocky outcrops and cliffs, caves, mines, trees, and in various human structures such as bridges, and barns. Pallid bats are feeding generalists that glean a variety of arthropod prey from surfaces as well as capturing insects on the wing. Foraging occurs over grasslands, oak savannahs, ponderosa pine forests, talus slopes, gravel roads, lava flows, fruit orchards, and vineyards. Although this species utilizes echolocation to locate prey, often they use only passive acoustic cues. This species is not thought to migrate long distances between summer and winter sites (WBWG 2023).

There are no CNDDB occurrences of this species within five miles of the Study Area (CDFW 2023b). The trees onsite provide potential roosting habitat. Pallid bat has potential to occur.

4.4.8.2 Western Red Bat

The western red bat (*Lasiurus blossevillii*) is not listed pursuant to either the California or federal Endangered Species Acts; however, this species is considered a species of special concern by CDFW. The western red bat is easily distinguished from other western bat species by its distinctive red coloration. This species is broadly distributed, its range extending from southern British Columbia in Canada through Argentina and Chile in South America, and including much of the western United States. This solitary species day roosts primarily in the foliage of trees or shrubs in edge habitats bordering streams or open fields, in orchards, and occasionally urban areas. They may be associated with intact riparian habitat, especially with willows, cottonwoods, and sycamores. This species may occasionally utilize caves for roosting as well. They feed on a variety of insects, and generally begin to forage one to two hours after

sunset. This species is considered highly migratory, however the timing of migration and the summer ranges of males and females may be different. Winter behavior of this species is poorly understood (WBWG 2023).

There are no CNDDB occurrences of this species within five miles of the Study Area (CDFW 2023b). The trees onsite and adjacent provide marginal roosting habitat. Western red bat has low potential to occur.

4.5 Critical Habitat and Essential Fish Habitat

There is no designated Critical Habitat mapped within the Study Area (USFWS 2023).

4.6 Protected Trees

There are several trees within the Study Area that may be protected by the City of Rancho Cordova Tree Protection Plan. An initial site reconnaissance for trees has been completed. Identified trees within the Study Area included Valley Oak (*Quercus lobata*), walnut (*Juglans hindsii*) and potentially Chinese pistache (*Pistache chinensis*), and Fremont's cottonwood (*Populus fremontii*).

4.7 Riparian Habitats and Sensitive Natural Communities

Northern Claypan Vernal Pool, Northern Hardpan Vernal Pool, Northern Volcanic Mud Flow Vernal Pool, Valley Needlegrass Grassland, Elderberry Savanna, and Great Valley Valley Oak Riparian Forest are sensitive natural communities that were identified during the literature review as occurring in the vicinity of the Study Area (CDFW 2023b; Appendix A). However, no sensitive natural communities or riparian habitats were observed within the Study Area during the field assessment. Therefore, those biological resources will not be discussed further in this analysis.

4.8 Wildlife Movement/Corridors and Nursery Sites

The Study Area does not contain habitat areas or corridors with significant potential for wildlife movement. The ruderal grassland in the Study Area is a relatively small and fragmented and in close proximity to residential developments, the light rail station and subject to regular human presence.

For the purposes of this analysis, nursery sites include but are not limited to concentrations of nest or den sites such as heron rookeries or bat maternity roosts. This data is available through CDFW's Biogeographic Information and Observation System database or as occurrence records in the CNDDB and is supplemented with the results of the field reconnaissance. No nursery sites have been documented within the Study Area (CDFW 2022) and none were observed during the site reconnaissance.

4.9 Wildlife Observations

The Study Area supports a variety of common wildlife species. A detailed list of wildlife species observed in the vicinity of the Study Area during the site visit is included as Appendix C.

5.0 IMPACT ANALYSIS

This section specifically addresses the questions raised by the CEQA - Appendix G Environmental Checklist Form, IV. Biological Resources. This section also identifies the appropriate recommendations to reduce potential impacts of the actions to less than significant. The recommendations are described in detail in Section 7.0.

5.1 Special-Status Species

Would the Project result in effects, either directly or through habitat modifications, to species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

The Project could result in impacts to suitable habitat for special-status species within the Study Area. No special-status species are known to occur within the Project Area; however, focused surveys have not been conducted. Impacts by taxon group are presented below.

5.1.1 Impacts to Special-Status Plants

No special-status plants have potential to occur within the Study Area. Therefore, Project activities would not impact special status plants.

5.1.2 Impacts to Special-Status Invertebrates

No special-status invertebrates have potential to occur within the Study Area. Therefore, Project activities would not impact special status invertebrates.

5.1.3 Impacts to Special-Status Fish

No special-status fish have potential to occur within the Study Area. Therefore, Project activities would not impact special status fish.

5.1.4 Impacts to Special-Status Amphibians

No special-status amphibians have potential to occur within the Study Area. Therefore, Project activities would not impact special status amphibians.

5.1.5 Impacts to Special-Status Reptiles

No special-status reptiles have potential to occur within the Study Area. Therefore, Project activities would not impact special status reptiles.

5.1.6 Impacts to Special-Status Birds

There are four special-status bird species with potential to occur in the Study Area. Additionally, the Study Area supports potential nesting habitat for a variety of common birds protected by the MBTA and Fish and Game Code. Removal or disturbance of active nests may have a significant impact under CEQA. Noise from construction activities have potential to impact nesting birds if present within or adjacent to the

construction activities. Implementation of recommendations outlined below would minimize potential effects to special-status birds.

5.1.7 Impacts to Special-Status Bats

There are two special-status bats with a potential to occur in the Study Area. Removal of trees found within the Study Area could result in impacts to roosting bats, if present. Implementation of recommendations outlined below would minimize the potential for effects to special-status bats.

5.2 Riparian Habitat and Sensitive Natural Communities

Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

No sensitive natural communities or riparian habitats were observed within the Study Area during the field assessment. Therefore, the Project is not expected to have a substantial adverse effect on riparian habitat or sensitive natural communities.

5.3 Aquatic Resources, Including Waters of the U.S./State

Would the Project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

There were no aquatic resources identified or observed during the field assessment. Therefore, the Project is not expected to have adverse effects on aquatic resources, including Waters of the U.S./State.

5.4 Wildlife Movement/Corridors

Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

The Study Area is a previously disturbed/developed site that is surrounded by development. It does not support signification wildlife use or movement corridors.

As discussed in Section 5.7, the Study Area does not include a known nursery sites and no evidence of a wildlife nursery site was observed during the field reconnaissance. Therefore, the Project is not expected to impact wildlife nursery sites. Potential impacts to individual nesting birds would be reduced by implementation of recommendations described in Section 7.0.

5.5 Local Policies, Ordinances, and Other Plans

Does the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The Project is required to comply with Ch 19.12 of the Rancho Cordova Municipal Code for the preservation and protection of private trees once a certain size is reached. Implementation of recommendations below will reduce potential significant impacts associated with removal of protected trees.

Does the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The Study Area is covered by the Rancho Cordova General Plan. The Natural Resources Element of the General Plan includes goals and policies for protection of natural resources. The Project will not conflict with the City's General Plan.

6.0 RECOMMENDATIONS

The following measures are recommended to avoid or minimize potential impacts to biological resources from the Proposed Project.

6.1 General Recommendations

The following general measure is recommended:

The Project will implement erosion control measures and best management practices to reduce the potential for sediment or pollutant dispersal. Measures may include:

- Fiber rolls used for erosion control will be certified by the California Department of Food and Agriculture as weed free.
- Seed mixtures applied for erosion control will not contain California Invasive Plant Council designated invasive species (http://cal-ipc.org/) and will be composed of native species appropriate for the site.
- Trash generated onsite will be promptly and properly removed from the site.

6.2 Special-Status Species

Recommendations to minimize impacts to special-status species or habitats are summarized below by species group.

6.2.1 Special-Status Birds and Migratory Bird Treaty Act-Protected Birds (Including Nesting Raptors)

The following measures are recommended to minimize potential impacts to nesting birds:

To protect nesting birds, no Project activity shall begin from February 1 through August 31 unless a qualified wildlife biologist completes the following surveys. Separate surveys and avoidance requirements are listed below for nesting birds and raptors.

- If Project construction begins between February 1 through August 31, a qualified biologist will perform a preconstruction nesting bird survey within 7 days prior to construction (or less if recommended by CDFW), within the Project work area for all birds protected under the MBTA, including raptors. If any active nests are observed, these nests shall be designated a sensitive area and protected by an avoidance buffer established by a qualified biologist in coordination with CDFW. The avoidance buffer shall be maintained until a qualified biologist has determined that the young have fledged and are no longer reliant upon the nest, or that the nest is otherwise no longer active.

6.2.2 Special-Status Bats

The following measure is recommended to minimize potential impacts to roosting bats:

- A qualified biologist will conduct a survey for suitable bat roosting habitat within 14 days of construction activities. If no suitable roosting habitat is identified, no further measures are necessary. If suitable roosting habitat is identified and proposed for removal, a qualified biologist will conduct an evening bat emergence survey that may include acoustic monitoring to determine whether or not bats are present. If roosting bats are found, consultation with CDFW prior to initiation of construction activities may be required. If bats are not found during the preconstruction surveys, no further measures are necessary.

6.2.3 Protected Trees

The Project site may support protected trees. The following measures are recommended:

- Certified Arborist Survey;
- A Tree Removal Permit shall be obtained from the City of Rancho Cordova if impacts to protected trees are anticipated.

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LIST OF APPENDICES

Appendix A – Database Query Results

Appendix B – Representative Site Photos

Appendix C – Observed Species List

APPENDIX A

Database Query Results

Selected Elements by Element Code

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Folsom (3812162) OR Citrus Heights (3812163) OR Carmichael (3812153) OR Elk Grove (3812143) OR Sloughhouse (3812142) OR Buffalo Creek (3812152) OR Rio Linda (3812164) OR Florin (3812144) OR Sacramento East (3812154))

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AAAAA01181	***Ambystoma californiense pop. 1*** California tiger salamander - central California DPS	Threatened	Threatened	G2G3T3	S3	WL
AAABF02020	***Spea hammondii*** western spadefoot	None	None	G2G3	S3S4	SSC
ABNFD01020	***Nannopterum auritum*** double-crested cormorant	None	None	G5	S4	WL
ABNGA04010	***Ardea herodias*** great blue heron	None	None	G5	S4	
ABNGA04040	***Ardea alba*** great egret	None	None	G5	S4	
ABNGA11010	***Nycticorax nycticorax*** black-crowned night heron	None	None	G5	S4	
ABNKC06010	***Elanus leucurus*** white-tailed kite	None	None	G5	S3S4	FP
ABNKC12040	***Accipiter cooperii*** Cooper's hawk	None	None	G5	S4	WL
ABNKC19070	***Buteo swainsoni*** Swainson's hawk	None	Threatened	G5	S3	
ABNKC19120	***Buteo regalis*** ferruginous hawk	None	None	G4	S3S4	WL
ABNKC22010	***Aquila chrysaetos*** golden eagle	None	None	G5	S3	FP
ABNKD06030	***Falco columbarius*** merlin	None	None	G5	S3S4	WL
ABNRB02022	***Coccyzus americanus occidentalis*** western yellow-billed cuckoo	Threatened	Endangered	G5T2T3	S1	
ABNSB10010	***Athene cunicularia*** burrowing owl	None	None	G4	S3	SSC
ABPAU01010	***Progne subis*** purple martin	None	None	G5	S3	SSC
ABPAU08010	***Riparia riparia*** bank swallow	None	Threatened	G5	S2	
ABPBXA3013	***Melospiza melodia pop. 1*** song sparrow ("Modesto" population)	None	None	G5T3?Q	S3?	SSC
ABPBXB0020	***Agelaius tricolor*** tricolored blackbird	None	Threatened	G1G2	S1S2	SSC
ABPBXB3010	***Xanthocephalus xanthocephalus*** yellow-headed blackbird	None	None	G5	S3	SSC

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
AFCAA01031	***Acipenser medirostris pop. 1*** green sturgeon - southern DPS	Threatened	None	G2T1	S1	
AFCHA0209K	***Oncorhynchus mykiss irideus pop. 11*** steelhead - Central Valley DPS	Threatened	None	G5T2Q	S2	
AFCHB03010	***Spirinchus thaleichthys*** longfin smelt	Candidate	Threatened	G5	S1	
AFCJB34020	***Pogonichthys macrolepidotus*** Sacramento splittail	None	None	G3	S3	SSC
AMACC02010	***Lasionycteris noctivagans*** silver-haired bat	None	None	G3G4	S3S4	
AMACC10010	***Antrozous pallidus*** pallid bat	None	None	G4	S3	SSC
AMAJF04010	***Taxidea taxus*** American badger	None	None	G5	S3	SSC
ARAAD02030	***Emys marmorata*** western pond turtle	None	None	G3G4	S3	SSC
ARADB36150	***Thamnophis gigas*** giant gartersnake	Threatened	Threatened	G2	S2	
CTT42110CA	***Valley Needlegrass Grassland*** Valley Needlegrass Grassland	None	None	G3	S3.1	
CTT44110CA	***Northern Hardpan Vernal Pool*** Northern Hardpan Vernal Pool	None	None	G3	S3.1	
CTT44120CA	***Northern Claypan Vernal Pool*** Northern Claypan Vernal Pool	None	None	G1	S1.1	
CTT44132CA	***Northern Volcanic Mud Flow Vernal Pool*** Northern Volcanic Mud Flow Vernal Pool	None	None	G1	S1.1	
CTT61430CA	***Great Valley Valley Oak Riparian Forest*** Great Valley Valley Oak Riparian Forest	None	None	G1	S1.1	
CTT63440CA	***Elderberry Savanna*** Elderberry Savanna	None	None	G2	S2.1	
ICBRA03030	***Branchinecta lynchi*** vernal pool fairy shrimp	Threatened	None	G3	S3	
ICBRA03150	***Branchinecta mesovallensis*** midvalley fairy shrimp	None	None	G2	S2S3	
ICBRA06010	***Linderiella occidentalis*** California linderiella	None	None	G2G3	S2S3	
ICBRA10010	***Lepidurus packardi*** vernal pool tadpole shrimp	Endangered	None	G4	S3	
ICBRA23010	***Dumontia oregonensis*** hairy water flea	None	None	G1G3	S1	
IICOL48011	***Desmocerus californicus dimorphus*** valley elderberry longhorn beetle	Threatened	None	G3T2T3	S3	

Element Code	Species	Federal Status	State Status	Global Rank	State Rank	Rare Plant Rank/CDFW SSC or FP
IICOL5V010	***Hydrochara rickseckeri*** Ricksecker's water scavenger beetle	None	None	G2?	S2?	
IIHYM24480	***Bombus crotchii*** Crotch bumble bee	None	Candidate Endangered	G2	S2	
IIHYM35030	***Andrena blennospermatis*** Blennosperma vernal pool andrenid bee	None	None	G2	S2	
IIHYM35210	***Andrena subapasta*** An andrenid bee	None	None	G1G2	S1S2	
IMBIV19010	***Gonidea angulata*** western ridged mussel	None	None	G3	S1S2	
PDAST5L030	***Lasthenia chrysantha*** alkali-sink goldfields	None	None	G2	S2	1B.1
PDBRA1M0K1	***Lepidium latipes var. heckardii*** Heckard's pepper-grass	None	None	G4T1	S1	1B.2
PDCAM060C0	***Downingia pusilla*** dwarf downingia	None	None	GU	S2	2B.2
PDCAM0C010	***Legenere limosa*** legenere	None	None	G2	S2	1B.1
PDCUS01111	***Cuscuta obtusiflora var. glandulosa*** Peruvian dodder	None	None	G5T4?	SH	2B.2
PDFAB400R5	***Trifolium hydrophilum*** saline clover	None	None	G2	S2	1B.2
PDMAL0H0R3	***Hibiscus lasiocarpos var. occidentalis*** woolly rose-mallow	None	None	G5T3	S3	1B.2
PDONA05053	***Clarkia biloba ssp. brandegeeae*** Brandegee's clarkia	None	None	G4G5T4	S4	4.2
PDPLM0C0X1	***Navarretia myersii ssp. myersii*** pincushion navarretia	None	None	G2T2	S2	1B.1
PDSCR0R060	***Gratiola heterosepala*** Boggs Lake hedge-hyssop	None	Endangered	G2	S2	1B.2
PMALI040Q0	***Sagittaria sanfordii*** Sanford's arrowhead	None	None	G3	S3	1B.2
PMJUN011L1	***Juncus leiospermus var. ahartii*** Ahart's dwarf rush	None	None	G2T1	S1	1B.2
PMLIL0V010	***Fritillaria agrestis*** stinkbells	None	None	G3	S3	4.2
PMPOA4G050	***Orcuttia tenuis*** slender Orcutt grass	Threatened	Endangered	G2	S2	1B.1
PMPOA4G070	***Orcuttia viscida*** Sacramento Orcutt grass	Endangered	Endangered	G1	S1	1B.1

Record Count: 60

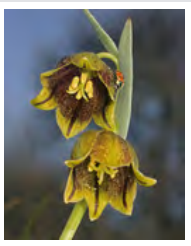
CNPS Rare Plant Inventory

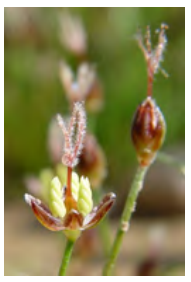
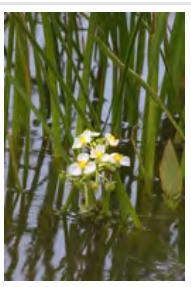
California Native Plant Society

Search Results

19 matches found. Click on scientific name for details

Search Criteria: 9-Quad include [**3812162:3812163:3812153:3812143:3812142:3812152:3812164:3812144:3812154**]

▲ SCIENTIFIC NAME	COMMON NAME	FAMILY	LIFEFORM	BLOOMING PERIOD	FED LIST	STATE LIST	GLOBAL RANK	STATE RANK	CA RARE PLANT RANK	CA ENDEMIC	DATE ADDED	PHOTO
Brodiaea rosea ssp. *vallicola*	valley brodiaea	Themidaceae	perennial bulbiferous herb	Apr-May(Jun)	None	None	G5T3	S3	4.2	Yes	2019-01-07	© 2011 Steven Perry
Centromadia parryi ssp. *rudis*	Parry's rough tarplant	Asteraceae	annual herb	May-Oct	None	None	G3T3	S3	4.2	Yes	2007-05-22	No Photo Available
Clarkia biloba ssp. *brandegeeae*	Brandegee's clarkia	Onagraceae	annual herb	(Mar)May-Jul	None	None	G4G5T4	S4	4.2	Yes	2001-01-01	No Photo Available
Cuscuta obtusiflora var. *glandulosa*	Peruvian dodder	Convolvulaceae	annual vine (parasitic)	Jul-Oct	None	None	G5T4?	SH	2B.2		2011-08-24	No Photo Available
Downingia pusilla	dwarf downingia	Campanulaceae	annual herb	Mar-May	None	None	GU	S2	2B.2		1980-01-01	No Photo Available
Fritillaria agrestis	stinkbells	Liliaceae	perennial bulbiferous herb	Mar-Jun	None	None	G3	S3	4.2	Yes	1980-01-01	 © 2016 Aaron Schusteff
Gratiola heterosepala	Boggs Lake hedge-hyssop	Plantaginaceae	annual herb	Apr-Aug	None	CE	G2	S2	1B.2		1974-01-01	©2004 Carol W. Witham
Hesperevax caulescens	hogwallow starfish	Asteraceae	annual herb	Mar-Jun	None	None	G3	S3	4.2	Yes	2001-01-01	© 2017 John Doyen
Hibiscus lasiocarpos var. *occidentalis*	woolly rose-mallow	Malvaceae	perennial rhizomatous herb (emergent)	Jun-Sep	None	None	G5T3	S3	1B.2	Yes	1974-01-01	© 2020 Steven Perry

Juncus leiospermus var. *ahartii*	Ahart's dwarf rush	Juncaceae	annual herb	Mar-May	None	None	G2T1	S1	1B.2	Yes	1984-01-01	 © 2004 Carol W. Witham
Lasthenia chrysantha	alkali-sink goldfields	Asteraceae	annual herb	Feb-Apr	None	None	G2	S2	1B.1	Yes	2019-09-30	© 2009 California State University, Stanislaus
Legenere limosa	legenere	Campanulaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.1	Yes	1974-01-01	©2000 John Game
Lepidium latipes var. *heckardii*	Heckard's pepper-grass	Brassicaceae	annual herb	Mar-May	None	None	G4T1	S1	1B.2	Yes	1994-01-01	2018 Jennifer Buck
Navarretia eriocephala	hoary navarretia	Polemoniaceae	annual herb	May-Jun	None	None	G4?	S4?	4.3	Yes	1974-01-01	© 2018 Leigh Johnson
Navarretia myersii ssp. *myersii*	pincushion navarretia	Polemoniaceae	annual herb	Apr-May	None	None	G2T2	S2	1B.1	Yes	1994-01-01	© 2020 Leigh Johnson
Orcuttia tenuis	slender Orcutt grass	Poaceae	annual herb	May-Sep(Oct)	FT	CE	G2	S2	1B.1	Yes	1974-01-01	© 2013 Justy Leppert
Orcuttia viscida	Sacramento Orcutt grass	Poaceae	annual herb	Apr-Jul(Sep)	FE	CE	G1	S1	1B.1	Yes	1974-01-01	No Photo Available
Sagittaria sanfordii	Sanford's arrowhead	Alismataceae	perennial rhizomatous herb (emergent)	May-Oct(Nov)	None	None	G3	S3	1B.2	Yes	1984-01-01	 ©2013 Debra L. Cook

Trifolium hydrophilum	saline clover	Fabaceae	annual herb	Apr-Jun	None	None	G2	S2	1B.2	Yes	2001-01-01	No Photo Available

Showing 1 to 19 of 19 entries

Suggested Citation:

California Native Plant Society, Rare Plant Program. 2023. Rare Plant Inventory (online edition, v9.5). Website https://www.rareplants.cnps.org [accessed 25 January 2023].

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

Sacramento County, California

Local office

Sacramento Fish And Wildlife Office

(916) 414-6600
(916) 414-6713

Federal Building

Federal Building
2800 Cottage Way, Room W-2605
Sacramento, CA 95825-1846

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

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2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Amphibians

NAME	STATUS
California Tiger Salamander Ambystoma californiense There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/2076	Threatened

Fishes

NAME	STATUS
Delta Smelt Hypomesus transpacificus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/321	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate
Valley Elderberry Longhorn Beetle Desmocerus californicus dimorphus Wherever found There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/7850	Threatened

Crustaceans

NAME	STATUS

NOT FOR CONSULTATION

Conservancy Fairy Shrimp Branchinecta conservatio — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/8246

Vernal Pool Fairy Shrimp Branchinecta lynchi — Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/498

Vernal Pool Tadpole Shrimp Lepidurus packardi — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/2246

Flowering Plants

NAME	STATUS

Sacramento Orcutt Grass Orcuttia viscida — Endangered
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/5507

Slender Orcutt Grass Orcuttia tenuis — Threatened
Wherever found
There is **final** critical habitat for this species. Your location does not overlap the critical habitat.
https://ecos.fws.gov/ecp/species/1063

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

NOT FOR CONSULTATION

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON

NOT FOR CONSULTATION

Bald Eagle Haliaeetus leucocephalus — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Belding's Savannah Sparrow Passerculus sandwichensis beldingi — Breeds Apr 1 to Aug 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8

Black Swift Cypseloides niger — Breeds Jun 15 to Sep 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8878

Black Tern Chlidonias niger — Breeds May 15 to Aug 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3093

Bullock's Oriole Icterus bullockii — Breeds Mar 21 to Jul 25

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

California Gull Larus californicus — Breeds Mar 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Clark's Grebe Aechmophorus clarkii — Breeds Jun 1 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Common Yellowthroat Geothlypis trichas sinuosa — Breeds May 20 to Jul 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/2084

NOT FOR CONSULTATION

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Marbled Godwit Limosa fedoa — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9481

Nuttall's Woodpecker Picoides nuttallii — Breeds Apr 1 to Jul 20

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9410

Oak Titmouse Baeolophus inornatus — Breeds Mar 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9656

Olive-sided Flycatcher Contopus cooperi — Breeds May 20 to Aug 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3914

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Tricolored Blackbird Agelaius tricolor — Breeds Mar 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3910

NOT FOR CONSULTATION

Western Grebe aechmophorus occidentalis — Breeds Jun 1 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6743

Wrentit Chamaea fasciata — Breeds Mar 15 to Aug 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Yellow-billed Magpie Pica nuttalli — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9726

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

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3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

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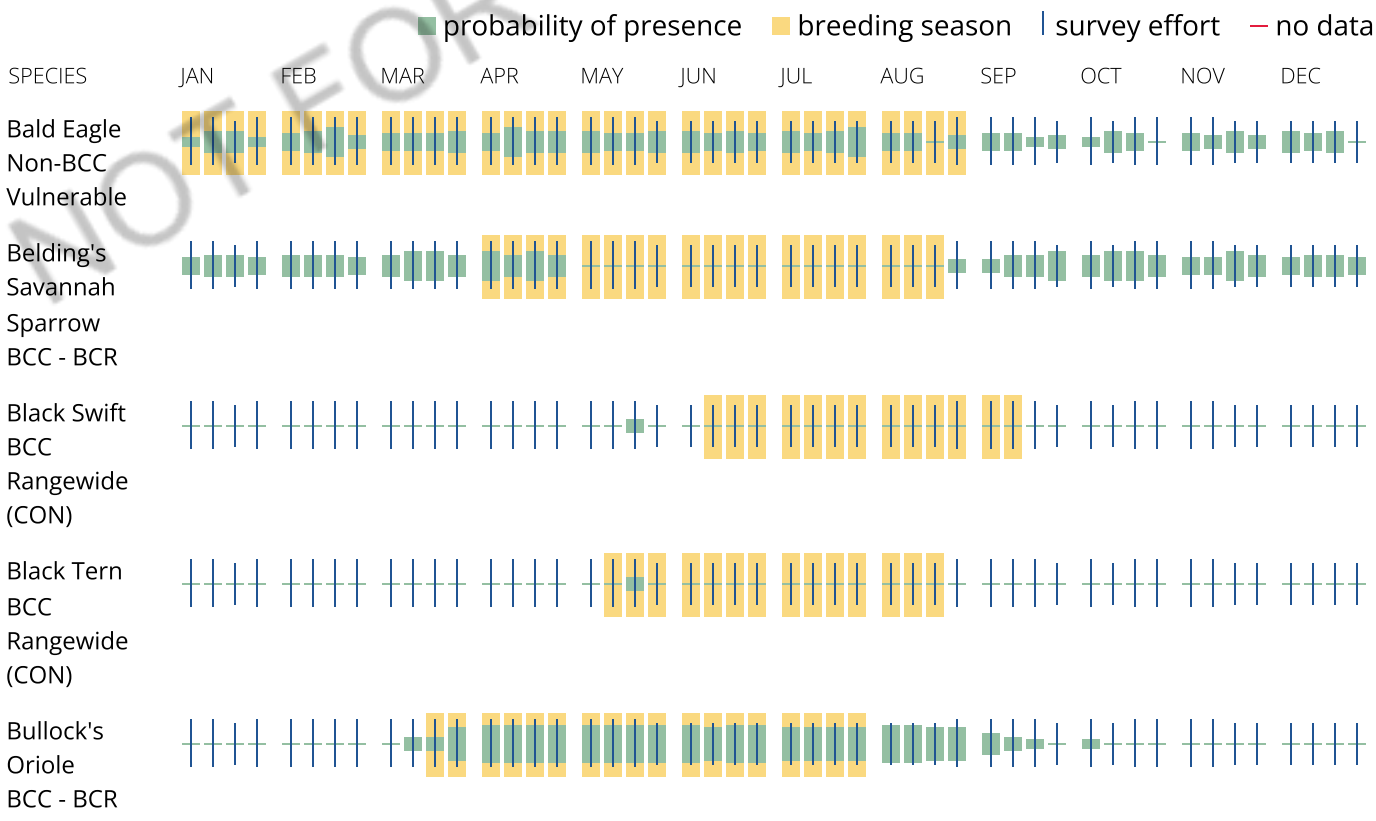
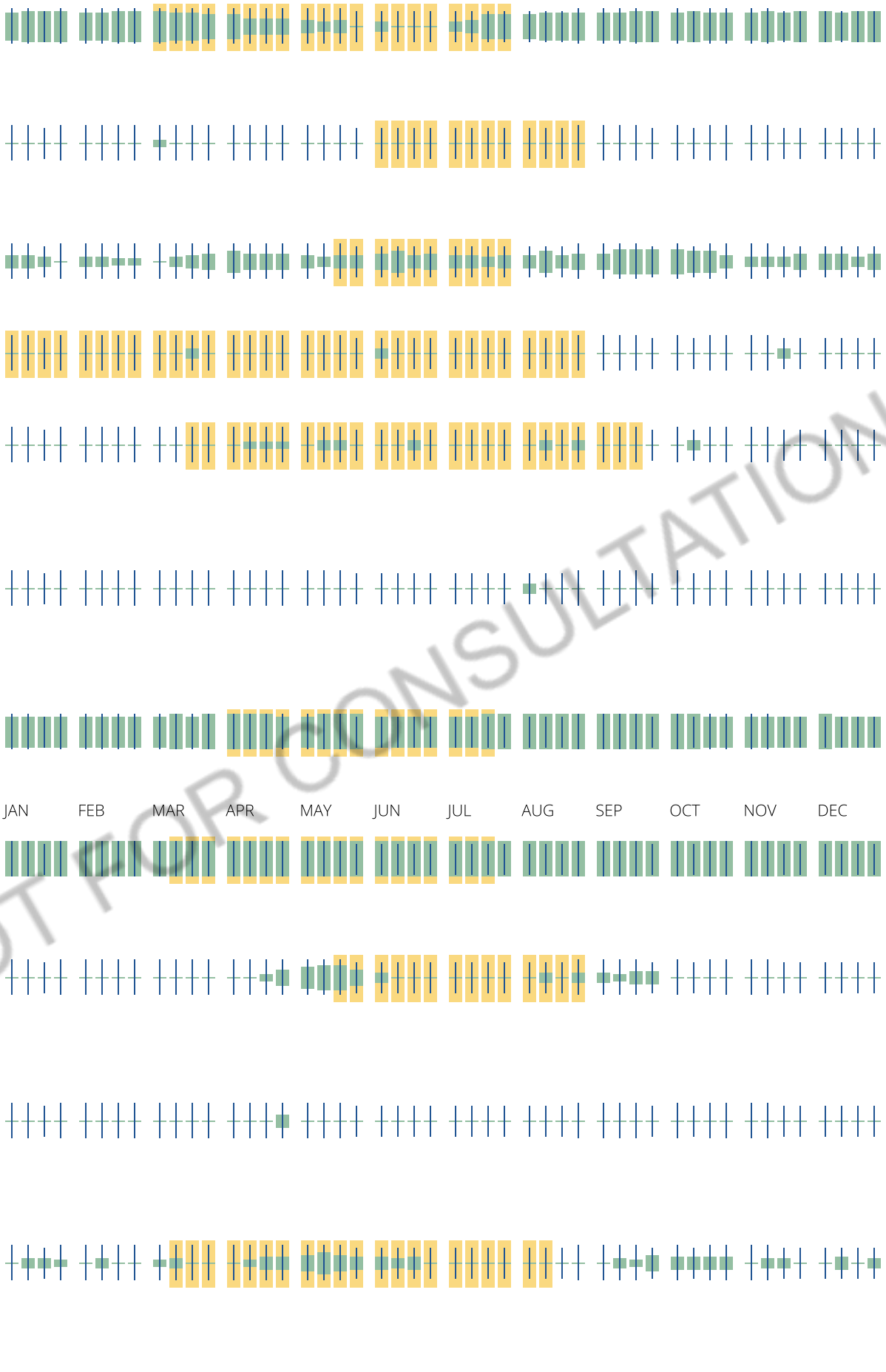
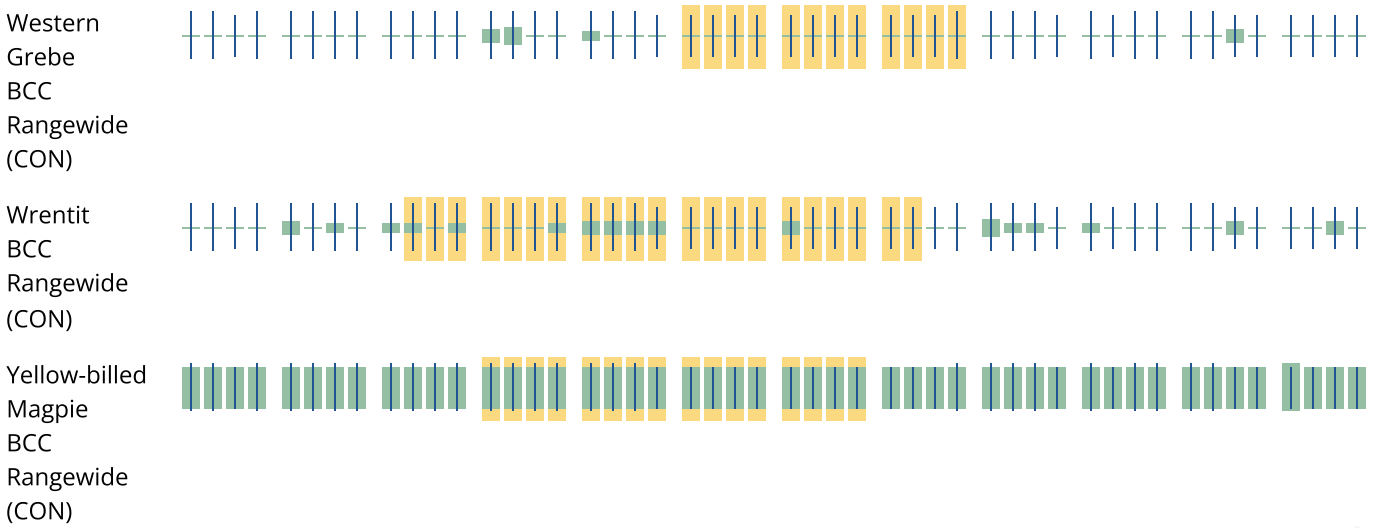




NOT FOR CONSULTATION



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

NOT FOR CONSULTATION

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

NOT FOR CONSULTATION

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

NOT FOR CONSULTATION

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory

(NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Wetland information is not available at this time

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the NWI map to view wetlands at this location.

NOT FOR CONSULTATION

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas

should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

National Marine Fisheries Service – West Coast Region – California
November 2016

Intersection of USGS 7.5" Topographic Quadrangles with NOAA Fisheries ESA Listed Species, Critical Habitat, Essential Fish Habitat, and MMRP Species Data within California.

An yellow-highlighted "X" following a listed species indicates in may be present.

Quad Name **Carmichael**
Quad Number **38121-E3**

ESA Anadromous Fish

SONCC Coho ESU (T) -
CCC Coho ESU (E) -
CC Chinook Salmon ESU (T) -
CVSR Chinook Salmon ESU (T) - **X**
SRWR Chinook Salmon ESU (E) - **X**
NC Steelhead DPS (T) -
CCC Steelhead DPS (T) -
SCCC Steelhead DPS (T) -
SC Steelhead DPS (E) -
CCV Steelhead DPS (T) - **X**
Eulachon (T) -
sDPS Green Sturgeon (T) -

ESA Anadromous Fish Critical Habitat

SONCC Coho Critical Habitat -
CCC Coho Critical Habitat -
CC Chinook Salmon Critical Habitat -
CVSR Chinook Salmon Critical Habitat -
SRWR Chinook Salmon Critical Habitat -
NC Steelhead Critical Habitat -
CCC Steelhead Critical Habitat -
SCCC Steelhead Critical Habitat -
SC Steelhead Critical Habitat -
CCV Steelhead Critical Habitat - **X**
Eulachon Critical Habitat -
sDPS Green Sturgeon Critical Habitat -

ESA Marine Invertebrates

Range Black Abalone (E) -

Range White Abalone (E) -

ESA Marine Invertebrates Critical Habitat

Black Abalone Critical Habitat -

ESA Sea Turtles

East Pacific Green Sea Turtle (T) -
Olive Ridley Sea Turtle (T/E) -
Leatherback Sea Turtle (E) -
North Pacific Loggerhead Sea Turtle (E) -

ESA Whales

Blue Whale (E) -
Fin Whale (E) -
Humpback Whale (E) -
Southern Resident Killer Whale (E) -
North Pacific Right Whale (E) -
Sei Whale (E) -
Sperm Whale (E) -

ESA Pinnipeds

Guadalupe Fur Seal (T) -
Steller Sea Lion Critical Habitat -

Essential Fish Habitat

Coho EFH -
Chinook Salmon EFH - **X**
Groundfish EFH -
Coastal Pelagics EFH -
Highly Migratory Species EFH -

MMPA Species (See list at left)

ESA and MMPA Cetaceans/Pinnipeds
See list at left and consult the NMFS Long Beach office
562-980-4000

MMPA Cetaceans -
MMPA Pinnipeds -

APPENDIX B

Representative Site Photos

Photo 1: South side of lot facing east. February 7, 2023.

Photo 2: Northwest corner of lot facing south. February 7, 2023.

Photo 3: Northwest corner of lot facing east. February 7, 2023.

Photo 4: Northeast corner of lot facing west. February 7, 2023.

Photo 5: South side of lot facing east. February 7, 2023.

Photo 6: South side of lot facing north. February 7, 2023.

Photo 7: Ruderal grassland on east side of lot . Facing east. February 7, 2023.

Photo 8: Large oak tree onsite. Facing northwest. February 7, 2023.

APPENDIX C

Observed Species List

Common Name	Scientific Name
Birds	
Killdeer	*Charadrius vociferus*
Eurasian Collared-dove	*Streptopelia decaocto*
Mourning Dove	*Zenaida macroura*
Anna's Hummingbird	*Calypte anna*
Nuttall's Woodpecker	*Dryobates nuttallii*
Northern Flicker	*Colaptes auratus*
California Scrub-Jay	*Aphelocoma californica*
American Pipit	*Anthus rubescens*
European Starling	*Sturnus vulgaris*
Lesser Goldfinch	*Spinus psaltria*
Western Meadowlark	*Sturnella neglecta*
Yellow-Rumped Warbler	*Setophaga coronata*

Appendices

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Appendix 5.3-1 Archeological Resources Inventory Report

*This document contains contains sensitive and confidential information concerning archaeological sites. This appendix is on file at the City of Rancho Cordova.

Appendices

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Appendix 5.4-1 Energy Calculations for Mills Crossing

Construction-Related Fuel/Energy Usage

CONSTRUCTION WORKER COMMUTE

Year	Gas		Diesel		Electricity	
	VMT	Gallons	VMT	Gallons	VMT	kWh
2024	52,733	2,027	110	3	1,998	732
2025	1,126,507	70,474	2,130	115	36,703	14,660
2026	1,296,938	112,959	2,383	140	47,666	19,269
2027	1,291,936	102,572	2,287	48	52,763	29,650
2028	1,262,338	75,657	2,171	107	56,673	31,181
Total	**5,030,453**	**363,690**	**9,081**	**413**	**195,803**	**95,492**

CONSTRUCTION VENDOR TRIPS

Year	Gas		Diesel	
	VMT	Gallons	VMT	Gallons
2024	0	0	0	0
2025	6,819	1,468	96,832	14,182
2026	7,577	1,616	113,979	16,465
2027	7,185	1,517	114,140	16,260
2028	6,551	1,370	112,535	15,870
Total	**28,131**	**5,971**	**437,485**	**62,777**

CONSTRUCTION OFF-ROAD EQUIPMENT

Year	Gasoline gallons	Diesel gallons
2024	0	41,839
2025	0	53,178
2026	0	53,411
2027	0	53,281
2028	0	54,055
Total	**0**	**95,017**

CONSTRUCTION TOTAL

Year	Gas		Diesel		Electricity	
	VMT	Gallons	VMT	Gallons	VMT	kWh
2024	52,733	2,027	110	41,842	1,998	732
2025	1,133,326	71,943	98,962	67,475	36,703	14,660
2026	1,304,514	114,575	116,361	70,015	47,666	19,269
2027	1,299,121	104,090	116,427	69,589	52,763	29,650
2028	1,268,890	77,027	114,707	70,032	56,673	31,181
Total	**5,058,584**	**369,661**	**446,567**	**318,953**	**195,803**	**95,492**

Operation-Related Vehicle Fuel/Energy Usage

PROJECT LAND USE COMMUTE

Vehicle Type	Gas		Diesel		CNG		Electricity	
	VMT	Gallons	VMT	Gallons	VMT	Gallons	VMT	kWh
Proposed Passenger Vehicles	9,392,909	356,219	468,617	47,045	14,531	2,329	689,740	240,718
Total	**9,392,909**	**356,219**	**468,617**	**47,045**	**14,531**	**2,329**	**689,740**	**240,718**

Construction Worker Trips Fuel Usage Worksheet

Note: Per CalEEMod methodology, worker vehicles are "LD_Mix", which is 50% LDA, 25% LDT1, and 25% LDT2

Activity[1]	Daily trips[1,2]	Trip miles[2]	Trip days[1]	Annual VMT
2024				
Demolition	15	14.3	100	21,450
Site Preparation	17.5	14.3	100	25,025
Grading	15	14.3	39	8,366
2025				
Grading	15	14.3	61	13,085
Building Construction	188	14.3	222	596,825
Paving	15	14.3	222	47,619
Architectural Coating	37.6	14.3	222	119,365
2026				
Building Construction	188	14.3	261	701,672
Paving	15	14.3	261	55,985
Architectural Coating	37.6	14.3	261	140,334
2027				
Building Construction	188	14.3	261	701,672
Paving	15	14.3	261	55,985
Architectural Coating	37.6	14.3	261	140,334
2028				
Building Construction	188	14.3	256	688,230
Paving	15	14.3	256	54,912
Architectural Coating	37.6	14.3	256	137,646

[1] *Based on information provided.*

[2] *Based on CalEEMod defaults.*

Year	Gasoline[1]									Diesel[1]					Electricity[1]				
	LDA VMT	LDT1 VMT	LDT2 VMT	LDA mpg	LDA gallons	LDT1 mpg	LDT1 gallons	LDT2 mpg	LDT2 gallons	LDA mpg	LDA gallons	LDT1 mpg	LDT1 gallons	LDT2 mpg	LDT2 gallons	LDA m/kWh	LDA kWh	LDT1 m/kWh	LDT1 kWh	LDT2 m/kWh	LDT2 kWh
2024	27,420	13,710	13,710	28.85	885	24.19	564	23.44	578	42.86	1	23.74	0	32.41	1	2.72	670	2.71	21	2.90	42
2025	388,447	388,447	388,447	24.59	14,531	24.01	16,091	9.60	39,853	23.78	34	33.12	1	16.01	80	2.73	11,086	2.89	706	1.54	2,868
2026	448,996	448,996	448,996	24.58	16,660	9.73	45,828	8.75	50,471	33.81	25	16.05	3	13.36	112	2.87	13,436	1.54	1,915	1.56	3,918
2027	448,996	448,996	448,996	9.85	41,231	8.83	50,420	40.32	10,921	16.09	47	13.43	1	0.00	0	1.54	27,298	1.56	2,351	0.00	0
2028	440,394	440,394	440,394	8.91	44,375	40.54	10,754	20.99	20,529	13.50	49	0.00	0	25.72	58	1.56	28,265	0.00	0	2.77	2,916

Gasoline		Diesel		Electricity	
VMT	Gallons	VMT	Gallons	VMT	kWh
52,733	2,027	110	3	1,998	732
1,126,507	70,474	2,130	115	36,703	14,660
1,296,938	112,959	2,383	140	47,666	19,269
1,291,936	102,572	2,287	48	52,763	29,650
1,262,338	75,657	2,171	107	56,673	31,181
1,179,240	**363,690**	**9,081**	**413**	**195,803**	**95,492**

[1] *EMFAC2021 v1.0.2.*

Year	VMT from gasoline			VMT from diesel			VMT from electricity		
	LDA	LDT1	LDT2	LDA	LDT1	LDT2	LDA	LDT1	LDT2
2024	93.13%	99.58%	98.79%	0.23%	0.01%	0.32%	6.64%	0.40%	0.89%
2025	92.00%	99.46%	98.54%	0.21%	0.01%	0.33%	7.79%	0.52%	1.13%
2026	91.21%	99.34%	98.30%	0.19%	0.01%	0.33%	8.60%	0.66%	1.36%
2027	90.49%	99.18%	98.07%	0.17%	0.00%	0.34%	9.34%	0.82%	1.60%
2028	89.83%	98.99%	97.83%	0.15%	0.00%	0.34%	10.02%	1.01%	1.84%

Vendor Trips Fuel Usage Worksheet

Note: Based on CalEEMod methodology, vendor vehicles are 50% HHDT (T7) and 50% MHDT (T6).

Activity[1]	Daily trips[1,2]	Trip miles[2]	Trip days[1]	Annual VMT
2024				
Demolition	0	8.8	100	0
Site Preparation	0	8.8	100	0
Grading	0	8.8	39	0
2025				
Grading	0	8.8	61	0
Building Construction	57.1	8.8	222	111,551
Paving	0	8.8	222	0
Architectural Coating	0	8.8	222	0
2026				
Building Construction	57.1	8.8	261	131,147
Paving	0	8.8	261	0
Architectural Coating	0	8.8	261	
2027				
Building Construction	57.1	8.8	261	131,147
Paving	0	8.8	261	
Architectural Coating	0	8.8	261	
2028				
Building Construction	57.1	8.8	256	128,635
Paving	0	8.8	256	0
Architectural Coating	0	8.8	256	0

[1] *Based on information provided.*

[2] *Based on CalEEMod defaults.*

Year	HHDT (T7) VMT	MHDT (T6) VMT	Gasoline[1]				Diesel[1]			
			HHDT (T7) mpg	HHDT (T7) gallons	MHDT (T6) mpg	MHDT (T6) gallons	HHDT (T7) mpg	HHDT (T7) gallons	MHDT (T6) mpg	MHDT (T6) gallons
2024	0	0	3.29	0	4.60	0	5.70	0	8.36	0
2025	55,775	55,775	3.42	3	4.65	1,465	5.80	8,631	8.42	5,551
2026	65,574	65,574	3.62	3	4.69	1,613	5.90	9,955	8.49	6,511
2027	65,574	65,574	3.74	3	4.74	1,514	6.00	9,764	8.55	6,496
2028	64,317	64,317	3.86	3	4.78	1,368	6.11	9,650	8.61	6,221

[1] *EMFAC2021 v1.0.1.*

Year	VMT from gasoline		VMT from diesel	
	HHDT (T7)	MHDT (T6)	HHDT (T7)	MHDT (T6)
2024	0.02%	13.12%	94.48%	84.64%
2025	0.02%	12.21%	89.78%	83.83%
2026	0.02%	11.54%	89.55%	84.27%
2027	0.02%	10.94%	89.39%	84.67%
2028	0.02%	10.17%	91.72%	83.25%

VENDOR

Gasoline		Diesel	
VMT	Gallons	VMT	Gallons
0.00	0.00	0	0
6,818.67	1,468.30	96,832	14,182
7,576.50	1,615.66	113,979	16,465
7,184.62	1,517.22	114,140	16,260
6,551	1,370	112,535	15,870
28,131.23	**5,971.43**	**437,485**	**62,777**

Off-Road Construction Equipment Fuel Usage Worksheet

Year	Total Gasoline	Total Diesel Gallons	Total Natural Gas
2024	0	41,839	0
2025	0	53,178	0
2026	0	53,411	0
2027	0	53,281	0
2028	0	54,055	0
Total	**0**	**255,763**	**0**

Equipment Type[1]	Number of Equipment[1]	Horsepower	OFFROAD2017 Horsepower Category	Fuel Type	Working days[1]	Hours Per Day	Total Hours of Operation	Gasoline Gal/Hr[2]	Total Gasoline gallons	Diesel Gal/Hr[2]	Total Diesel gallons	Natural Gas Gal/Hr[2]	Total Natural Gas gallons
2024													
Demolition													
Rubber Tired Dozers	2	367	*600*	*Diesel*	100	8	1,600	0.00	0	6.99	11,176	0.00	0
Excavators	3	36	*50*	*Diesel*	100	8	2,400	0.00	0	0.76	1,816	0.00	0
Concrete/Industrial Saws	1	33	*50*	*Diesel*	100	8	800	0.00	0	1.38	1,102	0.00	0
Site Preparation													
Rubber Tired Dozers	3	367	*600*	*Diesel*	100	8	2,400	0.00	0	6.99	16,764	0.00	0
Tractors/Loaders/Backhoes	4	84	*100*	*Diesel*	100	8	3,200	0.00	0	1.83	5,854	0.00	0
Grading													
Graders	1	148	*175*	*Diesel*	39	8	312	0.00	0	3.20	999	0.00	0
Excavators	1	36	*50*	*Diesel*	39	8	312	0.00	0	0.76	236	0.00	0
Tractors/Loaders/Backhoes	3	84	*100*	*Diesel*	39	8	936	0.00	0	1.83	1,712	0.00	0
Rubber Tired Dozers	1	367	*600*	*Diesel*	39	8	312	0.00	0	6.99	2,179	0.00	0
							TOTAL		**0**		**41,839**		**0**
2025													
Grading													
Graders	1	148	*175*	*Diesel*	61	8	488	0.00	0	3.20	1,563	0.00	0
Excavators	1	36	*50*	*Diesel*	61	8	488	0.00	0	0.76	369	0.00	0
Tractors/Loaders/Backhoes	3	84	*100*	*Diesel*	61	8	1,464	0.00	0	1.83	2,678	0.00	0
Rubber Tired Dozers	1	367	*600*	*Diesel*	61	8	488	0.00	0	6.99	3,409	0.00	0
Building Construction													
Forklifts	3	82	*100*	*Diesel*	222	8	5,328	0.00	0	1.33	7,087	0.00	0
Generator Sets	1	14	*25*	*Diesel*	222	8	1,776	0.00	0	0.00	0	0.00	0
Cranes	1	367	*600*	*Diesel*	222	7	1,554	0.00	0	6.24	9,695	0.00	0
Welders	1	46	*50*	*Diesel*	222	8	1,776	0.00	0	1.19	2,110	0.00	0
Tractors/Loaders/Backhoes	3	84	*100*	*Diesel*	222	7	4,662	0.00	0	1.83	8,526	0.00	0
Paving													
Pavers	2	81	*100*	*Diesel*	222	8	3,552	0.00	0	1.99	7,065	0.00	0
Paving Equipment	2	89	*100*	*Diesel*	222	8	3,552	0.00	0	1.85	6,580	0.00	0
Rollers	2	36	*50*	*Diesel*	222	8	3,552	0.00	0	0.77	2,736	0.00	0
Architectural Coating													
Air Compressors	1	37	*50*	*Diesel*	222	6	1,332	0.00	0	1.02	1,360	0.00	0
							TOTAL		**0**		**53,178**		**0**
2026													
Building Construction													
Forklifts	3	82	*100*	*Diesel*	261	8	6,264	0.00	0	1.35	8,448	0.00	0
Generator Sets	1	14	*25*	*Diesel*	261	8	2,088	0.00	0	0.00	0	0.00	0
Cranes	1	367	*600*	*Diesel*	261	7	1,827	0.00	0	6.27	11,463	0.00	0
Welders	1	46	*50*	*Diesel*	261	8	2,088	0.00	0	1.19	2,480	0.00	0
Tractors/Loaders/Backhoes	3	84	*100*	*Diesel*	261	7	5,481	0.00	0	1.85	10,163	0.00	0
Paving													
Pavers	2	81	*100*	*Diesel*	261	8	4,176	0.00	0	1.99	8,306	0.00	0
Paving Equipment	2	89	*100*	*Diesel*	261	8	4,176	0.00	0	1.85	7,736	0.00	0
Rollers	2	36	*50*	*Diesel*	261	8	4,176	0.00	0	0.77	3,217	0.00	0
Architectural Coating													
Air Compressors	1	37	*50*	*Diesel*	261	6	1,566	0.00	0	1.02	1,599	0.00	0
							TOTAL		**0**		**53,411**		**0**
2027													
Building Construction													
Forklifts	3	82	*100*	*Diesel*	261	8	6,264	0.00	0	1.34	8,399	0.00	0
Generator Sets	1	14	*25*	*Diesel*	261	8	2,088	0.00	0	0.00	0	0.00	0
Cranes	1	367	*600*	*Diesel*	261	7	1,827	0.00	0	6.24	11,407	0.00	0
Welders	1	46	*50*	*Diesel*	261	8	2,088	0.00	0	1.19	2,479	0.00	0
Tractors/Loaders/Backhoes	3	84	*100*	*Diesel*	261	7	5,481	0.00	0	1.85	10,140	0.00	0
Paving													
Pavers	2	81	*100*	*Diesel*	261	8	4,176	0.00	0	1.99	8,306	0.00	0
Paving Equipment	2	89	*100*	*Diesel*	261	8	4,176	0.00	0	1.85	7,736	0.00	0
Rollers	2	36	*50*	*Diesel*	261	8	4,176	0.00	0	0.77	3,217	0.00	0
Architectural Coating													
Air Compressors	1	37	*50*	*Diesel*	261	6	1,566	0.00	0	1.02	1,597	0.00	0
							TOTAL		**0**		**53,281**		**0**
2028													
Building Construction													
Forklifts	3	82	*100*	*Diesel*	256	8	6,144	0.00	0	1.34	8,238	0.00	0
Generator Sets	1	14	*25*	*Diesel*	256	8	2,048	0.00	0	0.00	0	0.00	0
Cranes	1	367	*600*	*Diesel*	256	7	1,792	0.00	0	6.24	11,188	0.00	0
Welders	1	46	*50*	*Diesel*	256	8	2,048	0.00	0	1.19	2,432	0.00	0
Tractors/Loaders/Backhoes	3	84	*100*	*Diesel*	256	7	5,376	0.00	0	1.85	9,946	0.00	0
Paving													
Pavers	2	81	*100*	*Diesel*	256	8	4,096	0.00	0	2.09	8,563	0.00	0
Paving Equipment	2	89	*100*	*Diesel*	256	8	4,096	0.00	0	1.99	8,141	0.00	0
Rollers	2	36	*50*	*Diesel*	256	8	4,096	0.00	0	0.97	3,980	0.00	0
Architectural Coating													
Air Compressors	1	37	*50*	*Diesel*	256	6	1,536	0.00	0	1.02	1,567	0.00	0
							TOTAL		**0**		**54,055**		**0**

Land Use

Operational Land Use

Vehicle type	Fleet percent	VMT	
	CalEEMod Default	CalEEMod Default	Total
LDA	49.03%	5,180,497	5,180,497
LDT1	3.96%	418,445	418,445
LDT2	23.30%	2,462,097	2,462,097
MDV	14.45%	1,526,209	1,526,209
LHD1	2.93%	309,596	309,596
LHD2	0.73%	76,696	76,696
MHD	1.64%	173,596	173,596
HHD	1.02%	107,830	107,830
OBUS	0.10%	10,500	10,500
UBUS	0.05%	5,709	5,709
MCY	2.39%	252,767	252,767
SBUS	0.10%	10,916	10,916
MH	0.29%	30,718	30,718
	100.00%	10,565,578	10,565,578

5.9.2. Mitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Medical Office Building	84.2	84.2	84.2	30,738	968	968	968	353,305
Library	42.5	42.5	42.5	15,509	488	488	488	178,258
Strip Mall	98.5	98.5	98.5	35,970	1,133	1,133	1,133	413,438
Strip Mall	389	389	389	142,141	4,476	4,476	4,476	1,633,766
High Turnover (Sit Down Restaurant)	2,602	2,602	2,602	949,766	11,317	29,908	29,908	6,069,564
Condo/Townhouse	292	292	292	106,559	3,557	3,557	3,557	1,298,216
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unenclosed Parking with Elevator	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apartments Mid Rise	139	139	139	50,811	1,696	1,696	1,696	619,031

Source: ECORP 2023 (See Appendix 5.1-1)

PROPOSED CONDITIONS

Vehicle type	Gas percent	Diesel percent	CNG percent	Electricity percent	
LDA	89.21%	0.13%	0.00%	10.65%	
LDT1	98.76%	0.00%	0.00%	1.24%	
LDT2	97.58%	0.34%	0.00%	2.08%	
MDV	95.53%	1.48%	0.00%	2.99%	
LHD1	57.05%	37.93%	0.00%	5.02%	
LHD2	30.86%	64.28%	0.00%	4.85%	
MHD	9.48%	81.80%	2.24%	6.47%	<< Equal to T6 (https://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf)
HHD	0.07%	90.54%	5.46%	4.09%	<< Equal to T7 (https://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf)
OBUS	28.04%	64.73%	6.13%	1.53%	<< Motor coach, all other buses, and OBUS (https://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf)
UBUS	27.74%	0.11%	68.00%	4.15%	
MCY	100.00%	0.00%	0.00%	0.00%	
SBUS	23.86%	70.07%	2.02%	4.05%	
MH	68.19%	31.81%	0.00%	0.00%	

PROPOSED CONDITIONS

Vehicle type	Gasoline			Diesel			CNG			Electricity		
	VMT	mpg	Gallons	VMT	mpg	Gallons	VMT	mpg	Gallons	VMT	m/kWh	kWh
LDA	4,621,631	31.84	145,151	6,962	45.48	153	0	0.00	0	551,905	2.70	204,361
LDT1	413,245	26.36	15,679	9	25.13	0	0	0.00	0	5,191	2.77	1,876
LDT2	2,402,418	26.19	91,735	8,422	35.76	235	0	0.00	0	51,257	2.85	18,004
MDV	1,457,936	21.42	68,074	22,647	26.09	868	0	0.00	0	45,626	2.77	16,477
LHD1	176,626	10.08	17,524	117,417	16.16	7,266	0	0.00	0	15,553	1.54	0
LHD2	23,671	8.99	2,632	49,304	13.57	3,633	0	0.00	0	3,722	1.56	0
MHD	16,459	4.83	3,409	142,009	8.67	16,388	3,897	6.90	0	11,231	0.00	0
HHD	76	4.27	18	97,626	6.22	15,690	5,887	5.02	1,174	4,414	0.54	0
OBUS	2,944	4.90	601	6,796	8.05	844	644	7.81	0	161	0.00	0
UBUS	1,583	8.60	184	6	10.18	0	3,882	3.36	1,155	237	0.57	0
MCY	252,767	40.68	6,214	0	0.00	0	0	0.00	0	0	0.00	0
SBUS	2,604	10.28	253	7,649	8.27	925	221	6.12	0	442	0.95	0
MH	20,948	4.42	4,745	9,770	9.38	1,042	0	0.00	0	0	0.00	0
	9,392,909		**356,219**	**468,617**		**47,045**	**14,531**		**2,329**	**689,740**		**240,718**

EMFAC Fuel Usage: Year 2024

Vehicle type	GAS			DSL			NG			ELEC		
	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	kWh/day	Miles/kWh
All other buses	0	0	0.00	24,165	2,771	8.72	3,651	491	7.44	0	0	0.00
LDA	18,354,149	636,191	28.85	45,679	1,066	42.86	0	0	0.00	1,308,232	481,427	2.72
LDT1	1,597,038	66,020	24.19	192	8	23.74	0	0	0.00	6,493	2,398	2.71
LDT2	8,749,659	373,333	23.44	28,646	884	32.41	0	0	0.00	78,706	27,100	2.90
LHD1	782,072	82,566	9.47	517,412	32,409	15.96	0	0	0.00	3,425	2,229	1.54
LHD2	109,112	12,738	8.57	204,885	15,525	13.20	0	0	0.00	840	538	1.56
MCY	144,381	3,616	39.93	0	0	0.00	0	0	0.00	0	0	0.00
MDV	5,313,917	277,995	19.12	95,417	3,912	24.39	0	0	0.00	65,993	23,563	2.80
MH	25,572	5,796	4.41	9,902	1,053	9.40	0	0	0.00	0	0	0.00
Motor coach	0	0	0.00	12,808	2,329	5.50	0	0	0.00	0	0	0.00
OBUS	24,091	5,106	4.72	0	0	0.00	0	0	0.00	63	70	0.90
PTO	0	0	0.00	23,708	4,793	4.95	0	0	0.00	101	210	0.48
SBUS	6,349	631	10.05	21,653	2,675	8.09	500	83	6.06	78	82	0.95
T6	99,033	21,513	4.60	638,747	76,379	8.36	14,205	2,061	6.89	2,679	3,021	0.89
T7	220	67	3.29	880,990	154,435	5.70	48,437	10,251	4.72	2,804	5,242	0.53
UBUS	13,605	2,896	4.70	298	31	9.48	32,907	5,727	5.75	174	303	0.57
Total	**35,219,198**	**1,488,468**	**23.66**	**2,504,502**	**298,272**	**8.40**	**99,699**	**18,613**	**5.36**	**1,469,588**	**546,184**	**2.69**

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Fuel Consumption	Energy Consumption
Sacramento	2024	All Other Buses	Aggregate	Aggregate	Diesel	448.1720568	24165.24726	24165.24726	0	3988.731306	2.770935613	0
Sacramento	2024	All Other Buses	Aggregate	Aggregate	Natural Gas	59.62575461	3650.50036	3650.50036	0	530.6692161	0.490917707	0
Sacramento	2024	LDA	Aggregate	Aggregate	Gasoline	493200.1993	18074528.65	18074528.65	0	2269233.534	626.231759	0
Sacramento	2024	LDA	Aggregate	Aggregate	Diesel	1664.361034	45679.43808	45679.43808	0	6936.376006	1.065668693	0
Sacramento	2024	LDA	Aggregate	Aggregate	Electricity	21753.2242	1026758.976	0	1026758.976	108519.5839	0	396413.7077
Sacramento	2024	LDA	Aggregate	Aggregate	Plug-in Hybrid	12557.71162	561093.5687	279620.4489	281473.1198	51926.13754	9.958909599	85013.27142
Sacramento	2024	LDT1	Aggregate	Aggregate	Gasoline	50226.44621	1595989.731	1595989.731	0	219342.9065	65.98229527	0
Sacramento	2024	LDT1	Aggregate	Aggregate	Diesel	20.20513654	191.8459499	191.8459499	0	58.11177291	0.008081932	0
Sacramento	2024	LDT1	Aggregate	Aggregate	Electricity	137.4326143	5203.342878	0	5203.342878	635.5815194	0	2008.919806
Sacramento	2024	LDT1	Aggregate	Aggregate	Plug-in Hybrid	46.9445185	2337.598743	1048.190327	1289.408417	194.115584	0.037479867	389.4397724
Sacramento	2024	LDT2	Aggregate	Aggregate	Gasoline	232779.326	8714872.614	8714872.614	0	1079554.899	372.085082	0
Sacramento	2024	LDT2	Aggregate	Aggregate	Diesel	712.1328005	28646.0961	28646.0961	0	3389.855955	0.883864637	0
Sacramento	2024	LDT2	Aggregate	Aggregate	Electricity	1089.567979	39603.20378	0	39603.20378	5565.115779	0	15290.10529
Sacramento	2024	LDT2	Aggregate	Aggregate	Plug-in Hybrid	1547.679179	73888.83588	34786.40406	39102.43182	6399.653404	1.247593019	11810.09985
Sacramento	2024	LHD1	Aggregate	Aggregate	Gasoline	21611.08184	782072.4324	782072.4324	0	321972.9189	82.56582896	0
Sacramento	2024	LHD1	Aggregate	Aggregate	Diesel	14392.00662	517411.5259	517411.5259	0	181033.3382	32.40925702	0
Sacramento	2024	LHD1	Aggregate	Aggregate	Electricity	45.54584243	3425.015859	0	3425.015859	636.2465756	0	2228.534471
Sacramento	2024	LHD2	Aggregate	Aggregate	Gasoline	2981.215087	109111.7968	109111.7968	0	44415.66278	12.73824481	0
Sacramento	2024	LHD2	Aggregate	Aggregate	Diesel	5362.494031	204884.5529	204884.5529	0	67453.4289	15.52524985	0
Sacramento	2024	LHD2	Aggregate	Aggregate	Electricity	11.78868828	839.9350684	0	839.9350684	156.0465244	0	537.602576
Sacramento	2024	MCY	Aggregate	Aggregate	Gasoline	26567.59997	144380.6418	144380.6418	0	53135.19995	3.616159165	0
Sacramento	2024	MDV	Aggregate	Aggregate	Gasoline	152412.2812	5292619.19	5292619.19	0	692679.4423	277.2218986	0
Sacramento	2024	MDV	Aggregate	Aggregate	Diesel	2523.696776	95417.44955	95417.44955	0	11812.79874	3.912332256	0
Sacramento	2024	MDV	Aggregate	Aggregate	Electricity	1189.885707	43207.68137	0	43207.68137	6075.265709	0	16681.73113
Sacramento	2024	MDV	Aggregate	Aggregate	Plug-in Hybrid	961.9692463	44082.77056	21297.71976	22785.0508	3977.742834	0.772774336	6881.764444
Sacramento	2024	MH	Aggregate	Aggregate	Gasoline	2852.273737	25572.28773	25572.28773	0	285.3414646	5.796088086	0
Sacramento	2024	MH	Aggregate	Aggregate	Diesel	1091.341957	9901.825212	9901.825212	0	109.1341957	1.053420503	0
Sacramento	2024	Motor Coach	Aggregate	Aggregate	Diesel	91.79863294	12807.90907	12807.90907	0	2109.532585	2.329043151	0
Sacramento	2024	OBUS	Aggregate	Aggregate	Gasoline	546.5666781	24091.16445	24091.16445	0	10935.7061	5.106418298	0
Sacramento	2024	OBUS	Aggregate	Aggregate	Electricity	0.699299808	62.97393419	0	62.97393419	13.99159055	0	69.85598948
Sacramento	2024	PTO	Aggregate	Aggregate	Diesel	0	23707.51155	23707.51155	0	0	4.793431643	0
Sacramento	2024	PTO	Aggregate	Aggregate	Electricity	0	101.4354772	0	101.4354772	0	0	210.1254948
Sacramento	2024	SBUS	Aggregate	Aggregate	Gasoline	120.643206	6349.134667	6349.134667	0	482.5728242	0.631483077	0
Sacramento	2024	SBUS	Aggregate	Aggregate	Diesel	976.1484084	21653.2821	21653.2821	0	14134.62895	2.675330014	0
Sacramento	2024	SBUS	Aggregate	Aggregate	Electricity	2.70021539	77.60995264	0	77.60995264	35.08010252	0	81.75863846
Sacramento	2024	SBUS	Aggregate	Aggregate	Natural Gas	19.01635328	500.1783812	500.1783812	0	275.3567955	0.082539803	0
Sacramento	2024	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	11.21332019	754.8106929	754.8106929	0	257.682098	0.084551705	0
Sacramento	2024	T6 CAIRP Class 4	Aggregate	Aggregate	Electricity	0.06089364	4.530168593	0	4.530168593	1.399335843	0	4.921047503
Sacramento	2024	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	14.94969052	1036.245357	1036.245357	0	343.5438881	0.116063651	0
Sacramento	2024	T6 CAIRP Class 5	Aggregate	Aggregate	Electricity	0.069722463	5.433757683	0	5.433757683	1.602222198	0	5.902601443
Sacramento	2024	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	49.03991651	2699.057894	2699.057894	0	1126.937281	0.297704793	0
Sacramento	2024	T6 CAIRP Class 6	Aggregate	Aggregate	Electricity	0.411106135	22.87943456	0	22.87943456	9.447218983	0	24.8535528
Sacramento	2024	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	82.57736008	17008.38345	17008.38345	0	1897.627735	1.754038637	0
Sacramento	2024	T6 CAIRP Class 7	Aggregate	Aggregate	Electricity	0.333333121	64.98328996	0	64.98328996	7.659995111	0	70.59027722
Sacramento	2024	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	710.4104702	24155.1965	24155.1965	0	10137.55741	2.929113807	0
Sacramento	2024	T6 Instate Delivery Class 4	Aggregate	Aggregate	Electricity	2.388774294	95.36570888	0	95.36570888	34.08780918	0	101.8771916
Sacramento	2024	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	331.462539	11362.04942	11362.04942	0	4729.970431	1.378434661	0
Sacramento	2024	T6 Instate Delivery Class 5	Aggregate	Aggregate	Electricity	0.971017703	38.92728201	0	38.92728201	13.85642262	0	41.58520097
Sacramento	2024	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	1378.194578	47255.29546	47255.29546	0	19666.83662	5.721135866	0
Sacramento	2024	T6 Instate Delivery Class 6	Aggregate	Aggregate	Electricity	3.899105106	152.7751146	0	152.7751146	55.64022986	0	163.2064587
Sacramento	2024	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	185.1558813	10197.61408	10197.61408	0	2642.174427	1.208135703	0
Sacramento	2024	T6 Instate Delivery Class 7	Aggregate	Aggregate	Electricity	0.47566588	21.07838791	0	21.07838791	6.787752102	0	22.51760082
Sacramento	2024	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	2.737627426	154.2476047	154.2476047	0	39.06594337	0.022255468	0
Sacramento	2024	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	1036.823405	43745.0413	43745.0413	0	11985.67856	5.123493572	0
Sacramento	2024	T6 Instate Other Class 4	Aggregate	Aggregate	Electricity	2.712713246	122.7436578	0	122.7436578	31.35896513	0	130.1182301
Sacramento	2024	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	2761.884822	122453.5254	122453.5254	0	31927.38855	14.38882798	0
Sacramento	2024	T6 Instate Other Class 5	Aggregate	Aggregate	Electricity	6.465867063	301.0666887	0	301.0666887	74.74542325	0	319.1551025
Sacramento	2024	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	1920.549966	83458.29567	83458.29567	0	22201.5576	9.780791061	0
Sacramento	2024	T6 Instate Other Class 6	Aggregate	Aggregate	Electricity	4.701740384	207.3527608	0	207.3527608	54.35211883	0	219.8107399
Sacramento	2024	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	900.305582	42899.23989	42899.23989	0	10407.53253	4.927381973	0
Sacramento	2024	T6 Instate Other Class 7	Aggregate	Aggregate	Electricity	1.903709506	126.4592322	0	126.4592322	22.00688189	0	134.0570403
Sacramento	2024	T6 Instate Other Class 7	Aggregate	Aggregate	Natural Gas	10.05928052	506.2100902	506.2100902	0	116.2852828	0.064815966	0
Sacramento	2024	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	9.736421954	499.4906955	499.4906955	0	112.5530378	0.057190928	0
Sacramento	2024	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	605.2056566	38201.96673	38201.96673	0	6996.177391	4.196395201	0
Sacramento	2024	T6 Instate Tractor Class 7	Aggregate	Aggregate	Electricity	0.173525475	12.95713711	0	12.95713711	2.005954488	0	13.73561598
Sacramento	2024	T6 Instate Tractor Class 7	Aggregate	Aggregate	Natural Gas	7.898863895	514.4905719	514.4905719	0	91.31086663	0.064602002	0
Sacramento	2024	T6 OOS Class 4	Aggregate	Aggregate	Diesel	5.743915948	383.7196247	383.7196247	0	131.9951885	0.042759989	0
Sacramento	2024	T6 OOS Class 5	Aggregate	Aggregate	Diesel	7.623148238	526.3943232	526.3943232	0	175.1799465	0.05869994	0
Sacramento	2024	T6 OOS Class 6	Aggregate	Aggregate	Diesel	25.12143338	1375.483427	1375.483427	0	577.2905391	0.150654067	0
Sacramento	2024	T6 OOS Class 7	Aggregate	Aggregate	Diesel	39.35952796	10001.47491	10001.47491	0	904.4819525	1.023854997	0
Sacramento	2024	T6 Public Class 4	Aggregate	Aggregate	Diesel	496.9049808	17145.90927	17145.90927	0	2549.122552	2.262773847	0
Sacramento	2024	T6 Public Class 4	Aggregate	Aggregate	Electricity	2.429791627	103.7808735	0	103.7808735	12.46483105	0	122.5548913
Sacramento	2024	T6 Public Class 4	Aggregate	Aggregate	Natural Gas	25.16170541	1064.819801	1064.819801	0	129.0795488	0.157998912	0
Sacramento	2024	T6 Public Class 5	Aggregate	Aggregate	Diesel	594.3379864	22128.04877	22128.04877	0	3048.95387	2.844239385	0
Sacramento	2024	T6 Public Class 5	Aggregate	Aggregate	Electricity	2.341200694	99.06825673	0	99.06825673	12.01035956	0	116.9897596
Sacramento	2024	T6 Public Class 5	Aggregate	Aggregate	Natural Gas	54.27812246	2237.090804	2237.090804	0	278.4467682	0.337448414	0
Sacramento	2024	T6 Public Class 6	Aggregate	Aggregate	Diesel	758.1135124	26366.58783	26366.58783	0	3889.122319	3.410080404	0
Sacramento	2024	T6 Public Class 6	Aggregate	Aggregate	Electricity	3.813755475	145.7769266	0	145.7769266	19.56456559	0	172.1480539
Sacramento	2024	T6 Public Class 6	Aggregate	Aggregate	Natural Gas	47.69315068	1993.6913	1993.6913	0	244.665863	0.30037714	0
Sacramento	2024	T6 Public Class 7	Aggregate	Aggregate	Diesel	2577.514338	112706.7305	112706.7305	0	13222.64856	14.35328282	0
Sacramento	2024	T6 Public Class 7	Aggregate	Aggregate	Electricity	12.72618407	794.3218867	0	794.3218867	65.28532426	0	938.0151586
Sacramento	2024	T6 Public Class 7	Aggregate	Aggregate	Natural Gas	138.597003	7723.792198	7723.792198	0	711.0026253	1.112331524	0
Sacramento	2024	T6 Utility Class 5	Aggregate	Aggregate	Diesel	40.42799811	1643.974989	1643.974989	0	517.4783758	0.185725204	0
Sacramento	2024	T6 Utility Class 5	Aggregate	Aggregate	Electricity	0.311559072	13.55443242	0	13.55443242	3.987956126	0	15.1818235
Sacramento	2024	T6 Utility Class 5	Aggregate	Aggregate	Natural Gas	0.179360901	7.005000708	7.005000708	0	2.295819533	0.00096071	0
Sacramento	2024	T6 Utility Class 6	Aggregate	Aggregate	Diesel	7.680252696	310.8228725	310.8228725	0	98.30723451	0.035005213	0
Sacramento	2024	T6 Utility Class 6	Aggregate	Aggregate	Electricity	0.058157102	2.530134998	0	2.530134998	0.744410909	0	2.833911578
Sacramento	2024	T6 Utility Class 6	Aggregate	Aggregate	Natural Gas	0.030774988	1.210303586	1.210303586	0	0.393919846	0.000165445	0
Sacramento	2024	T6 Utility Class 7	Aggregate	Aggregate	Diesel	8.709894462	431.3195376	431.3195376	0	111.4866491	0.048286488	0
Sacramento	2024	T6 Utility Class 7	Aggregate	Aggregate	Electricity	0.069592439	4.119657681	0	4.119657681	0.890783217	0	4.614277739
Sacramento	2024	T6 Utility Class 7	Aggregate	Aggregate	Natural Gas	0.051369445	2.222861241	2.222861241	0	0.657528902	0.000302938	0

Sacramento	2024 T6TS	Aggregate	Aggregate	Gasoline	2096.631429	99033.02741	99033.02741	0	41949.40162	21.51325118	0
Sacramento	2024 T6TS	Aggregate	Aggregate	Electricity	3.773023934	339.7715234	0	339.7715234	75.49066287	0	396.658421
Sacramento	2024 T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	912.3206943	185866.3672	185866.3672	0	20965.12955	30.34467391	0
Sacramento	2024 T7 CAIRP Class 8	Aggregate	Aggregate	Electricity	5.909183646	1060.103189	0	1060.103189	135.7930402	0	1935.670057
Sacramento	2024 T7 CAIRP Class 8	Aggregate	Aggregate	Natural Gas	14.25039999	2999.05884	2999.05884	0	327.4741918	0.539370833	0
Sacramento	2024 T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	802.5687807	218802.619	218802.619	0	18443.03058	35.10676831	0
Sacramento	2024 T7 NOOS Class 8	Aggregate	Aggregate	Diesel	338.5055363	79558.2466	79558.2466	0	7778.857225	12.97319123	0
Sacramento	2024 T7 Other Port Class 8	Aggregate	Aggregate	Diesel	10.99578496	2023.809182	2023.809182	0	179.8910419	0.340489521	0
Sacramento	2024 T7 Other Port Class 8	Aggregate	Aggregate	Electricity	0.01909976	4.068164156	0	4.068164156	0.31247207	0	7.40392548
Sacramento	2024 T7 POAK Class 8	Aggregate	Aggregate	Diesel	36.97254827	3667.655654	3667.655654	0	604.8708897	0.62857791	0
Sacramento	2024 T7 POAK Class 8	Aggregate	Aggregate	Electricity	0.085755551	6.783633535	0	6.783633535	1.402960815	0	12.34599078
Sacramento	2024 T7 Public Class 8	Aggregate	Aggregate	Diesel	4141.699383	177467.965	177467.965	0	21246.91784	33.98816475	0
Sacramento	2024 T7 Public Class 8	Aggregate	Aggregate	Electricity	14.21626456	868.2531473	0	868.2531473	72.92943719	0	1704.018486
Sacramento	2024 T7 Public Class 8	Aggregate	Aggregate	Natural Gas	62.9230119	3092.151834	3092.151834	0	322.795051	0.665689283	0
Sacramento	2024 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Diesel	168.2065563	11844.23482	11844.23482	0	1584.50576	2.006510262	0
Sacramento	2024 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Electricity	1.387775496	104.2285934	0	104.2285934	13.07284517	0	190.0247951
Sacramento	2024 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Natural Gas	3.809595177	264.0134835	264.0134835	0	35.88638657	0.045276325	0
Sacramento	2024 T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	492.0941688	29375.80393	29375.80393	0	4635.52707	5.086361876	0
Sacramento	2024 T7 Single Dump Class 8	Aggregate	Aggregate	Electricity	0.347830007	26.45832766	0	26.45832766	3.276558662	0	48.2376105
Sacramento	2024 T7 Single Dump Class 8	Aggregate	Aggregate	Natural Gas	15.10797722	854.0653983	854.0653983	0	142.3171454	0.163375221	0
Sacramento	2024 T7 Single Other Class 8	Aggregate	Aggregate	Diesel	1316.49472	74963.29249	74963.29249	0	12401.38026	12.7645781	0
Sacramento	2024 T7 Single Other Class 8	Aggregate	Aggregate	Electricity	5.749253954	380.1624175	0	380.1624175	54.15797224	0	693.0946982
Sacramento	2024 T7 Single Other Class 8	Aggregate	Aggregate	Natural Gas	37.94058987	2094.356779	2094.356779	0	357.4003566	0.380215755	0
Sacramento	2024 T7 SWCV Class 8	Aggregate	Aggregate	Diesel	311.6335015	20213.65719	20213.65719	0	1433.514107	8.543290869	0
Sacramento	2024 T7 SWCV Class 8	Aggregate	Aggregate	Electricity	2.555215203	159.4034638	0	159.4034638	11.75398993	0	296.5782269
Sacramento	2024 T7 SWCV Class 8	Aggregate	Aggregate	Natural Gas	591.2499545	38292.74559	38292.74559	0	2719.749791	8.299163829	0
Sacramento	2024 T7 Tractor Class 8	Aggregate	Aggregate	Diesel	974.1598058	75896.02217	75896.02217	0	14154.54198	12.42667686	0
Sacramento	2024 T7 Tractor Class 8	Aggregate	Aggregate	Electricity	2.472542396	189.6045433	0	189.6045433	35.92604101	0	345.2148501
Sacramento	2024 T7 Tractor Class 8	Aggregate	Aggregate	Natural Gas	11.41429158	840.9590003	840.9590003	0	165.8496567	0.158308339	0
Sacramento	2024 T7 Utility Class 8	Aggregate	Aggregate	Diesel	28.88733604	1310.342276	1310.342276	0	369.7579013	0.225517194	0
Sacramento	2024 T7 Utility Class 8	Aggregate	Aggregate	Electricity	0.063199083	3.994689743	0	3.994689743	0.808948263	0	7.521194991
Sacramento	2024 T7IS	Aggregate	Aggregate	Gasoline	9.560258333	220.2316007	220.2316007	0	191.2816487	0.066933527	0
Sacramento	2024 T7IS	Aggregate	Aggregate	Electricity	0.003543916	1.036190561	0	1.036190561	0.070906662	0	2.082167657
Sacramento	2024 UBUS	Aggregate	Aggregate	Gasoline	179.3370522	13604.69733	13604.69733	0	717.3482087	2.895548815	0
Sacramento	2024 UBUS	Aggregate	Aggregate	Diesel	6.270269616	298.4677101	298.4677101	0	25.08107847	0.031480773	0
Sacramento	2024 UBUS	Aggregate	Aggregate	Electricity	1.665294001	173.9240734	0	173.9240734	6.661176006	0	303.1921181
Sacramento	2024 UBUS	Aggregate	Aggregate	Natural Gas	343.418592	32906.53669	32906.53669	0	1373.674368	5.727295138	0

EMFAC Fuel Usage: Year 2025

Vehicle type	GAS			DSL			NG			ELEC		
	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	kWh/day	Miles/kWh
All other buses	0	0	0.00	24,332	2,759	8.82	3,712	494	7.51	0	0	0.00
LDA	18,315,663	622,137	29.44	41,591	960	43.30	0	0	0.00	1,550,775	572,229	2.71
LDT1	1,549,077	62,984	24.59	167	7	23.78	0	0	0.00	8,171	2,993	2.73
LDT2	8,916,174	371,333	24.01	29,746	898	33.12	0	0	0.00	102,634	35,564	2.89
LHD1	760,756	79,208	9.60	504,882	31,541	16.01	0	0	0.00	8,855	5,764	1.54
LHD2	105,560	12,196	8.66	203,025	15,289	13.28	0	0	0.00	2,156	1,380	1.56
MCY	143,679	3,585	40.08	0	0	0.00	0	0	0.00	0	0	0.00
MDV	5,325,251	271,947	19.58	93,388	3,782	24.69	0	0	0.00	87,161	31,246	2.79
MH	24,193	5,483	4.41	9,792	1,042	9.40	0	0	0.00	0	0	0.00
Motor coach	0	0	0.00	12,872	2,319	5.55	0	0	0.00	0	0	0.00
OBUS	22,264	4,685	4.75	0	0	0.00	0	0	0.00	152	169	0.90
PTO	0	0	0.00	23,919	4,778	5.01	0	0	0.00	275	570	0.48
SBUS	6,368	629	10.13	21,558	2,653	8.13	522	86	6.08	176	185	0.95
T6	93,881	20,204	4.65	644,813	76,546	8.42	15,229	2,207	6.90	7,278	8,116	0.90
T7	194	57	3.42	891,397	153,650	5.80	50,659	10,572	4.79	6,528	12,190	0.54
UBUS	13,976	2,975	4.70	294	31	9.45	33,665	5,817	5.79	347	606	0.57
Total	**35,277,035**	**1,457,422**	**24.21**	**2,501,777**	**296,255**	**8.44**	**103,786**	**19,176**	**5.41**	**1,774,507**	**671,012**	**2.64**

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2025
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Fuel Consumption	Energy Consumption
Sacramento	2025	All Other Buses	Aggregate	Aggregate	Diesel	459.152534	24332.4636	24332.4636	0	4086.457553	2.758850969	0
Sacramento	2025	All Other Buses	Aggregate	Aggregate	Natural Gas	62.31948121	3711.777498	3711.777498	0	554.6433828	0.49413976	0
Sacramento	2025	LDA	Aggregate	Aggregate	Gasoline	491398.2875	18017006.84	18017006.84	0	2259539.787	611.4937225	0
Sacramento	2025	LDA	Aggregate	Aggregate	Diesel	1553.179368	41591.1948	41591.1948	0	6423.396188	0.960487597	0
Sacramento	2025	LDA	Aggregate	Aggregate	Electricity	25544.25516	1235520.352	0	1235520.352	126966.2385	0	477012.8289
Sacramento	2025	LDA	Aggregate	Aggregate	Plug-in Hybrid	13839.58259	613910.6611	298656.1188	315254.5423	57226.67403	10.64327416	95216.26786
Sacramento	2025	LDT1	Aggregate	Aggregate	Gasoline	48785.93501	1547597.8	1547597.8	0	212712.1866	62.93127109	0
Sacramento	2025	LDT1	Aggregate	Aggregate	Diesel	18.32966044	167.489148	167.489148	0	51.70597598	0.007042138	0
Sacramento	2025	LDT1	Aggregate	Aggregate	Electricity	154.133345	6253.331287	0	6253.331287	719.8313558	0	2414.301992
Sacramento	2025	LDT1	Aggregate	Aggregate	Plug-in Hybrid	68.80007272	3397.039343	1479.447127	1917.592216	284.4883007	0.052931048	579.1700025
Sacramento	2025	LDT2	Aggregate	Aggregate	Gasoline	237055.1324	8875175.116	8875175.116	0	1098484.37	369.8615216	0
Sacramento	2025	LDT2	Aggregate	Aggregate	Diesel	742.8591203	29745.88465	29745.88465	0	3530.432508	0.898116959	0
Sacramento	2025	LDT2	Aggregate	Aggregate	Electricity	1513.657547	54317.14583	0	54317.14583	7696.673897	0	20970.90133
Sacramento	2025	LDT2	Aggregate	Aggregate	Plug-in Hybrid	1896.559955	89315.33456	40998.49218	48316.84238	7842.275416	1.471552878	14593.12647
Sacramento	2025	LHD1	Aggregate	Aggregate	Gasoline	21064.70218	760756.2379	760756.2379	0	313832.676	79.20833646	0
Sacramento	2025	LHD1	Aggregate	Aggregate	Diesel	14102.97332	504881.7138	504881.7138	0	177397.6629	31.54107237	0
Sacramento	2025	LHD1	Aggregate	Aggregate	Electricity	126.7678879	8855.051642	0	8855.051642	1773.187603	0	5763.823266
Sacramento	2025	LHD2	Aggregate	Aggregate	Gasoline	2913.052565	105559.7948	105559.7948	0	43400.14277	12.19562128	0
Sacramento	2025	LHD2	Aggregate	Aggregate	Diesel	5366.007996	203025.0058	203025.0058	0	67497.63016	15.2890039	0
Sacramento	2025	LHD2	Aggregate	Aggregate	Electricity	32.46589156	2155.55361	0	2155.55361	430.528586	0	1380.357826
Sacramento	2025	MCY	Aggregate	Aggregate	Gasoline	26621.95836	143679.2199	143679.2199	0	53243.91673	3.585081887	0
Sacramento	2025	MDV	Aggregate	Aggregate	Gasoline	152263.9196	5300161.213	5300161.213	0	691884.2217	271.0357031	0
Sacramento	2025	MDV	Aggregate	Aggregate	Diesel	2523.925631	93387.59733	93387.59733	0	11727.81799	3.782251219	0
Sacramento	2025	MDV	Aggregate	Aggregate	Electricity	1633.501521	58547.73754	0	58547.73754	8302.484428	0	22604.2589
Sacramento	2025	MDV	Aggregate	Aggregate	Plug-in Hybrid	1178.532607	53702.28644	25089.33203	28612.95441	4873.23233	0.911084917	8641.965035
Sacramento	2025	MH	Aggregate	Aggregate	Gasoline	2699.200325	24193.05559	24193.05559	0	270.0280005	5.482646957	0
Sacramento	2025	MH	Aggregate	Aggregate	Diesel	1085.673442	9792.361587	9792.361587	0	108.5673442	1.042222345	0
Sacramento	2025	Motor Coach	Aggregate	Aggregate	Diesel	96.28279742	12872.0525	12872.0525	0	2212.578685	2.318553832	0
Sacramento	2025	OBUS	Aggregate	Aggregate	Gasoline	520.9637171	22263.94795	22263.94795	0	10423.44205	4.68545612	0
Sacramento	2025	OBUS	Aggregate	Aggregate	Electricity	1.719092546	152.0704909	0	152.0704909	34.39560366	0	168.6893911
Sacramento	2025	PTO	Aggregate	Aggregate	Diesel	0	23918.81915	23918.81915	0	0	4.778072245	0
Sacramento	2025	PTO	Aggregate	Aggregate	Electricity	0	275.06994	0	275.06994	0	0	569.8125431
Sacramento	2025	SBUS	Aggregate	Aggregate	Gasoline	120.8436248	6367.611202	6367.611202	0	483.3744993	0.628580268	0
Sacramento	2025	SBUS	Aggregate	Aggregate	Diesel	978.342651	21557.86235	21557.86235	0	14166.40159	2.653029999	0
Sacramento	2025	SBUS	Aggregate	Aggregate	Electricity	5.886108389	175.59329	0	175.59329	76.45501363	0	184.9797329
Sacramento	2025	SBUS	Aggregate	Aggregate	Natural Gas	20.00841731	521.5570373	521.5570373	0	289.7218826	0.085823336	0
Sacramento	2025	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	11.41002127	763.5020513	763.5020513	0	262.2022888	0.084798049	0
Sacramento	2025	T6 CAIRP Class 4	Aggregate	Aggregate	Electricity	0.144873461	11.73872732	0	11.73872732	3.329192138	0	12.75158608
Sacramento	2025	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	15.0985278	1049.125503	1049.125503	0	346.9641689	0.116591761	0
Sacramento	2025	T6 CAIRP Class 5	Aggregate	Aggregate	Electricity	0.167641629	14.36543807	0	14.36543807	3.852404629	0	15.60493868
Sacramento	2025	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	51.17526518	2722.846701	2722.846701	0	1176.007594	0.297918742	0
Sacramento	2025	T6 CAIRP Class 6	Aggregate	Aggregate	Electricity	0.943885701	56.08555556	0	56.08555556	21.6904934	0	60.92481493
Sacramento	2025	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	84.43563631	17260.19755	17260.19755	0	1940.330922	1.755639203	0
Sacramento	2025	T6 CAIRP Class 7	Aggregate	Aggregate	Electricity	0.802145966	170.6701922	0	170.6701922	18.4333143	0	185.3962178
Sacramento	2025	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	725.8938074	24498.64338	24498.64338	0	10358.50463	2.953430969	0
Sacramento	2025	T6 Instate Delivery Class 4	Aggregate	Aggregate	Electricity	6.324130106	259.7038635	0	259.7038635	90.24533661	0	277.4362041
Sacramento	2025	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	339.2340572	11524.52822	11524.52822	0	4840.869997	1.390113288	0
Sacramento	2025	T6 Instate Delivery Class 5	Aggregate	Aggregate	Electricity	2.803653203	115.1747131	0	115.1747131	40.00813121	0	123.0387365
Sacramento	2025	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	1412.245218	47939.6232	47939.6232	0	20152.73926	5.773484538	0
Sacramento	2025	T6 Instate Delivery Class 6	Aggregate	Aggregate	Electricity	11.37462883	461.129876	0	461.129876	162.3159533	0	492.6153992
Sacramento	2025	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	190.6821779	10385.81643	10385.81643	0	2721.034678	1.227068772	0
Sacramento	2025	T6 Instate Delivery Class 7	Aggregate	Aggregate	Electricity	1.00482483	48.85449849	0	48.85449849	14.33885032	0	52.19023866
Sacramento	2025	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	2.784563125	155.4692144	155.4692144	0	39.73571579	0.022420053	0
Sacramento	2025	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	1058.85061	44347.1474	44347.1474	0	12240.31306	5.168753629	0
Sacramento	2025	T6 Instate Other Class 4	Aggregate	Aggregate	Electricity	9.348057667	439.1896648	0	439.1896648	108.0635466	0	465.5766571
Sacramento	2025	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	2846.929218	124278.0056	124278.0056	0	32910.50176	14.53871436	0
Sacramento	2025	T6 Instate Other Class 5	Aggregate	Aggregate	Electricity	21.90228562	1046.957603	0	1046.957603	253.1904217	0	1109.859953
Sacramento	2025	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	1972.008328	84684.75635	84684.75635	0	22796.41627	9.880080014	0
Sacramento	2025	T6 Instate Other Class 6	Aggregate	Aggregate	Electricity	15.83942233	732.7757785	0	732.7757785	183.1037221	0	776.8017435
Sacramento	2025	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	942.5376664	43501.75888	43501.75888	0	10895.73542	4.970850924	0
Sacramento	2025	T6 Instate Other Class 7	Aggregate	Aggregate	Electricity	6.353798204	435.5737255	0	435.5737255	73.44990723	0	461.7434682
Sacramento	2025	T6 Instate Other Class 7	Aggregate	Aggregate	Natural Gas	10.44153817	506.0957733	506.0957733	0	120.7041813	0.064834567	0
Sacramento	2025	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	10.06622194	506.5755359	506.5755359	0	116.3655257	0.057786825	0
Sacramento	2025	T6 Instate Tractor Class 6	Aggregate	Aggregate	Electricity	0.058587939	3.374047033	0	3.374047033	0.677276578	0	3.576763445
Sacramento	2025	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	635.2249478	38853.86419	38853.86419	0	7343.200396	4.231837422	0
Sacramento	2025	T6 Instate Tractor Class 7	Aggregate	Aggregate	Electricity	2.285590191	172.62307	0	172.62307	26.42142261	0	182.9944516
Sacramento	2025	T6 Instate Tractor Class 7	Aggregate	Aggregate	Natural Gas	8.17204668	513.8864093	513.8864093	0	94.46885963	0.064469642	0
Sacramento	2025	T6 OOS Class 4	Aggregate	Aggregate	Diesel	5.892479901	391.7543697	391.7543697	0	135.4091881	0.04298832	0
Sacramento	2025	T6 OOS Class 5	Aggregate	Aggregate	Diesel	7.759283562	537.4165485	537.4165485	0	178.3083363	0.059086971	0
Sacramento	2025	T6 OOS Class 6	Aggregate	Aggregate	Diesel	26.49165136	1404.284817	1404.284817	0	608.7781482	0.151254449	0
Sacramento	2025	T6 OOS Class 7	Aggregate	Aggregate	Diesel	40.0977785	10210.89683	10210.89683	0	921.44695	1.029599414	0
Sacramento	2025	T6 Public Class 4	Aggregate	Aggregate	Diesel	492.1321089	17067.01632	17067.01632	0	2524.637719	2.230971988	0
Sacramento	2025	T6 Public Class 4	Aggregate	Aggregate	Electricity	5.170035013	222.5380095	0	222.5380095	26.52227962	0	262.7952594
Sacramento	2025	T6 Public Class 4	Aggregate	Aggregate	Natural Gas	27.94720846	1175.400824	1175.400824	0	143.3691794	0.173992132	0
Sacramento	2025	T6 Public Class 5	Aggregate	Aggregate	Diesel	598.8456627	22112.54069	22112.54069	0	3072.07825	2.828622053	0
Sacramento	2025	T6 Public Class 5	Aggregate	Aggregate	Electricity	5.274159955	225.7817752	0	225.7817752	27.05644057	0	266.6258241
Sacramento	2025	T6 Public Class 5	Aggregate	Aggregate	Natural Gas	57.08673903	2326.847504	2326.847504	0	292.8549712	0.350613578	0
Sacramento	2025	T6 Public Class 6	Aggregate	Aggregate	Diesel	747.4338203	26258.29451	26258.29451	0	3834.335498	3.364693384	0
Sacramento	2025	T6 Public Class 6	Aggregate	Aggregate	Electricity	8.02405992	326.2549957	0	326.2549957	41.16342739	0	385.2747062
Sacramento	2025	T6 Public Class 6	Aggregate	Aggregate	Natural Gas	51.89601011	2155.670604	2155.670604	0	266.2265318	0.323794201	0
Sacramento	2025	T6 Public Class 7	Aggregate	Aggregate	Diesel	2532.865641	112133.723	112133.723	0	12993.60074	14.12448171	0
Sacramento	2025	T6 Public Class 7	Aggregate	Aggregate	Electricity	26.72164277	1701.269571	0	1701.269571	137.0820274	0	2009.030185
Sacramento	2025	T6 Public Class 7	Aggregate	Aggregate	Natural Gas	154.0273054	8385.657923	8385.657923	0	790.1600767	1.20553463	0
Sacramento	2025	T6 Utility Class 5	Aggregate	Aggregate	Diesel	40.5011472	1640.772024	1640.772024	0	518.4146842	0.184466368	0
Sacramento	2025	T6 Utility Class 5	Aggregate	Aggregate	Electricity	0.712282058	30.95343363	0	30.95343363	9.117210336	0	34.66980774
Sacramento	2025	T6 Utility Class 5	Aggregate	Aggregate	Natural Gas	0.167620252	6.48234389	6.48234389	0	2.14553923	0.000883784	0
Sacramento	2025	T6 Utility Class 6	Aggregate	Aggregate	Diesel	7.68805271	310.1219568	310.1219568	0	98.40707469	0.03475861	0
Sacramento	2025	T6 Utility Class 6	Aggregate	Aggregate	Electricity	0.135516996	5.889246614	0	5.889246614	1.734617552	0	6.596329515
Sacramento	2025	T6 Utility Class 6	Aggregate	Aggregate	Natural Gas	0.029126658	1.136099652	1.136099652	0	0.372821224	0.00015431	0

Sacramento	2025	T6 Utility Class 7	Aggregate	Aggregate	Diesel	8.677258539	429.7833513	429.7833513	0	111.0689093	0.047829264	0
Sacramento	2025	T6 Utility Class 7	Aggregate	Aggregate	Electricity	0.153258936	9.454383755	0	9.454383755	1.961714382	0	10.5895091
Sacramento	2025	T6 Utility Class 7	Aggregate	Aggregate	Natural Gas	0.046846746	2.019512634	2.019512634	0	0.599638347	0.000273574	0
Sacramento	2025	T6TS	Aggregate	Aggregate	Gasoline	1996.700173	93880.67563	93880.67563	0	39949.97706	20.20420805	0
Sacramento	2025	T6TS	Aggregate	Aggregate	Electricity	8.896966213	787.6722534	0	787.6722534	178.0105	0	919.5497881
Sacramento	2025	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	929.9492681	188597.9573	188597.9573	0	21370.23418	30.36721291	0
Sacramento	2025	T7 CAIRP Class 8	Aggregate	Aggregate	Electricity	11.82674452	2320.043881	0	2320.043881	271.7785891	0	4236.228621
Sacramento	2025	T7 CAIRP Class 8	Aggregate	Aggregate	Natural Gas	15.27831945	3139.490853	3139.490853	0	351.095781	0.563593614	0
Sacramento	2025	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	819.5219214	223562.8231	223562.8231	0	18832.61375	34.98741774	0
Sacramento	2025	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	347.6814299	81289.09194	81289.09194	0	7989.719259	13.02898585	0
Sacramento	2025	T7 Other Port Class 8	Aggregate	Aggregate	Diesel	11.26841234	2092.187564	2092.187564	0	184.3512259	0.349865997	0
Sacramento	2025	T7 Other Port Class 8	Aggregate	Aggregate	Electricity	0.046176682	11.00369862	0	11.00369862	0.755450524	0	20.02637098
Sacramento	2025	T7 POAK Class 8	Aggregate	Aggregate	Diesel	37.31874938	3714.977129	3714.977129	0	610.5347399	0.633795723	0
Sacramento	2025	T7 POAK Class 8	Aggregate	Aggregate	Electricity	0.197388746	17.20334678	0	17.20334678	3.229279889	0	31.30952751
Sacramento	2025	T7 Public Class 8	Aggregate	Aggregate	Diesel	4147.788818	177768.3924	177768.3924	0	21278.15663	33.7475674	0
Sacramento	2025	T7 Public Class 8	Aggregate	Aggregate	Electricity	30.54290932	1920.846142	0	1920.846142	156.6851248	0	3769.819143
Sacramento	2025	T7 Public Class 8	Aggregate	Aggregate	Natural Gas	66.69849379	3229.481469	3229.481469	0	342.1632731	0.690878182	0
Sacramento	2025	T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Diesel	169.2620944	11773.93114	11773.93114	0	1594.44893	1.973618473	0
Sacramento	2025	T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Electricity	2.941756653	237.8176967	0	237.8176967	27.71134767	0	433.5783263
Sacramento	2025	T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Natural Gas	3.942874337	273.749451	273.749451	0	37.14187625	0.046276055	0
Sacramento	2025	T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	507.6723916	29349.35271	29349.35271	0	4782.273929	5.062686282	0
Sacramento	2025	T7 Single Dump Class 8	Aggregate	Aggregate	Electricity	3.194839192	248.227561	0	248.227561	30.09538519	0	452.5571138
Sacramento	2025	T7 Single Dump Class 8	Aggregate	Aggregate	Natural Gas	15.39772288	839.657381	839.657381	0	145.0465495	0.159353786	0
Sacramento	2025	T7 Single Other Class 8	Aggregate	Aggregate	Diesel	1377.58441	76100.92254	76100.92254	0	12976.84515	12.89753649	0
Sacramento	2025	T7 Single Other Class 8	Aggregate	Aggregate	Electricity	12.81556466	899.2619419	0	899.2619419	120.7226191	0	1639.493163
Sacramento	2025	T7 Single Other Class 8	Aggregate	Aggregate	Natural Gas	39.5557971	2122.340998	2122.340998	0	372.6156087	0.382371372	0
Sacramento	2025	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	285.4256111	18514.44658	18514.44658	0	1312.957811	7.807676579	0
Sacramento	2025	T7 SWCV Class 8	Aggregate	Aggregate	Electricity	6.356077938	404.2011392	0	404.2011392	29.23795851	0	752.0367145
Sacramento	2025	T7 SWCV Class 8	Aggregate	Aggregate	Natural Gas	621.1305573	40229.07095	40229.07095	0	2857.200564	8.574311159	0
Sacramento	2025	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	1028.071352	77318.93006	77318.93006	0	14937.87675	12.56836859	0
Sacramento	2025	T7 Tractor Class 8	Aggregate	Aggregate	Electricity	5.562729235	455.6908194	0	455.6908194	80.82645579	0	829.6807406
Sacramento	2025	T7 Tractor Class 8	Aggregate	Aggregate	Natural Gas	11.60201643	825.5565499	825.5565499	0	168.5772987	0.154744223	0
Sacramento	2025	T7 Utility Class 8	Aggregate	Aggregate	Diesel	29.57643703	1313.928913	1313.928913	0	378.5783939	0.22505736	0
Sacramento	2025	T7 Utility Class 8	Aggregate	Aggregate	Electricity	0.175164933	11.20472178	0	11.20472178	2.242111142	0	21.09623094
Sacramento	2025	T7IS	Aggregate	Aggregate	Gasoline	7.621423831	193.643833	193.643833	0	152.489448	0.05660207	0
Sacramento	2025	T7IS	Aggregate	Aggregate	Electricity	0.007986364	2.259484279	0	2.259484279	0.159791181	0	4.540308767
Sacramento	2025	UBUS	Aggregate	Aggregate	Gasoline	184.232421	13976.26109	13976.26109	0	736.929684	2.974664125	0
Sacramento	2025	UBUS	Aggregate	Aggregate	Diesel	6.215216529	294.3637228	294.3637228	0	24.86086612	0.03113556	0
Sacramento	2025	UBUS	Aggregate	Aggregate	Electricity	3.32547593	347.4670622	0	347.4670622	13.30190372	0	605.7199128
Sacramento	2025	UBUS	Aggregate	Aggregate	Natural Gas	351.5947808	33664.90337	33664.90337	0	1406.379123	5.817158816	0

EMFAC Fuel Usage: Year 2026

Vehicle type	GAS			DSL			NG			ELEC		
	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	kWh/day	Miles/kWh
All other buses	0	0	0.00	24,539	2,750	8.92	3,723	491	7.59	0	0	0.00
LDA	18,278,791	608,242	30.05	37,722	862	43.77	0	0	0.00	1,723,059	636,434	2.71
LDT1	1,502,449	60,056	25.02	143	6	23.84	0	0	0.00	9,911	3,610	2.75
LDT2	9,056,381	368,414	24.58	30,675	907	33.81	0	0	0.00	125,535	43,689	2.87
LHD1	740,600	76,098	9.73	491,992	30,658	16.05	0	0	0.00	16,292	10,606	1.54
LHD2	102,173	11,683	8.75	200,748	15,028	13.36	0	0	0.00	3,950	2,530	1.56
MCY	143,067	3,557	40.22	0	0	0.00	0	0	0.00	0	0	0.00
MDV	5,333,629	265,978	20.05	91,089	3,643	25.01	0	0	0.00	107,199	38,536	2.78
MH	22,993	5,210	4.41	9,690	1,032	9.39	0	0	0.00	0	0	0.00
Motor coach	0	0	0.00	12,949	2,309	5.61	0	0	0.00	0	0	0.00
OBUS	20,609	4,304	4.79	0	0	0.00	0	0	0.00	251	279	0.90
PTO	0	0	0.00	24,093	4,755	5.07	0	0	0.00	482	998	0.48
SBUS	6,562	645	10.17	21,443	2,628	8.16	543	89	6.09	298	314	0.95
T6	88,998	18,970	4.69	650,010	76,587	8.49	16,187	2,344	6.91	13,006	14,442	0.90
T7	168	46	3.62	901,374	152,799	5.90	52,497	10,814	4.85	11,222	20,931	0.54
UBUS	14,348	3,054	4.70	294	31	9.45	34,419	5,784	5.95	521	908	0.57
Total	**35,310,767**	**1,426,257**	**24.76**	**2,496,762**	**293,995**	**8.49**	**107,369**	**19,522**	**5.50**	**2,011,726**	**773,277**	**2.60**

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2026
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Fuel Consumption	Energy Consumption
Sacramento	2026	All Other Buses	Aggregate	Aggregate	Diesel	469.187762	24539.43255	24539.43255	0	4175.771082	2.749873598	0
Sacramento	2026	All Other Buses	Aggregate	Aggregate	Natural Gas	63.96416593	3722.56086	3722.56086	0	569.2810768	0.49056013	0
Sacramento	2026	LDA	Aggregate	Aggregate	Gasoline	490520.664	17966701.5	17966701.5	0	2254615.988	597.1123465	0
Sacramento	2026	LDA	Aggregate	Aggregate	Diesel	1430.745301	37721.50272	37721.50272	0	5893.808305	0.861822099	0
Sacramento	2026	LDA	Aggregate	Aggregate	Electricity	28982.42278	1380306.326	0	1380306.326	143407.6929	0	532912.1647
Sacramento	2026	LDA	Aggregate	Aggregate	Plug-in Hybrid	14977.6109	654841.653	312089.4567	342752.1963	61932.42107	11.13015328	103521.3789
Sacramento	2026	LDT1	Aggregate	Aggregate	Gasoline	47430.07468	1500520.957	1500520.957	0	206539.2245	59.98660688	0
Sacramento	2026	LDT1	Aggregate	Aggregate	Diesel	16.20559695	143.3004056	143.3004056	0	44.90788683	0.00601102	0
Sacramento	2026	LDT1	Aggregate	Aggregate	Electricity	175.1803744	7332.135322	0	7332.135322	826.2935804	0	2830.809388
Sacramento	2026	LDT1	Aggregate	Aggregate	Plug-in Hybrid	92.6274366	4507.170864	1927.974638	2579.196226	383.0144504	0.069015042	778.9941326
Sacramento	2026	LDT2	Aggregate	Aggregate	Gasoline	241263.535	9009804.273	9009804.273	0	1117072.271	366.7405478	0
Sacramento	2026	LDT2	Aggregate	Aggregate	Diesel	773.0221254	30675.15942	30675.15942	0	3663.465023	0.907272115	0
Sacramento	2026	LDT2	Aggregate	Aggregate	Electricity	1942.902522	68690.07787	0	68690.07787	9829.02384	0	26520.03936
Sacramento	2026	LDT2	Aggregate	Aggregate	Plug-in Hybrid	2236.214513	103421.9192	46576.65582	56845.26342	9246.747013	1.673089612	17168.96381
Sacramento	2026	LHD1	Aggregate	Aggregate	Gasoline	20553.00978	740600.0124	740600.0124	0	306209.2217	76.09755447	0
Sacramento	2026	LHD1	Aggregate	Aggregate	Diesel	13789.3624	491992.1781	491992.1781	0	173452.8319	30.6578936	0
Sacramento	2026	LHD1	Aggregate	Aggregate	Electricity	243.7058975	16291.82349	0	16291.82349	3410.850772	0	10606.20227
Sacramento	2026	LHD2	Aggregate	Aggregate	Gasoline	2842.835824	102173.044	102173.044	0	42354.01795	11.68314156	0
Sacramento	2026	LHD2	Aggregate	Aggregate	Diesel	5354.107557	200747.7344	200747.7344	0	67347.9376	15.02769638	0
Sacramento	2026	LHD2	Aggregate	Aggregate	Electricity	62.04140345	3950.499601	0	3950.499601	823.0006996	0	2530.032898
Sacramento	2026	MCY	Aggregate	Aggregate	Gasoline	26668.73903	143066.9299	143066.9299	0	53337.47807	3.556738291	0
Sacramento	2026	MDV	Aggregate	Aggregate	Gasoline	152420.7174	5305204.632	5305204.632	0	692362.459	264.9451429	0
Sacramento	2026	MDV	Aggregate	Aggregate	Diesel	2517.863077	91089.26373	91089.26373	0	11617.91905	3.642691122	0
Sacramento	2026	MDV	Aggregate	Aggregate	Electricity	2074.444415	73273.89269	0	73273.89269	10492.0296	0	28289.7702
Sacramento	2026	MDV	Aggregate	Aggregate	Plug-in Hybrid	1385.855033	62349.05819	28424.07977	33924.97841	5730.510562	1.033107141	10246.35461
Sacramento	2026	MH	Aggregate	Aggregate	Gasoline	2559.574889	22993.19608	22993.19608	0	256.0598719	5.210088179	0
Sacramento	2026	MH	Aggregate	Aggregate	Diesel	1079.195807	9690.490905	9690.490905	0	107.9195807	1.031832885	0
Sacramento	2026	Motor Coach	Aggregate	Aggregate	Diesel	100.32814	12949.10452	12949.10452	0	2305.540658	2.309416706	0
Sacramento	2026	OBUS	Aggregate	Aggregate	Gasoline	495.2475434	20608.72061	20608.72061	0	9908.912848	4.303585972	0
Sacramento	2026	OBUS	Aggregate	Aggregate	Electricity	2.88628539	251.4188919	0	251.4188919	57.74879808	0	278.8950014
Sacramento	2026	PTO	Aggregate	Aggregate	Diesel	0	24092.85203	24092.85203	0	0	4.755018899	0
Sacramento	2026	PTO	Aggregate	Aggregate	Electricity	0	481.9543973	0	481.9543973	0	0	998.3775794
Sacramento	2026	SBUS	Aggregate	Aggregate	Gasoline	124.4030436	6562.066813	6562.066813	0	497.6121745	0.644930373	0
Sacramento	2026	SBUS	Aggregate	Aggregate	Diesel	978.5761745	21442.65244	21442.65244	0	14169.78301	2.627989581	0
Sacramento	2026	SBUS	Aggregate	Aggregate	Electricity	10.02998753	298.0278886	0	298.0278886	130.771368	0	313.9591453
Sacramento	2026	SBUS	Aggregate	Aggregate	Natural Gas	21.01785741	543.0029585	543.0029585	0	304.3385753	0.089122738	0
Sacramento	2026	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	11.53654035	770.5365913	770.5365913	0	265.1096972	0.084893312	0
Sacramento	2026	T6 CAIRP Class 4	Aggregate	Aggregate	Electricity	0.258023853	20.93703371	0	20.93703371	5.929388132	0	22.74355476
Sacramento	2026	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	15.17628056	1059.715761	1059.715761	0	348.7509273	0.116919443	0
Sacramento	2026	T6 CAIRP Class 5	Aggregate	Aggregate	Electricity	0.301010556	26.04372671	0	26.04372671	6.917222583	0	28.29087122
Sacramento	2026	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	52.90560817	2741.744118	2741.744118	0	1215.770876	0.297784874	0
Sacramento	2026	T6 CAIRP Class 6	Aggregate	Aggregate	Electricity	1.642325766	95.37648707	0	95.37648707	37.74064611	0	103.6059065
Sacramento	2026	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	86.00951747	17475.87079	17475.87079	0	1976.498711	1.754150003	0
Sacramento	2026	T6 CAIRP Class 7	Aggregate	Aggregate	Electricity	1.487381231	319.9836782	0	319.9836782	34.18002069	0	347.5929975
Sacramento	2026	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	738.7540335	24807.22862	24807.22862	0	10542.02006	2.972390085	0
Sacramento	2026	T6 Instate Delivery Class 4	Aggregate	Aggregate	Electricity	11.54193318	469.5362016	0	469.5362016	164.7033865	0	501.5957009
Sacramento	2026	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	345.7366219	11671.34723	11671.34723	0	4933.661594	1.399329265	0
Sacramento	2026	T6 Instate Delivery Class 5	Aggregate	Aggregate	Electricity	5.201569318	212.0806353	0	212.0806353	74.22639416	0	226.5613057
Sacramento	2026	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	1440.20104	48553.432	48553.432	0	20551.66885	5.814238436	0
Sacramento	2026	T6 Instate Delivery Class 6	Aggregate	Aggregate	Electricity	21.3376055	860.7894293	0	860.7894293	304.4876304	0	919.5633387
Sacramento	2026	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	196.9239843	10570.88137	10570.88137	0	2810.105256	1.245761526	0
Sacramento	2026	T6 Instate Delivery Class 7	Aggregate	Aggregate	Electricity	1.721676702	84.45301997	0	84.45301997	24.56832654	0	90.21939439
Sacramento	2026	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	2.840340379	156.5537799	156.5537799	0	40.53165721	0.022567988	0
Sacramento	2026	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	1078.20391	44875.58238	44875.58238	0	12464.0372	5.201351748	0
Sacramento	2026	T6 Instate Other Class 4	Aggregate	Aggregate	Electricity	17.85644542	848.5404023	0	848.5404023	206.420509	0	899.5216317
Sacramento	2026	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	2924.535726	125880.977	125880.977	0	33807.63299	14.64913388	0
Sacramento	2026	T6 Instate Other Class 5	Aggregate	Aggregate	Electricity	43.05612931	2068.178499	0	2068.178499	497.7288548	0	2192.43691
Sacramento	2026	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	2017.72226	85746.39927	85746.39927	0	23324.86933	9.951230003	0
Sacramento	2026	T6 Instate Other Class 6	Aggregate	Aggregate	Electricity	31.16196318	1459.699349	0	1459.699349	360.2322943	0	1547.399672
Sacramento	2026	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	984.4662083	44110.94381	44110.94381	0	11380.42937	5.019894149	0
Sacramento	2026	T6 Instate Other Class 7	Aggregate	Aggregate	Electricity	11.03034231	756.4048426	0	756.4048426	127.5107571	0	801.8504675
Sacramento	2026	T6 Instate Other Class 7	Aggregate	Aggregate	Natural Gas	10.83297705	506.6852403	506.6852403	0	125.2292147	0.064965321	0
Sacramento	2026	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	10.39495506	511.6347408	511.6347408	0	120.1656805	0.058078893	0
Sacramento	2026	T6 Instate Tractor Class 6	Aggregate	Aggregate	Electricity	0.150177964	8.992728914	0	8.992728914	1.736057268	0	9.533021838
Sacramento	2026	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	662.3900016	39472.96229	39472.96229	0	7657.228418	4.266242973	0
Sacramento	2026	T6 Instate Tractor Class 7	Aggregate	Aggregate	Electricity	4.787124627	382.1740199	0	382.1740199	55.33916069	0	405.1354503
Sacramento	2026	T6 Instate Tractor Class 7	Aggregate	Aggregate	Natural Gas	8.425873141	513.1773162	513.1773162	0	97.40309351	0.064317522	0
Sacramento	2026	T6 OOS Class 4	Aggregate	Aggregate	Diesel	6.019706179	399.9573548	399.9573548	0	138.332848	0.043226443	0
Sacramento	2026	T6 OOS Class 5	Aggregate	Aggregate	Diesel	7.877770512	548.669569	548.669569	0	181.0311664	0.059482846	0
Sacramento	2026	T6 OOS Class 6	Aggregate	Aggregate	Diesel	27.73877292	1433.689281	1433.689281	0	637.4370018	0.152024796	0
Sacramento	2026	T6 OOS Class 7	Aggregate	Aggregate	Diesel	40.80334327	10424.70385	10424.70385	0	937.6608284	1.035209095	0
Sacramento	2026	T6 Public Class 4	Aggregate	Aggregate	Diesel	486.5608301	16982.15471	16982.15471	0	2496.057058	2.199563208	0
Sacramento	2026	T6 Public Class 4	Aggregate	Aggregate	Electricity	8.195221319	352.4256641	0	352.4256641	42.04148537	0	416.1796631
Sacramento	2026	T6 Public Class 4	Aggregate	Aggregate	Natural Gas	30.50305876	1273.747769	1273.747769	0	156.4806915	0.188257425	0
Sacramento	2026	T6 Public Class 5	Aggregate	Aggregate	Diesel	602.3571272	22063.47624	22063.47624	0	3090.092063	2.807981654	0
Sacramento	2026	T6 Public Class 5	Aggregate	Aggregate	Electricity	8.935806123	382.1845171	0	382.1845171	45.84068541	0	451.3219093
Sacramento	2026	T6 Public Class 5	Aggregate	Aggregate	Natural Gas	59.85121147	2411.02439	2411.02439	0	307.0367148	0.362987931	0
Sacramento	2026	T6 Public Class 6	Aggregate	Aggregate	Diesel	736.6914939	26120.07715	26120.07715	0	3779.227363	3.316558404	0
Sacramento	2026	T6 Public Class 6	Aggregate	Aggregate	Electricity	13.19272134	538.3773915	0	538.3773915	67.67866048	0	635.7701616
Sacramento	2026	T6 Public Class 6	Aggregate	Aggregate	Natural Gas	55.88732603	2304.921876	2304.921876	0	286.7019825	0.345420638	0
Sacramento	2026	T6 Public Class 7	Aggregate	Aggregate	Diesel	2488.69813	111417.7113	111417.7113	0	12767.02141	13.87751845	0
Sacramento	2026	T6 Public Class 7	Aggregate	Aggregate	Electricity	43.90988549	2739.942351	0	2739.942351	225.2577126	0	3235.599449
Sacramento	2026	T6 Public Class 7	Aggregate	Aggregate	Natural Gas	169.2696121	9011.991262	9011.991262	0	868.3531101	1.294325975	0
Sacramento	2026	T6 Utility Class 5	Aggregate	Aggregate	Diesel	40.46037903	1634.151976	1634.151976	0	517.8928516	0.182794116	0
Sacramento	2026	T6 Utility Class 5	Aggregate	Aggregate	Electricity	1.177113807	51.07351736	0	51.07351736	15.06705673	0	57.20557688
Sacramento	2026	T6 Utility Class 5	Aggregate	Aggregate	Natural Gas	0.156707263	6.012920114	6.012920114	0	2.005852967	0.000814519	0
Sacramento	2026	T6 Utility Class 6	Aggregate	Aggregate	Diesel	7.673893828	308.7895437	308.7895437	0	98.22584099	0.034438154	0
Sacramento	2026	T6 Utility Class 6	Aggregate	Aggregate	Electricity	0.224747526	9.751819201	0	9.751819201	2.876768335	0	10.92265565
Sacramento	2026	T6 Utility Class 6	Aggregate	Aggregate	Natural Gas	0.027568337	1.06846204	1.06846204	0	0.35287471	0.000144152	0
Sacramento	2026	T6 Utility Class 7	Aggregate	Aggregate	Diesel	8.609692081	427.2498949	427.2498949	0	110.2040586	0.047274104	0
Sacramento	2026	T6 Utility Class 7	Aggregate	Aggregate	Electricity	0.256846595	15.59016177	0	15.59016177	3.287636411	0	17.46196941
Sacramento	2026	T6 Utility Class 7	Aggregate	Aggregate	Natural Gas	0.042625222	1.84337695	1.84337695	0	0.545602845	0.000248034	0
Sacramento	2026	T6TS	Aggregate	Aggregate	Gasoline	1903.640767	88998.34196	88998.34196	0	38088.04447	18.97044875	0
Sacramento	2026	T6TS	Aggregate	Aggregate	Electricity	14.9545781	1303.3502	0	1303.3502	299.2111987	0	1521.566102
Sacramento	2026	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	944.067804	190960.7055	190960.7055	0	21694.67814	30.29237639	0
Sacramento	2026	T7 CAIRP Class 8	Aggregate	Aggregate	Electricity	20.48343024	4095.007002	0	4095.007002	470.709227	0	7477.180067

Sacramento	2026 T7 CAIRP Class 8	Aggregate	Aggregate	Natural Gas	16.00862633	3223.636003	3223.636003	0	367.878233	0.57725741	0
Sacramento	2026 T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	835.5760283	228426.5886	228426.5886	0	19201.53713	34.89437454	0
Sacramento	2026 T7 NOOS Class 8	Aggregate	Aggregate	Diesel	356.6723128	83057.59299	83057.59299	0	8196.329747	13.065692	0
Sacramento	2026 T7 Other Port Class 8	Aggregate	Aggregate	Diesel	11.32242384	2158.385136	2158.385136	0	185.234854	0.357830914	0
Sacramento	2026 T7 Other Port Class 8	Aggregate	Aggregate	Electricity	0.088238037	22.31218564	0	22.31218564	1.443574288	0	40.60744686
Sacramento	2026 T7 POAK Class 8	Aggregate	Aggregate	Diesel	37.29725649	3757.618958	3757.618958	0	610.1831162	0.637245925	0
Sacramento	2026 T7 POAK Class 8	Aggregate	Aggregate	Electricity	0.357840542	32.30270691	0	32.30270691	5.854271264	0	58.78986825
Sacramento	2026 T7 Public Class 8	Aggregate	Aggregate	Diesel	4151.305876	177856.5839	177856.5839	0	21296.19914	33.47375916	0
Sacramento	2026 T7 Public Class 8	Aggregate	Aggregate	Electricity	50.6323713	3125.597222	0	3125.597222	259.7440648	0	6134.242605
Sacramento	2026 T7 Public Class 8	Aggregate	Aggregate	Natural Gas	70.34116703	3356.829565	3356.829565	0	360.8501869	0.714223454	0
Sacramento	2026 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Diesel	169.3382325	11665.57125	11665.57125	0	1595.16615	1.93486183	0
Sacramento	2026 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Electricity	4.91193035	394.1731069	0	394.1731069	46.2703839	0	718.638345
Sacramento	2026 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Natural Gas	4.057382854	282.4068018	282.4068018	0	38.22054649	0.047158408	0
Sacramento	2026 T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	517.6797551	29239.32883	29239.32883	0	4876.543293	5.018022419	0
Sacramento	2026 T7 Single Dump Class 8	Aggregate	Aggregate	Electricity	6.285306338	508.9431522	0	508.9431522	59.20758571	0	927.8818321
Sacramento	2026 T7 Single Dump Class 8	Aggregate	Aggregate	Natural Gas	15.59579878	829.3227783	829.3227783	0	146.9124245	0.155930575	0
Sacramento	2026 T7 Single Other Class 8	Aggregate	Aggregate	Diesel	1436.034329	77162.18368	77162.18368	0	13527.44338	13.00972387	0
Sacramento	2026 T7 Single Other Class 8	Aggregate	Aggregate	Electricity	22.00663242	1524.102421	0	1524.102421	207.3024774	0	2778.67369
Sacramento	2026 T7 Single Other Class 8	Aggregate	Aggregate	Natural Gas	41.24089581	2157.605255	2157.605255	0	388.4892385	0.385954917	0
Sacramento	2026 T7 SWCV Class 8	Aggregate	Aggregate	Diesel	263.6072934	17098.16549	17098.16549	0	1212.59355	7.201061966	0
Sacramento	2026 T7 SWCV Class 8	Aggregate	Aggregate	Electricity	10.62555179	677.9183088	0	677.9183088	48.87753825	0	1261.301387
Sacramento	2026 T7 SWCV Class 8	Aggregate	Aggregate	Natural Gas	645.7133562	41830.89324	41830.89324	0	2970.281438	8.781393495	0
Sacramento	2026 T7 Tractor Class 8	Aggregate	Aggregate	Diesel	1078.537414	78676.08575	78676.08575	0	15671.14863	12.68992142	0
Sacramento	2026 T7 Tractor Class 8	Aggregate	Aggregate	Electricity	10.00988609	817.7187616	0	817.7187616	145.4436448	0	1488.828563
Sacramento	2026 T7 Tractor Class 8	Aggregate	Aggregate	Natural Gas	11.80534026	816.3747502	816.3747502	0	171.5315939	0.15223753	0
Sacramento	2026 T7 Utility Class 8	Aggregate	Aggregate	Diesel	30.09060645	1315.587052	1315.587052	0	385.1597625	0.224192357	0
Sacramento	2026 T7 Utility Class 8	Aggregate	Aggregate	Electricity	0.315515578	19.83571504	0	19.83571504	4.038599395	0	37.34665022
Sacramento	2026 T7IS	Aggregate	Aggregate	Gasoline	5.564040018	167.8007511	167.8007511	0	111.3253127	0.046390148	0
Sacramento	2026 T7IS	Aggregate	Aggregate	Electricity	0.013175005	3.616381296	0	3.616381296	0.263605508	0	7.266918323
Sacramento	2026 UBUS	Aggregate	Aggregate	Gasoline	189.1264912	14347.73029	14347.73029	0	756.5059648	3.053781283	0
Sacramento	2026 UBUS	Aggregate	Aggregate	Diesel	6.215216529	294.3637228	294.3637228	0	24.86086612	0.03113556	0
Sacramento	2026 UBUS	Aggregate	Aggregate	Electricity	4.985657859	521.0100511	0	521.0100511	19.94263144	0	908.2477075
Sacramento	2026 UBUS	Aggregate	Aggregate	Natural Gas	359.717215	34419.26063	34419.26063	0	1438.86886	5.783625779	0

EMFAC Fuel Usage: Year 2027

Vehicle type	GAS			DSL			NG			ELEC		
	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	kWh/day	Miles/kWh
All other buses	0	0	0.00	24,759	2,742	9.03	3,719	485	7.67	0	0	0.00
LDA	18,288,698	597,248	30.62	34,097	772	44.19	0	0	0.00	1,887,317	697,707	2.71
LDT1	1,461,611	57,495	25.42	62	3	24.48	0	0	0.00	12,051	4,372	2.76
LDT2	9,202,452	366,569	25.10	31,582	918	34.41	0	0	0.00	149,691	52,275	2.86
LHD1	719,961	73,059	9.85	478,641	29,753	16.09	0	0	0.00	27,203	17,711	1.54
LHD2	98,746	11,181	8.83	198,032	14,741	13.43	0	0	0.00	6,589	4,220	1.56
MCY	142,503	3,534	40.32	0	0	0.00	0	0	0.00	0	0	0.00
MDV	5,354,704	261,305	20.49	88,763	3,509	25.30	0	0	0.00	127,510	45,923	2.78
MH	21,938	4,970	4.41	9,585	1,021	9.39	0	0	0.00	0	0	0.00
Motor coach	0	0	0.00	13,023	2,298	5.67	0	0	0.00	0	0	0.00
OBUS	19,096	3,956	4.83	0	0	0.00	0	0	0.00	397	440	0.90
PTO	0	0	0.00	24,171	4,713	5.13	0	0	0.00	784	1,625	0.48
SBUS	6,752	661	10.21	21,273	2,596	8.19	564	92	6.11	492	518	0.95
T6	84,400	17,816	4.74	653,189	76,418	8.55	16,922	2,450	6.91	21,420	23,723	0.90
T7	162	43	3.74	909,916	151,568	6.00	53,914	10,973	4.91	18,031	33,618	0.54
UBUS	14,584	3,104	4.70	288	31	9.41	34,886	5,840	5.97	1,123	1,958	0.57
Total	**35,415,607**	**1,400,943**	**25.28**	**2,487,381**	**291,082**	**8.55**	**110,005**	**19,841**	**5.54**	**2,252,607**	**884,090**	**2.55**

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Fuel Consumptio	Energy Consumpt
Sacramento	2027	All Other Buses	Aggregate	Aggregate	Diesel	478.4414247	24758.66413	24758.66413	0	4258.12868	2.741857105	0
Sacramento	2027	All Other Buses	Aggregate	Aggregate	Natural Gas	65.42990411	3719.471276	3719.471276	0	582.3261466	0.485181645	0
Sacramento	2027	LDA	Aggregate	Aggregate	Gasoline	490113.3762	17964906.32	17964906.32	0	2251991.096	585.645815	0
Sacramento	2027	LDA	Aggregate	Aggregate	Diesel	1299.90312	34097.40069	34097.40069	0	5352.033944	0.771590005	0
Sacramento	2027	LDA	Aggregate	Aggregate	Electricity	32316.4729	1519061.339	0	1519061.339	159179.1981	0	586483.0517
Sacramento	2027	LDA	Aggregate	Aggregate	Plug-in Hybrid	16022.74193	692047.5349	323791.898	368255.637	66254.03787	11.60205289	111224.1781
Sacramento	2027	LDT1	Aggregate	Aggregate	Gasoline	46145.10231	1459168.518	1459168.518	0	200762.7979	57.40706667	0
Sacramento	2027	LDT1	Aggregate	Aggregate	Diesel	6.268628847	61.79429294	61.79429294	0	17.92706284	0.002524205	0
Sacramento	2027	LDT1	Aggregate	Aggregate	Electricity	202.2708605	8711.05897	0	8711.05897	962.646497	0	3363.187725
Sacramento	2027	LDT1	Aggregate	Aggregate	Plug-in Hybrid	120.128406	5782.182312	2442.627133	3339.555178	496.7309588	0.087825142	1008.645199
Sacramento	2027	LDT2	Aggregate	Aggregate	Gasoline	245296.243	9150148.358	9150148.358	0	1134720.736	364.6814504	0
Sacramento	2027	LDT2	Aggregate	Aggregate	Diesel	799.5773891	31582.05861	31582.05861	0	3783.397321	0.917728314	0
Sacramento	2027	LDT2	Aggregate	Aggregate	Electricity	2411.405287	84039.70777	0	84039.70777	12140.33424	0	32446.26337
Sacramento	2027	LDT2	Aggregate	Aggregate	Plug-in Hybrid	2588.179649	117954.0499	52303.17478	65650.87516	10702.12285	1.887605195	19828.52101
Sacramento	2027	LHD1	Aggregate	Aggregate	Gasoline	20039.95657	719961.2624	719961.2624	0	298565.4933	73.05940747	0
Sacramento	2027	LHD1	Aggregate	Aggregate	Diesel	13469.47691	478640.8065	478640.8065	0	169429.0749	29.7530763	0
Sacramento	2027	LHD1	Aggregate	Aggregate	Electricity	418.2481119	27203.08537	0	27203.08537	5855.149711	0	17710.7643
Sacramento	2027	LHD2	Aggregate	Aggregate	Gasoline	2770.494879	98745.53544	98745.53544	0	41276.24566	11.18060951	0
Sacramento	2027	LHD2	Aggregate	Aggregate	Diesel	5332.863506	198031.6886	198031.6886	0	67080.71416	14.7412574	0
Sacramento	2027	LHD2	Aggregate	Aggregate	Electricity	106.2251064	6589.205189	0	6589.205189	1409.037048	0	4219.904754
Sacramento	2027	MCY	Aggregate	Aggregate	Gasoline	26693.55782	142502.9561	142502.9561	0	53387.11564	3.534408988	0
Sacramento	2027	MDV	Aggregate	Aggregate	Gasoline	152705.4861	5322875.849	5322875.849	0	693436.3268	260.1428386	0
Sacramento	2027	MDV	Aggregate	Aggregate	Diesel	2489.599289	88763.47568	88763.47568	0	11442.91861	3.508757168	0
Sacramento	2027	MDV	Aggregate	Aggregate	Electricity	2534.271112	88174.35435	0	88174.35435	12752.75719	0	34042.5782
Sacramento	2027	MDV	Aggregate	Aggregate	Plug-in Hybrid	1599.454787	71163.77003	31828.1652	39335.60483	6613.745546	1.162359069	11880.52505
Sacramento	2027	MH	Aggregate	Aggregate	Gasoline	2431.975047	21937.92587	21937.92587	0	243.2947837	4.970328521	0
Sacramento	2027	MH	Aggregate	Aggregate	Diesel	1070.832729	9584.895986	9584.895986	0	107.0832729	1.021007531	0
Sacramento	2027	Motor Coach	Aggregate	Aggregate	Diesel	104.1822901	13023.14037	13023.14037	0	2394.109027	2.297776106	0
Sacramento	2027	OBUS	Aggregate	Aggregate	Gasoline	472.1950121	19096.46064	19096.46064	0	9447.677803	3.956378022	0
Sacramento	2027	OBUS	Aggregate	Aggregate	Electricity	4.603332875	396.9139267	0	396.9139267	92.10348416	0	440.2903431
Sacramento	2027	PTO	Aggregate	Aggregate	Diesel	0	24170.5234	24170.5234	0	0	4.713423328	0
Sacramento	2027	PTO	Aggregate	Aggregate	Electricity	0	784.4722138	0	784.4722138	0	0	1625.048914
Sacramento	2027	SBUS	Aggregate	Aggregate	Gasoline	127.9229301	6752.181628	6752.181628	0	511.6917204	0.661111711	0
Sacramento	2027	SBUS	Aggregate	Aggregate	Diesel	975.8236826	21273.33967	21273.33967	0	14129.92692	2.596005663	0
Sacramento	2027	SBUS	Aggregate	Aggregate	Electricity	16.59068017	491.5494659	0	491.5494659	216.87335	0	517.8255327
Sacramento	2027	SBUS	Aggregate	Aggregate	Natural Gas	22.01513656	563.6516628	563.6516628	0	318.7791774	0.092308027	0
Sacramento	2027	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	11.59049194	773.8555564	773.8555564	0	266.3495047	0.084644207	0
Sacramento	2027	T6 CAIRP Class 4	Aggregate	Aggregate	Electricity	0.421624084	34.19081733	0	34.19081733	9.688921451	0	37.14092154
Sacramento	2027	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	15.15289025	1065.317224	1065.317224	0	348.2134179	0.11676671	0
Sacramento	2027	T6 CAIRP Class 5	Aggregate	Aggregate	Electricity	0.4956113	43.17709443	0	43.17709443	11.38914767	0	46.90256628
Sacramento	2027	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	54.25847738	2747.25303	2747.25303	0	1246.85981	0.296466367	0
Sacramento	2027	T6 CAIRP Class 6	Aggregate	Aggregate	Electricity	2.625867042	149.274339	0	149.274339	60.34242462	0	162.154255
Sacramento	2027	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	87.30279873	17636.83474	17636.83474	0	2006.218315	1.747319113	0
Sacramento	2027	T6 CAIRP Class 7	Aggregate	Aggregate	Electricity	2.449659515	531.648981	0	531.648981	56.29317566	0	577.5215286
Sacramento	2027	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	748.2780093	25027.97569	25027.97569	0	10677.92719	2.9806045	0
Sacramento	2027	T6 Instate Delivery Class 4	Aggregate	Aggregate	Electricity	19.26309021	778.061949	0	778.061949	274.8842973	0	831.1873023
Sacramento	2027	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	350.7164624	11777.25495	11777.25495	0	5004.723919	1.403535369	0
Sacramento	2027	T6 Instate Delivery Class 5	Aggregate	Aggregate	Electricity	8.769872782	355.0012568	0	355.0012568	125.1460846	0	379.2404156
Sacramento	2027	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	1461.344302	48997.05659	48997.05659	0	20853.38319	5.833549006	0
Sacramento	2027	T6 Instate Delivery Class 6	Aggregate	Aggregate	Electricity	36.21074248	1451.85437	0	1451.85437	516.7272951	0	1550.98565
Sacramento	2027	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	203.5749356	10745.31085	10745.31085	0	2905.014331	1.264619519	0
Sacramento	2027	T6 Instate Delivery Class 7	Aggregate	Aggregate	Electricity	2.682636051	133.3460188	0	133.3460188	38.28121645	0	142.4507622
Sacramento	2027	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	2.942382054	159.6225548	159.6225548	0	41.98779191	0.02301435	0
Sacramento	2027	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	1094.473718	45221.68833	45221.68833	0	12652.11618	5.211230052	0
Sacramento	2027	T6 Instate Other Class 4	Aggregate	Aggregate	Electricity	30.70402199	1459.856626	0	1459.856626	354.9384942	0	1547.566399
Sacramento	2027	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	2990.929025	126972.5142	126972.5142	0	34575.13953	14.69145968	0
Sacramento	2027	T6 Instate Other Class 5	Aggregate	Aggregate	Electricity	76.07643272	3655.782031	0	3655.782031	879.4435623	0	3875.425388
Sacramento	2027	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	2056.653645	86472.91717	86472.91717	0	23774.91614	9.978598339	0
Sacramento	2027	T6 Instate Other Class 6	Aggregate	Aggregate	Electricity	54.48336106	2559.199033	0	2559.199033	629.8276539	0	2712.958492
Sacramento	2027	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	1025.143522	44581.92512	44581.92512	0	11850.65911	5.058259261	0
Sacramento	2027	T6 Instate Other Class 7	Aggregate	Aggregate	Electricity	18.14590369	1230.465689	0	1230.465689	209.7666466	0	1304.393405
Sacramento	2027	T6 Instate Other Class 7	Aggregate	Aggregate	Natural Gas	11.35861252	511.734709	511.734709	0	131.3055608	0.065715876	0
Sacramento	2027	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	10.62958581	514.9926202	514.9926202	0	122.878012	0.058150268	0
Sacramento	2027	T6 Instate Tractor Class 6	Aggregate	Aggregate	Electricity	0.269624595	16.53632241	0	16.53632241	3.116860322	0	17.52984263
Sacramento	2027	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	690.4889516	40033.60738	40033.60738	0	7982.052281	4.300245644	0
Sacramento	2027	T6 Instate Tractor Class 7	Aggregate	Aggregate	Electricity	8.198770471	662.3248177	0	662.3248177	94.77778664	0	702.1180124
Sacramento	2027	T6 Instate Tractor Class 7	Aggregate	Aggregate	Natural Gas	8.792338655	517.6577534	517.6577534	0	101.6394349	0.064876662	0
Sacramento	2027	T6 OOS Class 4	Aggregate	Aggregate	Diesel	6.130155965	408.3321035	408.3321035	0	140.8709841	0.043449348	0
Sacramento	2027	T6 OOS Class 5	Aggregate	Aggregate	Diesel	7.96392539	560.1582182	560.1582182	0	183.0110055	0.059850133	0
Sacramento	2027	T6 OOS Class 6	Aggregate	Aggregate	Diesel	28.9196759	1463.70945	1463.70945	0	664.5741521	0.152795792	0
Sacramento	2027	T6 OOS Class 7	Aggregate	Aggregate	Diesel	41.47874038	10642.98781	10642.98781	0	953.181454	1.038659893	0
Sacramento	2027	T6 Public Class 4	Aggregate	Aggregate	Diesel	478.782902	16873.1549	16873.1549	0	2456.156287	2.167152744	0
Sacramento	2027	T6 Public Class 4	Aggregate	Aggregate	Electricity	12.32427833	529.4994283	0	529.4994283	63.22354783	0	625.28617
Sacramento	2027	T6 Public Class 4	Aggregate	Aggregate	Natural Gas	32.55331116	1347.986536	1347.986536	0	166.9984863	0.199075962	0
Sacramento	2027	T6 Public Class 5	Aggregate	Aggregate	Diesel	603.4860489	21952.73426	21952.73426	0	3095.883431	2.779653571	0
Sacramento	2027	T6 Public Class 5	Aggregate	Aggregate	Electricity	14.6159784	624.8191876	0	624.8191876	74.97996918	0	737.8493268
Sacramento	2027	T6 Public Class 5	Aggregate	Aggregate	Natural Gas	62.07212996	2469.230585	2469.230585	0	318.4300267	0.371564553	0
Sacramento	2027	T6 Public Class 6	Aggregate	Aggregate	Diesel	725.6529676	25927.167	25927.167	0	3722.599724	3.26491627	0
Sacramento	2027	T6 Public Class 6	Aggregate	Aggregate	Electricity	20.36856721	833.896843	0	833.896843	104.4907498	0	984.7492466
Sacramento	2027	T6 Public Class 6	Aggregate	Aggregate	Natural Gas	59.25094465	2423.818602	2423.818602	0	303.9573461	0.362675572	0
Sacramento	2027	T6 Public Class 7	Aggregate	Aggregate	Diesel	2454.710704	110447.3791	110447.3791	0	12592.66591	13.62550507	0
Sacramento	2027	T6 Public Class 7	Aggregate	Aggregate	Electricity	67.79091281	4180.465124	0	4180.465124	347.7673827	0	4936.713594
Sacramento	2027	T6 Public Class 7	Aggregate	Aggregate	Natural Gas	182.3856177	9483.777226	9483.777226	0	935.6382188	1.362221012	0
Sacramento	2027	T6 Utility Class 5	Aggregate	Aggregate	Diesel	40.14460426	1617.043269	1617.043269	0	513.8509345	0.179913833	0

Sacramento	2027 T6 Utility Class 5	Aggregate	Aggregate	Electricity	1.882260243	81.55081367	0	81.55081367	24.09293111	0	91.34208064
Sacramento	2027 T6 Utility Class 5	Aggregate	Aggregate	Natural Gas	0.146246915	5.578579338	5.578579338	0	1.871960517	0.000750687	0
Sacramento	2027 T6 Utility Class 6	Aggregate	Aggregate	Diesel	7.607480608	305.4818125	305.4818125	0	97.37575178	0.033892113	0
Sacramento	2027 T6 Utility Class 6	Aggregate	Aggregate	Electricity	0.359319596	15.56827598	0	15.56827598	4.599290823	0	17.43745594
Sacramento	2027 T6 Utility Class 6	Aggregate	Aggregate	Natural Gas	0.026029402	1.00404765	1.00404765	0	0.333176346	0.000134559	0
Sacramento	2027 T6 Utility Class 7	Aggregate	Aggregate	Diesel	8.492488309	421.9675703	421.9675703	0	108.7038504	0.046427468	0
Sacramento	2027 T6 Utility Class 7	Aggregate	Aggregate	Electricity	0.406880614	24.43027243	0	24.43027243	5.208071859	0	27.36345371
Sacramento	2027 T6 Utility Class 7	Aggregate	Aggregate	Natural Gas	0.038687767	1.686439636	1.686439636	0	0.495203414	0.000225323	0
Sacramento	2027 T6TS	Aggregate	Aggregate	Gasoline	1815.700992	84399.82455	84399.82455	0	36328.54545	17.81635012	0
Sacramento	2027 T6TS	Aggregate	Aggregate	Electricity	23.98409155	2068.797371	0	2068.797371	479.8737038	0	2415.169731
Sacramento	2027 T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	955.9471897	192857.9256	192857.9256	0	21967.66642	30.0920036	0
Sacramento	2027 T7 CAIRP Class 8	Aggregate	Aggregate	Electricity	32.29681461	6593.043215	0	6593.043215	742.1807997	0	12038.40953
Sacramento	2027 T7 CAIRP Class 8	Aggregate	Aggregate	Natural Gas	15.85361764	3142.085652	3142.085652	0	364.3161333	0.559446315	0
Sacramento	2027 T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	851.208872	233396.1688	233396.1688	0	19560.77988	34.77879797	0
Sacramento	2027 T7 NOOS Class 8	Aggregate	Aggregate	Diesel	365.6070299	84864.56901	84864.56901	0	8401.649547	13.05800623	0
Sacramento	2027 T7 Other Port Class 8	Aggregate	Aggregate	Diesel	11.19118177	2219.313989	2219.313989	0	183.0877338	0.363556861	0
Sacramento	2027 T7 Other Port Class 8	Aggregate	Aggregate	Electricity	0.152468425	41.12038298	0	41.12038298	2.494383427	0	74.8377498
Sacramento	2027 T7 POAK Class 8	Aggregate	Aggregate	Diesel	36.98521494	3792.734625	3792.734625	0	605.0781164	0.637479003	0
Sacramento	2027 T7 POAK Class 8	Aggregate	Aggregate	Electricity	0.58612276	54.92822857	0	54.92822857	9.58896835	0	99.96757638
Sacramento	2027 T7 Public Class 8	Aggregate	Aggregate	Diesel	4146.165274	177352.3216	177352.3216	0	21269.82786	33.10121688	0
Sacramento	2027 T7 Public Class 8	Aggregate	Aggregate	Electricity	80.80330116	4930.927581	0	4930.927581	414.5209349	0	9677.352487
Sacramento	2027 T7 Public Class 8	Aggregate	Aggregate	Natural Gas	73.71457901	3465.548862	3465.548862	0	378.1557903	0.734041557	0
Sacramento	2027 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Diesel	168.0993166	11481.92582	11481.92582	0	1583.495563	1.884583501	0
Sacramento	2027 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Electricity	7.728412442	616.6368467	0	616.6368467	72.8016452	0	1124.224041
Sacramento	2027 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Natural Gas	4.138408391	288.4177324	288.4177324	0	38.98380704	0.047685192	0
Sacramento	2027 T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	525.9906557	28977.97166	28977.97166	0	4954.831976	4.9446283	0
Sacramento	2027 T7 Single Dump Class 8	Aggregate	Aggregate	Electricity	11.05801107	891.8516307	0	891.8516307	104.1664642	0	1625.983023
Sacramento	2027 T7 Single Dump Class 8	Aggregate	Aggregate	Natural Gas	15.79685595	818.8355898	818.8355898	0	148.806383	0.152585055	0
Sacramento	2027 T7 Single Other Class 8	Aggregate	Aggregate	Diesel	1490.04057	77969.69081	77969.69081	0	14036.18217	13.07286017	0
Sacramento	2027 T7 Single Other Class 8	Aggregate	Aggregate	Electricity	35.64481546	2442.270394	0	2442.270394	335.7741616	0	4452.635463
Sacramento	2027 T7 Single Other Class 8	Aggregate	Aggregate	Natural Gas	42.88888167	2190.745553	2190.745553	0	404.0132653	0.389393648	0
Sacramento	2027 T7 SWCV Class 8	Aggregate	Aggregate	Diesel	243.2836749	15780.19571	15780.19571	0	1119.104904	6.637752982	0
Sacramento	2027 T7 SWCV Class 8	Aggregate	Aggregate	Electricity	16.98896644	1084.367274	0	1084.367274	78.14924561	0	2017.520296
Sacramento	2027 T7 SWCV Class 8	Aggregate	Aggregate	Natural Gas	666.7247543	43198.27614	43198.27614	0	3066.93387	8.939945111	0
Sacramento	2027 T7 Tractor Class 8	Aggregate	Aggregate	Diesel	1125.059595	79910.70976	79910.70976	0	16347.11592	12.77488159	0
Sacramento	2027 T7 Tractor Class 8	Aggregate	Aggregate	Electricity	16.38350024	1336.693145	0	1336.693145	238.0522584	0	2433.730308
Sacramento	2027 T7 Tractor Class 8	Aggregate	Aggregate	Natural Gas	11.9961797	809.9804752	809.9804752	0	174.3044911	0.150107829	0
Sacramento	2027 T7 Utility Class 8	Aggregate	Aggregate	Diesel	30.37372447	1312.592644	1312.592644	0	388.7836732	0.222485585	0
Sacramento	2027 T7 Utility Class 8	Aggregate	Aggregate	Electricity	0.532725252	33.04316562	0	33.04316562	6.818883222	0	62.2136155
Sacramento	2027 T7IS	Aggregate	Aggregate	Gasoline	4.758586347	161.9885347	161.9885347	0	95.20979563	0.043331032	0
Sacramento	2027 T7IS	Aggregate	Aggregate	Electricity	0.021334042	5.736909772	0	5.736909772	0.426851513	0	11.52800309
Sacramento	2027 UBUS	Aggregate	Aggregate	Gasoline	192.1981157	14584.17599	14584.17599	0	768.7924627	3.104148484	0
Sacramento	2027 UBUS	Aggregate	Aggregate	Diesel	6.132636899	288.2077419	288.2077419	0	24.5305476	0.030617741	0
Sacramento	2027 UBUS	Aggregate	Aggregate	Electricity	11.83112454	1123.033409	0	1123.033409	47.32449816	0	1957.721386
Sacramento	2027 UBUS	Aggregate	Aggregate	Natural Gas	364.5593899	34886.317	34886.317	0	1458.23756	5.840348245	0

EMFAC Fuel Usage: Year 2028

Vehicle type	GAS			DSL			NG			ELEC		
	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	kWh/day	Miles/kWh
All other buses	0	0	0.00	25,000	2,737	9.13	3,684	476	7.74	0	0	0.00
LDA	18,300,547	585,143	31.28	30,714	684	44.88	0	0	0.00	2,041,733	755,414	2.70
LDT1	1,423,430	54,928	25.91	41	2	25.09	0	0	0.00	14,545	5,263	2.76
LDT2	9,334,569	363,397	25.69	32,392	922	35.15	0	0	0.00	175,143	61,350	2.85
LHD1	699,123	70,133	9.97	464,412	28,802	16.12	0	0	0.00	41,720	27,164	1.54
LHD2	95,187	10,677	8.91	194,724	14,419	13.50	0	0	0.00	10,097	6,467	1.56
MCY	141,939	3,501	40.54	0	0	0.00	0	0	0.00	0	0	0.00
MDV	5,374,303	256,091	20.99	86,281	3,354	25.72	0	0	0.00	148,103	53,420	2.77
MH	20,965	4,749	4.41	9,474	1,010	9.38	0	0	0.00	0	0	0.00
Motor coach	0	0	0.00	13,094	2,285	5.73	0	0	0.00	0	0	0.00
OBUS	17,710	3,641	4.86	0	0	0.00	0	0	0.00	617	684	0.90
PTO	0	0	0.00	24,116	4,648	5.19	0	0	0.00	1,236	2,560	0.48
SBUS	6,912	675	10.25	21,023	2,554	8.23	582	95	6.12	791	833	0.95
T6	79,749	16,673	4.78	652,770	75,838	8.61	17,469	2,530	6.90	34,139	37,741	0.90
T7	157	41	3.86	916,344	149,891	6.11	54,913	11,056	4.97	27,644	51,558	0.54
UBUS	14,818	3,154	4.70	282	30	9.37	34,602	5,718	6.05	2,479	4,321	0.57
Total	**35,509,411**	**1,372,804**	**25.87**	**2,470,667**	**287,176**	**8.60**	**111,250**	**19,876**	**5.60**	**2,498,247**	**1,006,775**	**2.48**

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2028
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Fuel Consumptio	Energy Consumption
Sacramento	2028	All Other Buses	Aggregate	Aggregate	Diesel	485.9239591	24999.68837	24999.68837	0	4324.723236	2.73742375	0
Sacramento	2028	All Other Buses	Aggregate	Aggregate	Natural Gas	66.33561041	3684.00209	3684.00209	0	590.3869326	0.475888753	0
Sacramento	2028	LDA	Aggregate	Aggregate	Gasoline	490168.1273	17967218.11	17967218.11	0	2251477.259	573.1594577	0
Sacramento	2028	LDA	Aggregate	Aggregate	Diesel	1162.295927	30714.13158	30714.13158	0	4805.610233	0.684434188	0
Sacramento	2028	LDA	Aggregate	Aggregate	Electricity	35590.57632	1650745.235	0	1650745.235	174533.4954	0	637323.904
Sacramento	2028	LDA	Aggregate	Aggregate	Plug-in Hybrid	16982.23317	724317.04	333329.335	390987.705	70221.53415	11.98378432	118089.9402
Sacramento	2028	LDT1	Aggregate	Aggregate	Gasoline	44959.46674	1420412.946	1420412.946	0	195437.0041	54.81920372	0
Sacramento	2028	LDT1	Aggregate	Aggregate	Diesel	3.807815278	40.57065225	40.57065225	0	11.08988502	0.001617004	0
Sacramento	2028	LDT1	Aggregate	Aggregate	Electricity	235.0154543	10355.86673	0	10355.86673	1127.056413	0	3998.219275
Sacramento	2028	LDT1	Aggregate	Aggregate	Plug-in Hybrid	151.378797	7206.231233	3017.076299	4189.154934	625.9513255	0.108811369	1265.249647
Sacramento	2028	LDT2	Aggregate	Aggregate	Gasoline	249195.6027	9276498.938	9276498.938	0	1151664.488	361.2943631	0
Sacramento	2028	LDT2	Aggregate	Aggregate	Diesel	825.6901458	32391.9091	32391.9091	0	3897.084261	0.921554144	0
Sacramento	2028	LDT2	Aggregate	Aggregate	Electricity	2925.657584	100546.4886	0	100546.4886	14663.64178	0	38819.24316
Sacramento	2028	LDT2	Aggregate	Aggregate	Plug-in Hybrid	2954.136825	132666.4236	58070.14325	74596.28034	12215.35577	2.102745487	22530.29999
Sacramento	2028	LHD1	Aggregate	Aggregate	Gasoline	19547.60282	699123.4566	699123.4566	0	291230.1561	70.13270056	0
Sacramento	2028	LHD1	Aggregate	Aggregate	Diesel	13131.43325	464412.1145	464412.1145	0	165176.911	28.8019549	0
Sacramento	2028	LHD1	Aggregate	Aggregate	Electricity	657.9551004	41720.02544	0	41720.02544	9213.043674	0	27163.9573
Sacramento	2028	LHD2	Aggregate	Aggregate	Gasoline	2693.110936	95186.85863	95186.85863	0	40123.34022	10.67727854	0
Sacramento	2028	LHD2	Aggregate	Aggregate	Diesel	5299.078818	194724.1605	194724.1605	0	66655.74529	14.41896929	0
Sacramento	2028	LHD2	Aggregate	Aggregate	Electricity	166.8014207	10097.38721	0	10097.38721	2212.46656	0	6466.633524
Sacramento	2028	MCY	Aggregate	Aggregate	Gasoline	26721.97771	141939.4496	141939.4496	0	53443.95543	3.501410947	0
Sacramento	2028	MDV	Aggregate	Aggregate	Gasoline	153063.5365	5339114.491	5339114.491	0	694864.838	254.8014848	0
Sacramento	2028	MDV	Aggregate	Aggregate	Diesel	2458.378389	86281.17396	86281.17396	0	11246.8921	3.35401234	0
Sacramento	2028	MDV	Aggregate	Aggregate	Electricity	3016.288678	103368.7003	0	103368.7003	15104.35675	0	39908.84981
Sacramento	2028	MDV	Aggregate	Aggregate	Plug-in Hybrid	1817.684865	79923.34036	35189.00164	44734.33872	7516.126916	1.289484756	13511.10359
Sacramento	2028	MH	Aggregate	Aggregate	Gasoline	2312.09966	20964.58295	20964.58295	0	231.30245	4.749203177	0
Sacramento	2028	MH	Aggregate	Aggregate	Diesel	1061.491178	9474.313914	9474.313914	0	106.1491178	1.009658833	0
Sacramento	2028	Motor Coach	Aggregate	Aggregate	Diesel	107.5842684	13094.37912	13094.37912	0	2472.286487	2.284884309	0
Sacramento	2028	OBUS	Aggregate	Aggregate	Gasoline	451.3776517	17710.34129	17710.34129	0	9031.164054	3.641351285	0
Sacramento	2028	OBUS	Aggregate	Aggregate	Electricity	7.206726834	616.6580894	0	616.6580894	144.1921905	0	684.0490682
Sacramento	2028	PTO	Aggregate	Aggregate	Diesel	0	24115.6873	24115.6873	0	0	4.647982671	0
Sacramento	2028	PTO	Aggregate	Aggregate	Electricity	0	1235.739831	0	1235.739831	0	0	2559.858252
Sacramento	2028	SBUS	Aggregate	Aggregate	Gasoline	130.9634768	6912.292085	6912.292085	0	523.8539073	0.67455706	0
Sacramento	2028	SBUS	Aggregate	Aggregate	Diesel	969.1504564	21023.26263	21023.26263	0	14033.29861	2.554280652	0
Sacramento	2028	SBUS	Aggregate	Aggregate	Electricity	26.6408739	790.9174439	0	790.9174439	348.9593057	0	833.1964027
Sacramento	2028	SBUS	Aggregate	Aggregate	Natural Gas	22.94964781	582.0462679	582.0462679	0	332.3109003	0.095159324	0
Sacramento	2028	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	11.51500994	770.9571017	770.9571017	0	264.6149285	0.083796627	0
Sacramento	2028	T6 CAIRP Class 4	Aggregate	Aggregate	Electricity	0.661326541	54.00903845	0	54.00903845	15.19728392	0	58.66912861
Sacramento	2028	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	14.96223006	1062.471803	1062.471803	0	343.8320469	0.11575564	0
Sacramento	2028	T6 CAIRP Class 5	Aggregate	Aggregate	Electricity	0.783294561	69.23339298	0	69.23339298	18.00010902	0	75.2070941
Sacramento	2028	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	55.07918154	2729.460383	2729.460383	0	1265.719592	0.292948747	0
Sacramento	2028	T6 CAIRP Class 6	Aggregate	Aggregate	Electricity	4.042135532	227.7176718	0	227.7176718	92.88827452	0	247.365955
Sacramento	2028	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	88.35660784	17738.86121	17738.86121	0	2030.434848	1.733786607	0
Sacramento	2028	T6 CAIRP Class 7	Aggregate	Aggregate	Electricity	3.715144578	810.0542666	0	810.0542666	85.3740224	0	879.9486033
Sacramento	2028	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	753.2552234	25099.25994	25099.25994	0	10748.95204	2.971383225	0
Sacramento	2028	T6 Instate Delivery Class 4	Aggregate	Aggregate	Electricity	30.91821009	1247.132985	0	1247.132985	441.202858	0	1332.286076
Sacramento	2028	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	353.5482712	11813.30439	11813.30439	0	5045.13383	1.39958693	0
Sacramento	2028	T6 Instate Delivery Class 5	Aggregate	Aggregate	Electricity	14.17692533	572.990378	0	572.990378	202.3047245	0	612.1136333
Sacramento	2028	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	1473.307082	49151.30871	49151.30871	0	21024.09207	5.818749265	0
Sacramento	2028	T6 Instate Delivery Class 6	Aggregate	Aggregate	Electricity	58.70388819	2353.957206	0	2353.957206	837.7044845	0	2514.683236
Sacramento	2028	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	210.002802	10881.27975	10881.27975	0	2996.739984	1.278740508	0
Sacramento	2028	T6 Instate Delivery Class 7	Aggregate	Aggregate	Electricity	4.515604109	224.4585604	0	224.4585604	64.43767064	0	239.7843842
Sacramento	2028	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	3.07899205	163.6727868	163.6727868	0	43.93721655	0.023605813	0
Sacramento	2028	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	1104.888955	45263.25295	45263.25295	0	12772.51632	5.185275134	0
Sacramento	2028	T6 Instate Other Class 4	Aggregate	Aggregate	Electricity	50.15747067	2395.76169	0	2395.76169	579.8203609	0	2539.701656
Sacramento	2028	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	3038.729231	127212.2463	127212.2463	0	35127.70991	14.6315184	0
Sacramento	2028	T6 Instate Other Class 5	Aggregate	Aggregate	Electricity	127.6018696	6151.289287	0	6151.289287	1475.077613	0	6520.865431
Sacramento	2028	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	2083.99983	86630.17374	86630.17374	0	24091.03804	9.938053614	0
Sacramento	2028	T6 Instate Other Class 6	Aggregate	Aggregate	Electricity	90.2135073	4266.195141	0	4266.195141	1042.868144	0	4522.51278
Sacramento	2028	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	1061.42783	44817.09251	44817.09251	0	12270.10571	5.072294318	0
Sacramento	2028	T6 Instate Other Class 7	Aggregate	Aggregate	Electricity	28.85962016	1957.445984	0	1957.445984	333.6172091	0	2075.051465
Sacramento	2028	T6 Instate Other Class 7	Aggregate	Aggregate	Natural Gas	11.99884813	519.572674	519.572674	0	138.7066844	0.066873733	0
Sacramento	2028	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	10.77423197	515.1003358	515.1003358	0	124.5501216	0.057841314	0
Sacramento	2028	T6 Instate Tractor Class 6	Aggregate	Aggregate	Electricity	0.444820963	27.55834613	0	27.55834613	5.142130332	0	29.21408151
Sacramento	2028	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	716.0433936	40509.82485	40509.82485	0	8277.46163	4.325543071	0
Sacramento	2028	T6 Instate Tractor Class 7	Aggregate	Aggregate	Electricity	12.84942645	1041.206712	0	1041.206712	148.5393697	0	1103.763542
Sacramento	2028	T6 Instate Tractor Class 7	Aggregate	Aggregate	Natural Gas	9.24652026	525.5339965	525.5339965	0	106.8897742	0.065887185	0
Sacramento	2028	T6 OOS Class 4	Aggregate	Aggregate	Diesel	6.212006173	416.8822115	416.8822115	0	142.7519019	0.043700471	0
Sacramento	2028	T6 OOS Class 5	Aggregate	Aggregate	Diesel	8.011759278	571.887429	571.887429	0	184.1102282	0.060227674	0
Sacramento	2028	T6 OOS Class 6	Aggregate	Aggregate	Diesel	30.0270385	1494.358214	1494.358214	0	690.0213448	0.153706852	0
Sacramento	2028	T6 OOS Class 7	Aggregate	Aggregate	Diesel	42.13935276	10865.84243	10865.84243	0	968.3623263	1.04159768	0
Sacramento	2028	T6 Public Class 4	Aggregate	Aggregate	Diesel	470.1734306	16689.08936	16689.08936	0	2411.989699	2.126668546	0
Sacramento	2028	T6 Public Class 4	Aggregate	Aggregate	Electricity	18.41327719	790.5870497	0	790.5870497	94.46011196	0	933.6046876
Sacramento	2028	T6 Public Class 4	Aggregate	Aggregate	Natural Gas	34.29222805	1406.306498	1406.306498	0	175.9191299	0.207630274	0
Sacramento	2028	T6 Public Class 5	Aggregate	Aggregate	Diesel	601.6826922	21729.21568	21729.21568	0	3086.632211	2.737711642	0
Sacramento	2028	T6 Public Class 5	Aggregate	Aggregate	Electricity	23.28324263	996.0371497	0	996.0371497	119.4430347	0	1176.220825
Sacramento	2028	T6 Public Class 5	Aggregate	Aggregate	Natural Gas	63.76632397	2502.318775	2502.318775	0	327.121242	0.376462917	0
Sacramento	2028	T6 Public Class 6	Aggregate	Aggregate	Diesel	712.3414607	25613.7632	25613.7632	0	3654.311694	3.199723364	0
Sacramento	2028	T6 Public Class 6	Aggregate	Aggregate	Electricity	30.77799509	1267.542484	0	1267.542484	157.8911148	0	1496.841625
Sacramento	2028	T6 Public Class 6	Aggregate	Aggregate	Natural Gas	62.05526931	2514.233106	2514.233106	0	318.3435316	0.375826888	0
Sacramento	2028	T6 Public Class 7	Aggregate	Aggregate	Diesel	2418.254387	108897.9205	108897.9205	0	12405.64501	13.31546474	0
Sacramento	2028	T6 Public Class 7	Aggregate	Aggregate	Electricity	102.3433784	6279.908902	0	6279.908902	525.021531	0	7415.947922
Sacramento	2028	T6 Public Class 7	Aggregate	Aggregate	Natural Gas	193.7780547	9829.629182	9829.629182	0	994.0814207	1.413099924	0
Sacramento	2028	T6 Utility Class 5	Aggregate	Aggregate	Diesel	39.44579894	1584.646524	1584.646524	0	504.9062264	0.175374906	0
Sacramento	2028	T6 Utility Class 5	Aggregate	Aggregate	Electricity	2.927108859	126.6617791	0	126.6617791	37.4669934	0	141.8692215
Sacramento	2028	T6 Utility Class 5	Aggregate	Aggregate	Natural Gas	0.13596655	5.165069002	5.165069002	0	1.740371839	0.000690511	0
Sacramento	2028	T6 Utility Class 6	Aggregate	Aggregate	Diesel	7.468844609	299.2984258	299.2984258	0	95.601211	0.033035593	0
Sacramento	2028	T6 Utility Class 6	Aggregate	Aggregate	Electricity	0.557859278	24.13992028	0	24.13992028	7.140598754	0	27.03824089
Sacramento	2028	T6 Utility Class 6	Aggregate	Aggregate	Natural Gas	0.024460927	0.940375248	0.940375248	0	0.313099864	0.000125222	0
Sacramento	2028	T6 Utility Class 7	Aggregate	Aggregate	Diesel	8.305814981	412.4394776	412.4394776	0	106.3144318	0.045137692	0
Sacramento	2028	T6 Utility Class 7	Aggregate	Aggregate	Electricity	0.622239798	37.33768971	0	37.33768971	7.964669412	0	41.82057923

Sacramento	2028 T6 Utility Class 7	Aggregate	Aggregate	Natural Gas	0.034991287	1.541385345	1.541385345	0	0.447888476	0.000204518	0
Sacramento	2028 T6TS	Aggregate	Aggregate	Gasoline	1727.598755	79748.5943	79748.5943	0	34565.7959	16.67346805	0
Sacramento	2028 T6TS	Aggregate	Aggregate	Electricity	37.60155216	3218.061835	0	3218.061835	752.3318557	0	3756.851998
Sacramento	2028 T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	965.0297221	194225.1698	194225.1698	0	22176.38301	29.78155166	0
Sacramento	2028 T7 CAIRP Class 8	Aggregate	Aggregate	Electricity	47.33137646	9812.834568	0	9812.834568	1087.675031	0	17917.51052
Sacramento	2028 T7 CAIRP Class 8	Aggregate	Aggregate	Natural Gas	15.10723583	2962.603781	2962.603781	0	347.1642795	0.5225596	0
Sacramento	2028 T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	866.699487	238473.8659	238473.8659	0	19916.75421	34.64137382	0
Sacramento	2028 T7 NOOS Class 8	Aggregate	Aggregate	Diesel	374.1814793	86710.85712	86710.85712	0	8598.690395	13.0386905	0
Sacramento	2028 T7 Other Port Class 8	Aggregate	Aggregate	Diesel	10.9100043	2272.608705	2272.608705	0	178.4876704	0.365943854	0
Sacramento	2028 T7 Other Port Class 8	Aggregate	Aggregate	Electricity	0.243792793	69.83219586	0	69.83219586	3.988450098	0	127.0923086
Sacramento	2028 T7 POAK Class 8	Aggregate	Aggregate	Diesel	36.4726957	3818.784364	3818.784364	0	596.6933017	0.633114606	0
Sacramento	2028 T7 POAK Class 8	Aggregate	Aggregate	Electricity	0.891730723	86.61967875	0	86.61967875	14.58871463	0	157.6449774
Sacramento	2028 T7 Public Class 8	Aggregate	Aggregate	Diesel	4124.615392	175875.7106	175875.7106	0	21159.27696	32.55728623	0
Sacramento	2028 T7 Public Class 8	Aggregate	Aggregate	Electricity	125.8933534	7665.109836	0	7665.109836	645.832903	0	15043.4109
Sacramento	2028 T7 Public Class 8	Aggregate	Aggregate	Natural Gas	76.68889731	3548.711553	3548.711553	0	393.4140432	0.748987743	0
Sacramento	2028 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Diesel	165.4939326	11207.25328	11207.25328	0	1558.952845	1.820888805	0
Sacramento	2028 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Electricity	11.81224088	946.1228169	0	946.1228169	111.2713091	0	1724.927762
Sacramento	2028 T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Natural Gas	4.180102585	290.952683	290.952683	0	39.37656635	0.047730897	0
Sacramento	2028 T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	531.9822804	28584.80888	28584.80888	0	5011.273082	4.84758718	0
Sacramento	2028 T7 Single Dump Class 8	Aggregate	Aggregate	Electricity	17.72541345	1440.223461	0	1440.223461	166.9733947	0	2625.749414
Sacramento	2028 T7 Single Dump Class 8	Aggregate	Aggregate	Natural Gas	15.9300679	805.7067537	805.7067537	0	150.0612397	0.148816648	0
Sacramento	2028 T7 Single Other Class 8	Aggregate	Aggregate	Diesel	1537.655398	78350.25609	78350.25609	0	14484.71385	13.0632653	0
Sacramento	2028 T7 Single Other Class 8	Aggregate	Aggregate	Electricity	56.07102221	3837.086514	0	3837.086514	528.1890292	0	6995.600293
Sacramento	2028 T7 Single Other Class 8	Aggregate	Aggregate	Natural Gas	44.35969155	2212.443873	2212.443873	0	417.8682944	0.39108423	0
Sacramento	2028 T7 SWCV Class 8	Aggregate	Aggregate	Diesel	223.6676262	14507.82888	14507.82888	0	1028.87108	6.095040974	0
Sacramento	2028 T7 SWCV Class 8	Aggregate	Aggregate	Electricity	26.56068065	1699.198485	0	1699.198485	122.179131	0	3161.444939
Sacramento	2028 T7 SWCV Class 8	Aggregate	Aggregate	Natural Gas	683.4598895	44289.34505	44289.34505	0	3143.915492	9.049171351	0
Sacramento	2028 T7 Tractor Class 8	Aggregate	Aggregate	Diesel	1167.343921	81014.79543	81014.79543	0	16961.50717	12.82691179	0
Sacramento	2028 T7 Tractor Class 8	Aggregate	Aggregate	Electricity	24.91373402	2024.779547	0	2024.779547	361.9965553	0	3686.535964
Sacramento	2028 T7 Tractor Class 8	Aggregate	Aggregate	Natural Gas	12.121116	803.0242225	803.0242225	0	176.1198155	0.147731096	0
Sacramento	2028 T7 Utility Class 8	Aggregate	Aggregate	Diesel	30.3777326	1301.972234	1301.972234	0	388.8349773	0.219497232	0
Sacramento	2028 T7 Utility Class 8	Aggregate	Aggregate	Electricity	0.865031676	53.37636862	0	53.37636862	11.07240545	0	100.4969352
Sacramento	2028 T7IS	Aggregate	Aggregate	Gasoline	4.022204413	157.0822675	157.0822675	0	80.4762659	0.040669919	0
Sacramento	2028 T7IS	Aggregate	Aggregate	Electricity	0.033887659	8.965484114	0	8.965484114	0.678024285	0	18.01564477
Sacramento	2028 UBUS	Aggregate	Aggregate	Gasoline	195.2350744	14818.02266	14818.02266	0	780.9402977	3.153958837	0
Sacramento	2028 UBUS	Aggregate	Aggregate	Diesel	6.050057269	282.0517609	282.0517609	0	24.20022908	0.030099922	0
Sacramento	2028 UBUS	Aggregate	Aggregate	Electricity	29.27330616	2478.816574	0	2478.816574	117.0932246	0	4321.182415
Sacramento	2028 UBUS	Aggregate	Aggregate	Natural Gas	358.8395155	34602.21259	34602.21259	0	1435.358062	5.718336971	0

EMFAC Fuel Usage: Year 2029

Vehicle type	GAS			DSL			NG			ELEC		
	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	Gallons/day	Miles/gallon	VMT/day	kWh/day	Miles/kWh
All other buses	0	0	0.00	25,246	2,737	9.22	3,640	466	7.81	0	0	0.00
LDA	18,318,003	575,311	31.84	27,592	607	45.48	0	0	0.00	2,187,495	809,992	2.70
LDT1	1,388,171	52,668	26.36	29	1	25.13	0	0	0.00	17,438	6,301	2.77
LDT2	9,453,761	360,986	26.19	33,141	927	35.76	0	0	0.00	201,701	70,846	2.85
LHD1	676,879	67,158	10.08	449,977	27,845	16.16	0	0	0.00	59,603	38,810	1.54
LHD2	91,689	10,195	8.99	190,977	14,071	13.57	0	0	0.00	14,417	9,233	1.56
MCY	141,431	3,477	40.68	0	0	0.00	0	0	0.00	0	0	0.00
MDV	5,395,375	251,923	21.42	83,808	3,212	26.09	0	0	0.00	168,848	60,977	2.77
MH	20,077	4,547	4.42	9,364	998	9.38	0	0	0.00	0	0	0.00
Motor coach	0	0	0.00	13,166	2,272	5.79	0	0	0.00	0	0	0.00
OBUS	16,384	3,344	4.90	0	0	0.00	0	0	0.00	910	1,010	0.90
PTO	0	0	0.00	23,922	4,561	5.25	0	0	0.00	1,833	3,798	0.48
SBUS	7,045	686	10.28	20,693	2,503	8.27	597	98	6.12	1,196	1,260	0.95
T6	75,185	15,572	4.83	648,690	74,862	8.67	17,800	2,581	6.90	51,304	56,628	0.91
T7	717	168	4.27	920,747	147,978	6.22	55,527	11,068	5.02	39,996	74,621	0.54
UBUS	57,379	6,674	8.60	226	22	10.18	140,681	41,867	3.36	8,591	15,006	0.57
Total	**35,642,094**	**1,352,708**	**26.35**	**2,447,579**	**282,596**	**8.66**	**218,244**	**56,080**	**3.89**	**2,753,332**	**1,148,483**	**2.40**

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2029
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	Fuel Consumption	Energy Consumption	
Sacramento	2029	All Other Buses	Aggregate	Aggregate	Diesel	492.0664487	25245.51134	25245.51134	0	4379.391394	2.737140839	0	
Sacramento	2029	All Other Buses	Aggregate	Aggregate	Natural Gas	67.2092741	3639.605573	3639.605573	0	598.1625395	0.46625873	0	
Sacramento	2029	LDA	Aggregate	Aggregate	Gasoline	490473.1371	17976947.08	17976947.08	0	2252213.879	563.0415477	0	
Sacramento	2029	LDA	Aggregate	Aggregate	Diesel	1027.252948	27592.18325	27592.18325	0	4278.921486	0.606721379	0	
Sacramento	2029	LDA	Aggregate	Aggregate	Electricity	38797.82773	1776309.082	0	1776309.082	189458.1443	0	685801.9124	
Sacramento	2029	LDA	Aggregate	Aggregate	Plug-in Hybrid	17855.94973	752241.2042	341055.667	411185.5371	73834.35213	12.26921365	124190.2875	
Sacramento	2029	LDT1	Aggregate	Aggregate	Gasoline	43812.45091	1384517.788	1384517.788	0	190392.6051	52.53599554	0	
Sacramento	2029	LDT1	Aggregate	Aggregate	Diesel	2.478705859	29.06065504	29.06065504	0	7.380741603	0.001156574	0	
Sacramento	2029	LDT1	Aggregate	Aggregate	Electricity	274.6555472	12308.47627	0	12308.47627	1324.960618	0	4752.087714	
Sacramento	2029	LDT1	Aggregate	Aggregate	Plug-in Hybrid	186.5040036	8783.083428	3653.221882	5129.861546	771.1940551	0.131800624	1549.371081	
Sacramento	2029	LDT2	Aggregate	Aggregate	Gasoline	252853.3979	9389933.851	9389933.851	0	1167411.79	358.6733908	0	
Sacramento	2029	LDT2	Aggregate	Aggregate	Diesel	850.5974667	33140.64322	33140.64322	0	4004.196978	0.926674153	0	
Sacramento	2029	LDT2	Aggregate	Aggregate	Electricity	3483.420013	118096.3509	0	118096.3509	17383.18443	0	45594.93848	
Sacramento	2029	LDT2	Aggregate	Aggregate	Plug-in Hybrid	3329.789513	147431.8291	63826.98578	83604.84332	13768.67964	2.312700657	25251.15451	
Sacramento	2029	LHD1	Aggregate	Aggregate	Gasoline	19003.13248	676879.4886	676879.4886	0	283118.3593	67.15798597	0	
Sacramento	2029	LHD1	Aggregate	Aggregate	Diesel	12792.24484	449977.1984	449977.1984	0	160910.3475	27.84502186	0	
Sacramento	2029	LHD1	Aggregate	Aggregate	Electricity	963.3033154	59603.25879	0	59603.25879	13491.17111	0	38809.88286	
Sacramento	2029	LHD2	Aggregate	Aggregate	Gasoline	2617.157863	91688.92466	91688.92466	0	38991.75259	10.1954032	0	
Sacramento	2029	LHD2	Aggregate	Aggregate	Diesel	5254.339854	190977.1375	190977.1375	0	66092.9854	14.07121603	0	
Sacramento	2029	LHD2	Aggregate	Aggregate	Electricity	243.8354371	14416.50782	0	14416.50782	3233.990763	0	9232.611389	
Sacramento	2029	MCY	Aggregate	Aggregate	Gasoline	26745.56007	141430.8346	141430.8346	0	53491.12013	3.476676937	0	
Sacramento	2029	MDV	Aggregate	Aggregate	Gasoline	153512.8167	5356836.544	5356836.544	0	696714.2484	250.5093704	0	
Sacramento	2029	MDV	Aggregate	Aggregate	Diesel	2419.638617	83808.34518	83808.34518	0	11028.79136	3.211772718	0	
Sacramento	2029	MDV	Aggregate	Aggregate	Electricity	3516.289715	118733.525	0	118733.525	17525.02083	0	45840.94026	
Sacramento	2029	MDV	Aggregate	Aggregate	Plug-in Hybrid	2041.121293	88652.83946	38538.43949	50114.39997	8440.036548	1.413280549	15136.04244	
Sacramento	2029	MH	Aggregate	Aggregate	Gasoline	2199.366168	20076.5118	20076.5118	0	220.0245915	4.547328138	0	
Sacramento	2029	MH	Aggregate	Aggregate	Diesel	1050.915063	9363.657754	9363.657754	0	105.0915063	0.998236094	0	
Sacramento	2029	Motor Coach	Aggregate	Aggregate	Diesel	110.2592342	13166.00756	13166.00756	0	2533.757202	2.2722367	0	
Sacramento	2029	OBUS	Aggregate	Aggregate	Gasoline	430.8083168	16383.85327	16383.85327	0	8619.612803	3.343757663	0	
Sacramento	2029	OBUS	Aggregate	Aggregate	Electricity	10.72499632	910.4638858	0	910.4638858	214.5857264	0	1009.963193	
Sacramento	2029	PTO	Aggregate	Aggregate	Diesel	0	23922.48527	23922.48527	0	0	4.560869579	0	
Sacramento	2029	PTO	Aggregate	Aggregate	Electricity	0	1833.31983	0	1833.31983	0	0	3797.756436	
Sacramento	2029	SBUS	Aggregate	Aggregate	Gasoline	133.5183445	7045.304264	7045.304264	0	534.073378	0.685535605	0	
Sacramento	2029	SBUS	Aggregate	Aggregate	Diesel	957.5700623	20693.06511	20693.06511	0	13865.6145	2.503132465	0	
Sacramento	2029	SBUS	Aggregate	Aggregate	Electricity	40.18910753	1196.324205	0	1196.324205	527.1893059	0	1260.274421	
Sacramento	2029	SBUS	Aggregate	Aggregate	Natural Gas	23.78422396	597.1586828	597.1586828	0	344.395563	0.097520669	0	
Sacramento	2029	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	11.30021055	760.4498171	760.4498171	0	259.6788383	0.082109096	0	
Sacramento	2029	T6 CAIRP Class 4	Aggregate	Aggregate	Electricity	0.993162409	81.79037508	0	81.79037508	22.82287217	0	88.84753687	
Sacramento	2029	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	14.61785994	1049.381812	1049.381812	0	335.9184215	0.113602828	0	
Sacramento	2029	T6 CAIRP Class 5	Aggregate	Aggregate	Electricity	1.182987488	106.0202765	0	106.0202765	27.18505247	0	115.1680796	
Sacramento	2029	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	55.26280221	2684.64978	2684.64978	0	1269.939195	0.286636365	0	
Sacramento	2029	T6 CAIRP Class 6	Aggregate	Aggregate	Electricity	5.971832675	334.4489341	0	334.4489341	137.2327149	0	363.3063667	
Sacramento	2029	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	88.94348617	17783.45303	17783.45303	0	2043.921312	1.715931325	0	
Sacramento	2029	T6 CAIRP Class 7	Aggregate	Aggregate	Electricity	5.278464401	1153.860125	0	1153.860125	121.2991119	0	1253.419243	
Sacramento	2029	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	753.0150092	24999.81147	24999.81147	0	10745.52418	2.942390246	0	
Sacramento	2029	T6 Instate Delivery Class 4	Aggregate	Aggregate	Electricity	47.14510369	1898.25132	0	1898.25132	672.7606297	0	2027.862172	
Sacramento	2029	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	353.922381	11769.72183	11769.72183	0	5050.472377	1.386421981	0	
Sacramento	2029	T6 Instate Delivery Class 5	Aggregate	Aggregate	Electricity	21.71594323	875.9308557	0	875.9308557	309.8865098	0	935.7386078	
Sacramento	2029	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	1474.715182	48971.05565	48971.05565	0	21044.18565	5.764968746	0	
Sacramento	2029	T6 Instate Delivery Class 6	Aggregate	Aggregate	Electricity	90.14911466	3612.684397	0	3612.684397	1286.427866	0	3859.355161	
Sacramento	2029	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	215.4972045	10998.45059	10998.45059	0	3075.145109	1.291068667	0	
Sacramento	2029	T6 Instate Delivery Class 7	Aggregate	Aggregate	Electricity	6.761599863	342.4488789	0	342.4488789	96.48803004	0	365.8309729	
Sacramento	2029	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	3.167839813	164.4829979	164.4829979	0	45.20507413	0.023745659	0	
Sacramento	2029	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	1108.021755	44957.01732	44957.01732	0	12808.73148	5.119084767	0	
Sacramento	2029	T6 Instate Other Class 4	Aggregate	Aggregate	Electricity	77.1724777	3699.934392	0	3699.934392	892.1138422	0	3922.230471	
Sacramento	2029	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	3064.432958	126481.1229	126481.1229	0	35424.84499	14.45814182	0	
Sacramento	2029	T6 Instate Other Class 5	Aggregate	Aggregate	Electricity	200.2071121	9674.925631	0	9674.925631	2314.394216	0	10256.20568	
Sacramento	2029	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	2096.865756	86123.25812	86123.25812	0	24239.76813	9.820072193	0	
Sacramento	2029	T6 Instate Other Class 6	Aggregate	Aggregate	Electricity	140.3732089	6676.399298	0	6676.399298	1622.714295	0	7077.524623	
Sacramento	2029	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	1093.414946	44809.24103	44809.24103	0	12639.87678	5.061990458	0	
Sacramento	2029	T6 Instate Other Class 7	Aggregate	Aggregate	Electricity	43.59915181	2956.010296	0	2956.010296	504.006195	0	3133.610606	
Sacramento	2029	T6 Instate Other Class 7	Aggregate	Aggregate	Natural Gas	12.45754713	519.1561599	519.1561599	0	144.0092448	0.066991352	0	
Sacramento	2029	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	10.8235623	511.5913531	511.5913531	0	125.1203802	0.057065186	0	
Sacramento	2029	T6 Instate Tractor Class 6	Aggregate	Aggregate	Electricity	0.680822038	42.43011557	0	42.43011557	7.870302755	0	44.97936301	
Sacramento	2029	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	739.8185859	40987.65394	40987.65394	0	8552.302853	4.354674499	0	
Sacramento	2029	T6 Instate Tractor Class 7	Aggregate	Aggregate	Electricity	17.76817635	1443.945027	0	1443.945027	205.4001186	0	1530.698814	
Sacramento	2029	T6 Instate Tractor Class 7	Aggregate	Aggregate	Natural Gas	9.581979798	526.0121867	526.0121867	0	110.7676865	0.066007668	0	
Sacramento	2029	T6 OOS Class 4	Aggregate	Aggregate	Diesel	6.276567977	425.6113516	425.6113516	0	144.2355321	0.043965434	0	
Sacramento	2029	T6 OOS Class 5	Aggregate	Aggregate	Diesel	8.047850981	583.8622394	583.8622394	0	184.9396156	0.060616572	0	
Sacramento	2029	T6 OOS Class 6	Aggregate	Aggregate	Diesel	31.08750128	1525.648736	1525.648736	0	714.3907794	0.154818992	0	
Sacramento	2029	T6 OOS Class 7	Aggregate	Aggregate	Diesel	42.69274002	11093.36344	11093.36344	0	981.0791657	1.045698736	0	
Sacramento	2029	T6 Public Class 4	Aggregate	Aggregate	Diesel	460.6507298	16438.95441	16438.95441	0	2363.138244	2.07920479	0	
Sacramento	2029	T6 Public Class 4	Aggregate	Aggregate	Electricity	26.3557691	1130.811878	0	1130.811878	135.2050955	0	1335.376377	
Sacramento	2029	T6 Public Class 4	Aggregate	Aggregate	Natural Gas	35.71945952	1448.840294	1448.840294	0	183.2408273	0.213933081	0	
Sacramento	2029	T6 Public Class 5	Aggregate	Aggregate	Diesel	596.8950778	21394.95637	21394.95637	0	3062.071749	2.682300732	0	
Sacramento	2029	T6 Public Class 5	Aggregate	Aggregate	Electricity	34.9980195	1497.804384	0	1497.804384	179.53984	0	1768.758032	
Sacramento	2029	T6 Public Class 5	Aggregate	Aggregate	Natural Gas	64.96045144	2511.967284	2511.967284	0	333.2471159	0.37794707	0	
Sacramento	2029	T6 Public Class 6	Aggregate	Aggregate	Diesel	698.6253969	25210.3262	25210.3262	0	3583.948286	3.127290092	0	
Sacramento	2029	T6 Public Class 6	Aggregate	Aggregate	Electricity	43.87384496	1819.048268	0	1819.048268	225.0728246	0	2148.115113	
Sacramento	2029	T6 Public Class 6	Aggregate	Aggregate	Natural Gas	64.20243038	2572.58962	2572.58962	0	329.3584678	0.384363352	0	
Sacramento	2029	T6 Public Class 7	Aggregate	Aggregate	Diesel	2381.762242	106903.6381	106903.6381	0	12218.4403	12.96891589	0	
Sacramento	2029	T6 Public Class 7	Aggregate	Aggregate	Electricity	146.3868801	8932.127884	0	8932.127884	750.964695	0	10547.9548	
Sacramento	2029	T6 Public Class 7	Aggregate	Aggregate	Natural Gas	203.2453245	10049.53664	10049.53664	0	1042.648515	1.446759018	0	
Sacramento	2029	T6 Utility Class 5	Aggregate	Aggregate	Diesel	38.39015253	1537.981585	1537.981585	0	491.3939524	0.169313477	0	
Sacramento	2029	T6 Utility Class 5	Aggregate	Aggregate	Electricity	4.298716283	185.7737335	0	185.7737335	55.02356843	0	208.0783574	
Sacramento	2029	T6 Utility Class 5	Aggregate	Aggregate	Natural Gas	0.125913521	4.771703082	4.771703082	0	1.611693066	0.000633903	0	
Sacramento	2029	T6 Utility Class 6	Aggregate	Aggregate	Diesel	7.263474639	290.4440124	290.4440124	0	92.97247538	0.031895104	0	
Sacramento	2029	T6 Utility Class 6	Aggregate	Aggregate	Electricity	0.817640882	35.33499604	0	35.33499604	10.46580329	0	39.57743537	
Sacramento	2029	T6 Utility Class 6	Aggregate	Aggregate	Natural Gas	0.022875997	0.87760863	0.87760863	0	0.292812758	0.000116163	0	
Sacramento	2029	T6 Utility Class 7	Aggregate	Aggregate	Diesel	8.051743054	398.7801749	398.7801749	0	103.0623111	0.043422233	0	

Sacramento	2029	T6 Utility Class 7	Aggregate	Aggregate	Electricity	0.905824022	54.29734117	0	54.29734117	11.59454748	0	60.8164639
Sacramento	2029	T6 Utility Class 7	Aggregate	Aggregate	Natural Gas	0.031537727	1.410346178	1.410346178	0	0.403682904	0.000185877	0
Sacramento	2029	T6TS	Aggregate	Aggregate	Gasoline	1641.926591	75184.63385	75184.63385	0	32851.66724	15.57233636	0
Sacramento	2029	T6TS	Aggregate	Aggregate	Electricity	55.95115716	4749.446503	0	4749.446503	1119.470753	0	5544.631674
Sacramento	2029	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	970.9604147	195062.3506	195062.3506	0	22312.67033	29.39380753	0
Sacramento	2029	T7 CAIRP Class 8	Aggregate	Aggregate	Electricity	65.39312093	13700.79816	0	13700.79816	1502.733919	0	25016.64463
Sacramento	2029	T7 CAIRP Class 8	Aggregate	Aggregate	Natural Gas	14.04353401	2740.902511	2740.902511	0	322.7204116	0.47733956	0
Sacramento	2029	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	882.3559221	243662.0317	243662.0317	0	20276.53909	34.60723649	0
Sacramento	2029	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	382.056701	88597.31249	88597.31249	0	8779.662988	13.02643824	0
Sacramento	2029	T7 Other Port Class 8	Aggregate	Aggregate	Diesel	10.53090877	2317.377028	2317.377028	0	172.2856676	0.365420124	0
Sacramento	2029	T7 Other Port Class 8	Aggregate	Aggregate	Electricity	0.3629985	109.377969	0	109.377969	5.938655459	0	199.06432
Sacramento	2029	T7 POAK Class 8	Aggregate	Aggregate	Diesel	35.87433981	3835.681247	3835.681247	0	586.9041993	0.625114349	0
Sacramento	2029	T7 POAK Class 8	Aggregate	Aggregate	Electricity	1.27102564	127.4639845	0	127.4639845	20.79397947	0	231.9802757
Sacramento	2029	T7 Public Class 8	Aggregate	Aggregate	Diesel	4088.481593	173533.8368	173533.8368	0	20973.91057	31.87450545	0
Sacramento	2029	T7 Public Class 8	Aggregate	Aggregate	Electricity	185.6448496	11269.29558	0	11269.29558	952.3580786	0	22116.92299
Sacramento	2029	T7 Public Class 8	Aggregate	Aggregate	Natural Gas	79.09591414	3600.204813	3600.204813	0	405.7620395	0.757797797	0
Sacramento	2029	T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Diesel	161.3935051	10833.42006	10833.42006	0	1520.326818	1.743268336	0
Sacramento	2029	T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Electricity	17.14136605	1379.020461	0	1379.020461	161.4716682	0	2514.166909
Sacramento	2029	T7 Single Concrete/Transit Mix Cl	Aggregate	Aggregate	Natural Gas	4.174518024	289.50214	289.50214	0	39.32395978	0.047212454	0
Sacramento	2029	T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	534.7362179	28077.35964	28077.35964	0	5037.215173	4.731586215	0
Sacramento	2029	T7 Single Dump Class 8	Aggregate	Aggregate	Electricity	25.81460212	2105.269866	0	2105.269866	243.173552	0	3838.231543
Sacramento	2029	T7 Single Dump Class 8	Aggregate	Aggregate	Natural Gas	15.97204645	790.8476017	790.8476017	0	150.4566775	0.144879123	0
Sacramento	2029	T7 Single Other Class 8	Aggregate	Aggregate	Diesel	1576.610679	78265.18841	78265.18841	0	14851.67259	12.97812414	0
Sacramento	2029	T7 Single Other Class 8	Aggregate	Aggregate	Electricity	84.11034785	5748.674788	0	5748.674788	792.3194768	0	10480.72043
Sacramento	2029	T7 Single Other Class 8	Aggregate	Aggregate	Natural Gas	45.59354081	2222.099685	2222.099685	0	429.4911544	0.391031457	0
Sacramento	2029	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	204.5475976	13267.90655	13267.90655	0	940.9189488	5.564500199	0
Sacramento	2029	T7 SWCV Class 8	Aggregate	Aggregate	Electricity	40.03172792	2565.816429	0	2565.816429	184.1459484	0	4773.831567
Sacramento	2029	T7 SWCV Class 8	Aggregate	Aggregate	Natural Gas	695.6844309	45087.47517	45087.47517	0	3200.148382	9.1046537	0
Sacramento	2029	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	1205.837975	82009.74832	82009.74832	0	17520.82578	12.85291911	0
Sacramento	2029	T7 Tractor Class 8	Aggregate	Aggregate	Electricity	35.41903054	2861.10216	0	2861.10216	514.6385137	0	5209.236742
Sacramento	2029	T7 Tractor Class 8	Aggregate	Aggregate	Natural Gas	12.19283503	795.8031323	795.8031323	0	177.161893	0.14526245	0
Sacramento	2029	T7 Utility Class 8	Aggregate	Aggregate	Diesel	30.17903596	1284.928237	1284.928237	0	386.2916603	0.215435302	0
Sacramento	2029	T7 Utility Class 8	Aggregate	Aggregate	Electricity	1.304206122	79.93807709	0	79.93807709	16.69383836	0	150.5072743
Sacramento	2029	T7IS	Aggregate	Aggregate	Gasoline	2.791009211	144.1201169	144.1201169	0	55.84251229	0.035069303	0
Sacramento	2029	T7IS	Aggregate	Aggregate	Electricity	0.051128967	13.2775364	0	13.2775364	1.022988369	0	26.6804755
Sacramento	2029	UBUS	Aggregate	Aggregate	Gasoline	198.7719876	15089.12415	15089.12415	0	795.0879505	3.211705007	0
Sacramento	2029	UBUS	Aggregate	Aggregate	Diesel	5.548407104	226.400957	226.400957	0	22.19362841	0.022231411	0
Sacramento	2029	UBUS	Aggregate	Aggregate	Electricity	87.39374518	8513.43517	0	8513.43517	349.5749807	0	14840.99579
Sacramento	2029	UBUS	Aggregate	Aggregate	Natural Gas	312.3604998	29651.51276	29651.51276	0	1249.441999	4.579104485	0
Orange (SC)	2025	T7 Utility Class 8	Aggregate	Aggregate	Electricity	0.441786397	28.24913889	0	28.24913889	5.654865875	0	50.5236931
Orange (SC)	2025	T7IS	Aggregate	Aggregate	Gasoline	6.722292417	572.5132259	572.5132259	0	134.4996267	0.132943836	0
Orange (SC)	2025	T7IS	Aggregate	Aggregate	Electricity	0.027208508	7.235020643	0	7.235020643	0.544387836	0	12.92991158
Orange (SC)	2025	UBUS	Aggregate	Aggregate	Gasoline	256.3483478	42289.47506	42289.47506	0	1025.393391	3.462280467	0
Orange (SC)	2025	UBUS	Aggregate	Aggregate	Electricity	4.037405551	77.72005682	0	77.72005682	16.1496222	0	165.4036891
Orange (SC)	2025	UBUS	Aggregate	Aggregate	Natural Gas	577.6938563	111029.5135	111029.5135	0	2310.775425	37.28808911	0

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	Equipment Type	Horsepower	Gas				Diesel				Natural Gas			
		HP	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr
Air Compressors25	Air Compressors	25	27342.99676	96.69393355	0	0	2596.432812	4.919859598	0	0	0	0	0	0
Air Compressors50	Air Compressors	50	14034.25	12.9	6230.55	2.252489748	24181.25	29.09	23677.55	1.021273316	0	0	0	0
Air Compressors75	Air Compressors	75	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors100	Air Compressors	100	76142.65	41.82	20210.05	3.767563663	0	0	0	0	0	0	0	0
Air Compressors175	Air Compressors	175	9314.8	2.81	1365.1	6.823529412	0	0	0	0	0	0	0	0
Air Compressors300	Air Compressors	300	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors600	Air Compressors	600	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors750	Air Compressors	750	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors9999	Air Compressors	9999	0	0	0	0	0	0	0	0	0	0	0	0
Aerial Lifts25	Aerial Lifts	25	2518.320998	14.92068735	0	0	20.0102399	9.32200712	0	0	0	0	0	0
Aerial Lifts50	Aerial Lifts	50	7084.65	12.38	4467.6	1.585784314	9613.557163	50.0165083	11799.37726	0.814751233	0	0	0	0
Aerial Lifts75	Aerial Lifts	75	0	0	0	0	19111.31643	54.53511587	16101.99368	1.186891314	0	0	0	0
Aerial Lifts100	Aerial Lifts	100	12742.15	12.38	4467.6	2.852124183	3733.559595	9.415370489	2669.743302	1.398471378	0	0	0	0
Aerial Lifts175	Aerial Lifts	175	0	0	0	0	5571.247531	6.667001218	2996.747969	1.859097792	0	0	0	0
Aerial Lifts300	Aerial Lifts	300	0	0	0	0	119.4789461	0.07898693	32.63490697	3.661078189	0	0	0	0
Aerial Lifts600	Aerial Lifts	600	0	0	0	0	70.04729891	0.031594772	11.91468961	5.879070393	0	0	0	0
Bore/Drill rigs25	Bore/Drill rigs	25	434.0668618	4.881165216	0	0	23.49993042	3.69731954	0	0	0	0	0	0
Bore/Drill rigs50	Bore/Drill rigs	50	233.6	0.88	87.6	2.666666667	1419.649221	2.689915946	1274.763178	1.113657223	0	0	0	0
Bore/Drill rigs75	Bore/Drill rigs	75	0	0	0	0	5491.975255	6.265910165	3059.748841	1.794910478	0	0	0	0
Bore/Drill rigs100	Bore/Drill rigs	100	2730.2	3.99	434.35	6.285714286	4179.032859	3.313413669	1692.11628	2.46970785	0	0	0	0
Bore/Drill rigs175	Bore/Drill rigs	175	952.65	1.01	102.2	9.321428571	30021.4891	13.12802896	8540.812521	3.515062417	0	0	0	0
Bore/Drill rigs300	Bore/Drill rigs	300	0	0	0	0	35590.46648	10.27166972	6273.453376	5.673185779	0	0	0	0
Bore/Drill rigs600	Bore/Drill rigs	600	0	0	0	0	51228.40677	8.827670534	5067.859832	10.10848928	0	0	0	0
Bore/Drill rigs750	Bore/Drill rigs	750	0	0	0	0	21286.99579	2.29626971	1291.621108	16.4808361	0	0	0	0
Bore/Drill rigs9999	Bore/Drill rigs	9999	0	0	0	0	7025.660333	0.557665501	326.6814549	21.50614988	0	0	0	0
Cement and Mortar Mixers25	Cement and Mortar Mixers	25	199.3865018	2.878044388	0	0	6.86196294	2.645012657	0	0	0	0	0	0
Cement and Mortar Mixers50	Cement and Mortar Mixers	50	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers75	Cement and Mortar Mixers	75	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers100	Cement and Mortar Mixers	100	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers175	Cement and Mortar Mixers	175	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers300	Cement and Mortar Mixers	300	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers600	Cement and Mortar Mixers	600	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers750	Cement and Mortar Mixers	750	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers9999	Cement and Mortar Mixers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws25	Concrete/Industrial Saws	25	6594.279342	31.61185868	0	0	4.696411764	0.982201378	0	0	0	0	0	0
Concrete/Industrial Saws50	Concrete/Industrial Saws	50	5482.3	3.24	1981.95	2.76611418	1638.85	2.04	1189.9	1.377300613	0	0	0	0
Concrete/Industrial Saws75	Concrete/Industrial Saws	75	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws100	Concrete/Industrial Saws	100	5347.25	1.86	1135.15	4.710610932	0	0	0	0	0	0	0	0
Concrete/Industrial Saws175	Concrete/Industrial Saws	175	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws300	Concrete/Industrial Saws	300	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws600	Concrete/Industrial Saws	600	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws750	Concrete/Industrial Saws	750	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws9999	Concrete/Industrial Saws	9999	0	0	0	0	0	0	0	0	0	0	0	0
Cranes25	Cranes	25	0	0	0	0	3.99053351	0.065607706	11.28137652	0.353727535	0	0	0	0
Cranes50	Cranes	50	792.05	1.01	405.15	1.954954955	164.1836796	0.853398284	165.0968507	0.994468876	0	0	0	0
Cranes75	Cranes	75	0	0	0	0	648.6984175	2.52768173	453.4789218	1.430492987	0	0	0	0
Cranes100	Cranes	100	2711.95	1.98	817.6	3.316964286	1962.330684	4.959391216	950.9339847	2.063582452	0	0	0	0
Cranes175	Cranes	175	175.2	0.08	36.5	4.8	14625.07306	22.29980517	5811.372154	2.516629923	0	0	0	0
Cranes300	Cranes	300	0	0	0	0	47122.57805	50.15776168	12718.35063	3.705085621	0	0	0	0
Cranes600	Cranes	600	0	0	0	0	65272.50076	40.08483672	10420.97276	6.263570808	0	0	0	0
Cranes750	Cranes	750	0	0	0	0	10188.13515	4.625343273	1084.252315	9.396461522	0	0	0	0
Cranes9999	Cranes	9999	0	0	0	0	3475.620698	1.082527149	262.4083547	13.24508399	0	0	0	0
Crawler Tractors25	Crawler Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0
Crawler Tractors50	Crawler Tractors	50	0	0	0	0	830.7980839	2.822117014	769.1258516	1.080184839	0	0	0	0
Crawler Tractors75	Crawler Tractors	75	0	0	0	0	5655.750343	11.19037427	3271.072867	1.72901998	0	0	0	0
Crawler Tractors100	Crawler Tractors	100	0	0	0	0	21722.32903	28.15583413	9842.811126	2.206923282	0	0	0	0
Crawler Tractors175	Crawler Tractors	175	0	0	0	0	78598.477	57.81279469	26589.97423	2.955944083	0	0	0	0
Crawler Tractors300	Crawler Tractors	300	0	0	0	0	96964.60359	46.83183661	20249.9644	4.788383903	0	0	0	0
Crawler Tractors600	Crawler Tractors	600	0	0	0	0	170129.5013	46.78904702	20484.90548	8.305115269	0	0	0	0
Crawler Tractors750	Crawler Tractors	750	0	0	0	0	10757.03882	2.139063345	832.1997821	12.92602937	0	0	0	0
Crawler Tractors9999	Crawler Tractors	9999	0	0	0	0	17927.75733	2.529862156	1019.945615	17.57716986	0	0	0	0
Crushing/Proc. Equipment25	Crushing/Proc. Equipment	25	78.8827538	0.397101354	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment50	Crushing/Proc. Equipment	50	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment75	Crushing/Proc. Equipment	75	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment100	Crushing/Proc. Equipment	100	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment175	Crushing/Proc. Equipment	175	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment300	Crushing/Proc. Equipment	300	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment600	Crushing/Proc. Equipment	600	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment750	Crushing/Proc. Equipment	750	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment9999	Crushing/Proc. Equipment	9999	0	0	0	0	0	0	0	0	0	0	0	0
Dumpers/Tenders25	Dumpers/Tenders	25	489.9553756	8.216296892	0	0	3.379572815	1.366003105	0	0	0	0	0	0
Dumpers/Tenders100	Dumpers/Tenders	100	229.95	0.73	87.6	2.625	0	0	0	0	0	0	0	0
Excavators25	Excavators	25	0	0	0	0	26.53063201	2.179819946	13.94602596	1.902379365	0	0	0	0
Excavators50	Excavators	50	0	0	0	0	88194.10939	245.1435377	116538.1872	0.756782918	0	0	0	0
Excavators75	Excavators	75	0	0	0	0	70072.64873	101.3986727	53164.20012	1.318042002	0	0	0	0
Excavators100	Excavators	100	0	0	0	0	54306.14084	53.37533449	28305.19236	1.918592891	0	0	0	0
Excavators175	Excavators	175	0	0	0	0	306298.1566	151.6619793	108994.9343	2.810205435	0	0	0	0
Excavators300	Excavators	300	0	0	0	0	326957.2701	112.9940789	72599.93179	4.503547896	0	0	0	0
Excavators600	Excavators	600	0	0	0	0	378068.2275	78.77141613	52523.90559	7.198021991	0	0	0	0
Excavators750	Excavators	750	0	0	0	0	10999.60479	1.64067348	865.0170862	12.71605494	0	0	0	0
Excavators9999	Excavators	9999	0	0	0	0	53377.77728	3.05273044	1770.966141	30.14048437	0	0	0	0
Forklifts25	Forklifts	25	48.25387782	0.115750006	0	0	0.074899843	0.015797386	5.56490888	0.013459312	0	0	0	0
Forklifts50	Forklifts	50	119519.25	42.13	74708.2	1.599814344	12539.35487	36.58766131	18698.72241	0.670599552	182072.95	75.71	136396.85	1.334876502
Forklifts75	Forklifts	75	0	0	0	0	127085.0758	247.930036	99039.12585	1.283180508	0	0	0	0
Forklifts100	Forklifts	100	571046.15	156.09	265654.3	2.149583688	72531.02506	127.0349462	54292.49936	1.335930855	1139303.7	265.72	478715.75	2.379916892
Forklifts175	Forklifts	175	39722.95	5.64	9672.5	4.106792453	281205.6946	274.9830366	147347.2239	1.908456008	85512.2	9.73	17523.65	4.879816705
Forklifts300	Forklifts	300	0	0	0	0	9117.608998	7.702805688	3832.992189	2.378718387	0	0	0	0
Forklifts600	Forklifts	600	0	0	0	0	2723.703038	1.42830298	703.3674693	3.872375617	0	0	0	0
Forklifts750	Forklifts	750	0	0	0	0	325.8148087	0.080238192	35.53200883	9.169614087	0	0	0	0
Forklifts9999	Forklifts	9999	0	0	0	0	3210.684341	0.31594772	157.0440636	20.44448079	0	0	0	0
Generator Sets25	Generator Sets	25	40736.54716	402.5344691	0	0	47746.9955	178.7603986	0	0	0	0	0	0
Generator Sets50	Generator Sets	50	108532.75	424.29	48734.8	2.22700719	66583.3	141.17	47650.75	1.397319035	0	0	0	0
Generator Sets75	Generator Sets	75	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets100	Generator Sets	100	48902.7	81.93	9402.4	5.201086957	0	0	0	0	4383.65	6.09	704.45	6.222797927
Generator Sets175	Generator Sets	175	7993.5	7.73	886.95	9.012345679	0	0	0	0	6332.75	5.08	576.7	10.98101266
Generator Sets300	Generator Sets	300	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets600	Generator Sets	600	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets750	Generator Sets	750	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets9999	Generator Sets	9999	0	0	0	0	0	0	0	0	0	0	0	0
Graders25	Graders	25	0	0	0	0	0	0	0	0	0	0	0	0
Graders50	Graders	50	0	0	0	0	283.1053473	1.214033291	301.9777128	0.937504112	0	0	0	0
Graders75	Graders	75	0	0	0	0	1048.876822	2.331718273	564.3062377	1.85870145	0	0	0	0
Graders100	Graders	100	0	0	0	0	2215.071559	4.036607293	1051.85169	2.105878214	0	0	0	0
Graders175	Graders	175	0	0	0	0	35577.65594	34.39257336	11111.31316	3.201930809	0	0	0	0
Graders300	Graders	300	0	0	0	0	118169.9917	64.32233872	24973.22376	4.731867733	0	0	0	0
Graders600	Graders	600	0	0	0	0	28663.31564	9.516733233	4034.881761	7.103879949	0	0	0	0
Graders750	Graders	750	0	0	0	0	1095.053566	0.196823118	74.98460216	14.60371242	0	0	0	0
Graders9999	Graders	9999	0	0	0	0	791.1364551	0.131215412	50.93427084	15.53249791	0	0	0	0
Off-Highway Tractors25	Off-Highway Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0
Off-Highway Tractors50	Off-Highway Tractors	50	0	0	0	0	14739.09996	26.37834214	15973.13133	0.922743303	0	0	0	0
Off-Highway Tractors75	Off-Highway Tractors	75	0	0	0	0	12937.92512	14.24343874	8707.412053	1.485851943	0	0	0	0
Off-Highway Tractors100	Off-Highway Tractors	100	0	0	0	0	12352.56109	9.415408438	5955.416068	2.074172643	0	0	0	0
Off-Highway Tractors175	Off-Highway Tractors	175	0	0	0	0	67261.27118	20.8323527	21175.34832	3.176395031	0	0	0	0
Off-Highway Tractors300	Off-Highway Tractors	300	0	0	0	0	30026.86606	8.137739431	6410.274015	4.684178241	0	0	0	0
Off-Highway Tractors600	Off-Highway Tractors	600	0	0	0	0	79439.32054	10.56970089	9730.112372	8.164275756	0	0	0	0
Off-Highway Tractors750	Off-Highway Tractors	750	0	0	0	0	6484.031618	0.689026485	509.22265	12.73319562	0	0	0	0
Off-Highway Tractors9999	Off-Highway Tractors	9999	0	0	0	0	5760.505919	0.230345971	183.950579	31.31550849	0	0	0	0
Off-Highway Trucks25	Off-Highway Trucks	25	0	0	0	0	0	0	0	0	0	0	0	0
Off-Highway Trucks50	Off-Highway Trucks	50	0	0	0	0	630.8945214	1.705800356	1053.007563	0.599135793	0	0	0	0
Off-Highway Trucks75	Off-Highway Trucks	75	0	0	0	0	710.1461571	0.853648661	449.1239214	1.58118088	0	0	0	0
Off-Highway Trucks100	Off-Highway Trucks	100	0	0	0	0	332.9039928	0.295234677	182.9150023	1.81999283	0	0	0	0
Off-Highway Trucks175	Off-Highway Trucks	175	0	0	0	0	17221.03333	6.364434751	5696.691505	3.022988575	0	0	0	0
Off-Highway Trucks300	Off-Highway Trucks	300	0	0	0	0	40101.32552	12.63443589	9145.463875	4.384832314	0	0	0	0
Off-Highway Trucks600	Off-Highway Trucks	600	0	0	0	0	297588.0241	43.34476311	36008.11615	8.264470788	0	0	0	0
Off-Highway Trucks750	Off-Highway Trucks	750	0	0	0	0	36355.82184	5.63038394	3229.337859	11.25798025	0	0	0	0
Off-Highway Trucks9999	Off-Highway Trucks	9999	0	0	0	0	140357.4711	9.822994102	6576.2617	21.3430483	0	0	0	0
Pavers25	Pavers	25	1417.86509	4.864339236	0	0	6.365597633	0.8477046	0	0	0	0	0	0
Pavers50	Pavers	50	2573.25	2.81	1105.95	2.326732673	1365.488172	4.363136965	1539.862371	0.88675988	0	0	0	0
Pavers75	Pavers	75	0	0	0	0	6969.151363	11.31844069	4406.958324	1.581397156	0	0	0	0
Pavers100	Pavers	100	2299.5	1.55	609.55	3.77245509	7525.580878	8.69378706	3783.617474	1.98899094	0	0	0	0
Pavers175	Pavers	175	0	0	0	0	25356.58235	15.38586655	8548.487246	2.966206958	0	0	0	0
Pavers300	Pavers	300	0	0	0	0	30792.2197	11.38347728	6379.462826	4.826773122	0	0	0	0
Pavers600	Pavers	600	0	0	0	0	5439.97766	1.181376401	684.7426319	7.944558155	0	0	0	0
Pavers750	Pavers	750	0	0	0	0	225.6174682	0.032803853	16.90306149	13.34772806	0	0	0	0
Pavers9999	Pavers	9999	0	0	0	0	5168.429135	0.229626971	125.5310985	41.17249986	0	0	0	0
Paving Equipment25	Paving Equipment	25	1425.313001	10.78399789	0	0	10.80883398	2.106426415	0	0	0	0	0	0
Paving Equipment50	Paving Equipment	50	2996.65	7.65	1343.2	2.230978261	3553.53718	12.0724312	4686.83162	0.758196041	0	0	0	0
Paving Equipment75	Paving Equipment	75	0	0	0	0	2564.820858	4.756558685	1939.946653	1.322108963	0	0	0	0
Paving Equipment100	Paving Equipment	100	1237.35	1.99	343.1	3.606382979	4271.122815	5.415547122	2305.740436	1.852386655	0	0	0	0
Paving Equipment175	Paving Equipment	175	0	0	0	0	28174.45533	17.4865033	11452.68287	2.460074695	0	0	0	0
Paving Equipment300	Paving Equipment	300	0	0	0	0	12662.89993	5.545535621	2976.379143	4.254464676	0	0	0	0
Paving Equipment600	Paving Equipment	600	0	0	0	0	30115.73329	8.007379401	4682.064733	6.432147996	0	0	0	0
Paving Equipment750	Paving Equipment	750	0	0	0	0	6557.476325	1.082527149	567.4401166	11.55624379	0	0	0	0
Paving Equipment9999	Paving Equipment	9999	0	0	0	0	4111.811805	0.426450089	226.6758679	18.13960985	0	0	0	0
Rollers25	Rollers	25	4367.684816	23.57729498	0	0	75.69087943	16.65208303	0	0	0	0	0	0
Rollers50	Rollers	50	3347.05	1.98	1222.75	2.737313433	34232.8494	122.69693	44440.89899	0.770300561	0	0	0	0
Rollers75	Rollers	75	0	0	0	0	13598.09473	24.93203252	9381.069729	1.44952496	0	0	0	0
Rollers100	Rollers	100	10453.6	3.71	2310.45	4.524486572	21117.54429	29.59778475	11147.5575	1.894365137	0	0	0	0
Rollers175	Rollers	175	0	0	0	0	121645.4352	80.1815421	47666.9779	2.551985475	0	0	0	0
Rollers300	Rollers	300	0	0	0	0	10393.48944	5.321934303	2371.163052	4.383287532	0	0	0	0
Rollers600	Rollers	600	0	0	0	0	8423.283719	2.299394534	1132.115972	7.440301105	0	0	0	0
Rollers750	Rollers	750	0	0	0	0	203.8349735	0.032803853	14.83059035	13.74422519	0	0	0	0
Rollers9999	Rollers	9999	0	0	0	0	9263.345374	0.426450089	206.9727917	44.75634356	0	0	0	0
Rough Terrain Forklifts25	Rough Terrain Forklifts	25	0	0	0	0	0	0	0	0	0	0	0	0
Rough Terrain Forklifts50	Rough Terrain Forklifts	50	1095	0.84	328.5	3.333333333	1091.823342	4.067677772	1101.988163	0.990775926	0	0	0	0
Rough Terrain Forklifts75	Rough Terrain Forklifts	75	0	0	0	0	43480.38018	83.09485756	27382.10804	1.587912082	0	0	0	0
Rough Terrain Forklifts100	Rough Terrain Forklifts	100	23644.7	11.22	4635.5	5.100787402	30257.52581	47.57617538	15156.10767	1.996391584	0	0	0	0
Rough Terrain Forklifts175	Rough Terrain Forklifts	175	1321.3	0.32	131.4	10.05555556	194838.4204	166.9083329	79744.79392	2.443274486	0	0	0	0
Rough Terrain Forklifts300	Rough Terrain Forklifts	300	0	0	0	0	1666.227536	1.01754677	385.4252246	4.323088966	0	0	0	0
Rough Terrain Forklifts600	Rough Terrain Forklifts	600	0	0	0	0	471.5236609	0.164061446	69.06939749	6.826810107	0	0	0	0
Rough Terrain Forklifts750	Rough Terrain Forklifts	750	0	0	0	0	152.3235972	0.032846034	12.08278091	12.60666716	0	0	0	0
Rough Terrain Forklifts9999	Rough Terrain Forklifts	9999	0	0	0	0	0	0	0	0	0	0	0	0
Rubber Tired Dozers25	Rubber Tired Dozers	25	0	0	0	0	0	0	0	0	0	0	0	0
Rubber Tired Dozers50	Rubber Tired Dozers	50	0	0	0	0	332.3546169	0.5918509	220.4732825	1.507459829	0	0	0	0
Rubber Tired Dozers75	Rubber Tired Dozers	75	0	0	0	0	697.3606506	0.985015581	448.1223427	1.556183622	0	0	0	0
Rubber Tired Dozers100	Rubber Tired Dozers	100	0	0	0	0	1475.762416	1.641251478	718.8365812	2.052987361	0	0	0	0
Rubber Tired Dozers175	Rubber Tired Dozers	175	0	0	0	0	4583.301603	2.723815183	1588.322995	2.885623149	0	0	0	0
Rubber Tired Dozers300	Rubber Tired Dozers	300	0	0	0	0	5699.420733	2.200074096	1239.590565	4.597825196	0	0	0	0
Rubber Tired Dozers600	Rubber Tired Dozers	600	0	0	0	0	29796.19296	8.037435039	4265.71996	6.985032596	0	0	0	0
Rubber Tired Dozers750	Rubber Tired Dozers	750	0	0	0	0	1066.530563	0.164287173	84.04769439	12.68958739	0	0	0	0
Rubber Tired Dozers9999	Rubber Tired Dozers	9999	0	0	0	0	2620.49493	0.164019265	99.10234066	26.44231117	0	0	0	0
Scrapers25	Scrapers	25	0	0	0	0	0	0	0	0	0	0	0	0
Scrapers50	Scrapers	50	0	0	0	0	94.8590694	0.164492992	38.56831399	2.459507808	0	0	0	0
Scrapers75	Scrapers	75	0	0	0	0	661.0767993	1.280139103	334.5988857	1.975729231	0	0	0	0
Scrapers100	Scrapers	100	0	0	0	0	789.046734	1.017915655	315.1685825	2.5035704	0	0	0	0
Scrapers175	Scrapers	175	0	0	0	0	6277.942802	6.170714216	1685.16949	3.725407349	0	0	0	0
Scrapers300	Scrapers	300	0	0	0	0	92444.3879	48.73317927	15310.96484	6.037789838	0	0	0	0
Scrapers600	Scrapers	600	0	0	0	0	320711.0209	101.8010566	32422.33079	9.891670744	0	0	0	0
Scrapers750	Scrapers	750	0	0	0	0	53458.064	15.35542721	4186.181662	12.77012522	0	0	0	0
Scrapers9999	Scrapers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Skid Steer Loaders25	Skid Steer Loaders	25	10936.14722	60.9321866	0	0	1248.143144	221.1802943	0	0	0	0	0	0
Skid Steer Loaders50	Skid Steer Loaders	50	15990.65	26.94	8358.5	1.913100437	33330.05877	96.51631213	37379.33101	0.891670821	0	0	0	0
Skid Steer Loaders75	Skid Steer Loaders	75	0	0	0	0	237591.3159	376.0047938	170373.7365	1.394530171	0	0	0	0
Skid Steer Loaders100	Skid Steer Loaders	100	21348.85	16.11	5000.5	4.269343066	120270.0407	146.7336203	69087.87848	1.740826948	0	0	0	0
Skid Steer Loaders175	Skid Steer Loaders	175	0	0	0	0	35517.61761	25.42395958	16970.23958	2.092935544	0	0	0	0
Skid Steer Loaders300	Skid Steer Loaders	300	0	0	0	0	2892.774467	1.377761826	744.9789322	3.883028556	0	0	0	0
Skid Steer Loaders600	Skid Steer Loaders	600	0	0	0	0	2016.611496	0.393646236	228.6909475	8.81806437	0	0	0	0
Skid Steer Loaders750	Skid Steer Loaders	750	0	0	0	0	190.938374	0.032803853	15.93451898	11.98268829	0	0	0	0
Skid Steer Loaders9999	Skid Steer Loaders	9999	0	0	0	0	14860.33268	0.721684766	349.8314194	42.47855354	0	0	0	0
Surfacing Equipment25	Surfacing Equipment	25	513.841811	2.131554704	0	0	0	0	0	0	0	0	0	0
Surfacing Equipment50	Surfacing Equipment	50	0	0	0	0	380.1432801	1.115829108	526.1813866	0.722456723	0	0	0	0
Surfacing Equipment75	Surfacing Equipment	75	0	0	0	0	653.0825619	1.08332402	537.7975366	1.214365105	0	0	0	0
Surfacing Equipment100	Surfacing Equipment	100	0	0	0	0	873.4972711	1.018881446	487.8922251	1.790348823	0	0	0	0
Surfacing Equipment175	Surfacing Equipment	175	0	0	0	0	3204.77513	2.460726668	1584.601974	2.022448023	0	0	0	0
Surfacing Equipment300	Surfacing Equipment	300	0	0	0	0	3742.623069	1.872668374	1024.1636	3.654321504	0	0	0	0
Surfacing Equipment600	Surfacing Equipment	600	0	0	0	0	21532.43202	5.611125463	3648.528744	5.901675313	0	0	0	0
Surfacing Equipment750	Surfacing Equipment	750	0	0	0	0	9053.817675	1.672996503	941.8622492	9.6126771	0	0	0	0
Surfacing Equipment9999	Surfacing Equipment	9999	0	0	0	0	4035.664607	0.658567591	333.2146851	12.11130478	0	0	0	0
Sweepers/Scrubbers25	Sweepers/Scrubbers	25	1590.544428	6.888961712	0	0	3.530696738	0.565017318	0	0	0	0	0	0
Sweepers/Scrubbers50	Sweepers/Scrubbers	50	15607.4	11.53	5945.85	2.624923266	2571.289085	11.07578812	2924.461288	0.879235125	0	0	0	0
Sweepers/Scrubbers75	Sweepers/Scrubbers	75	0	0	0	0	2337.266453	4.281826483	1313.932681	1.778832727	0	0	0	0
Sweepers/Scrubbers100	Sweepers/Scrubbers	100	22224.85	9.61	4971.3	4.470631424	3010.638746	4.599044052	1397.38885	2.154474573	0	0	0	0

Sweepers/Scrubbers175	Sweepers/Scrubbers		175	259.15	0.05	29.2	8.875	696.3435738	0.632135314	253.2468745	2.749663052	0	0	0	0
Sweepers/Scrubbers300	Sweepers/Scrubbers		300	0	0	0	0	958.4929699	0.458124194	188.9424463	5.072936171	0	0	0	0
Sweepers/Scrubbers600	Sweepers/Scrubbers		600	0	0	0	0	147.0615404	0.047392158	19.64800365	7.48480828	0	0	0	0
Sweepers/Scrubbers750	Sweepers/Scrubbers		750	0	0	0	0	0	0	0	0	0	0	0	0
Sweepers/Scrubbers9999	Sweepers/Scrubbers		9999	0	0	0	0	303.2504625	0.015797386	5.940232579	51.05026755	0	0	0	0
Tractors/Loaders/Backhoes25	Tractors/Loaders/Backhoes		25	0	0.16294032	0	0	123.4834963	15.83702782	16.68439146	7.40113876	0	0	0	0
Tractors/Loaders/Backhoes50	Tractors/Loaders/Backhoes		50	0	0	0	0	34280.72618	105.9737285	41837.49409	0.819378094	0	0	0	0
Tractors/Loaders/Backhoes75	Tractors/Loaders/Backhoes		75	0	0	0	0	156072.0724	250.2972515	111324.9233	1.401950863	0	0	0	0
Tractors/Loaders/Backhoes100	Tractors/Loaders/Backhoes		100	8854.9	3.46	3029.5	2.922891566	363748.1568	415.5277472	198839.4459	1.829356118	0	0	0	0
Tractors/Loaders/Backhoes175	Tractors/Loaders/Backhoes		175	0	0	0	0	387199.6924	246.5270026	163456.1961	2.368828479	0	0	0	0
Tractors/Loaders/Backhoes300	Tractors/Loaders/Backhoes		300	0	0	0	0	180904.1618	67.85362317	42122.53432	4.294712194	0	0	0	0
Tractors/Loaders/Backhoes600	Tractors/Loaders/Backhoes		600	0	0	0	0	124379.0651	28.90859701	17168.73479	7.244509664	0	0	0	0
Tractors/Loaders/Backhoes750	Tractors/Loaders/Backhoes		750	0	0	0	0	5759.785875	0.853398284	449.5271823	12.81298685	0	0	0	0
Tractors/Loaders/Backhoes9999	Tractors/Loaders/Backhoes		9999	0	0	0	0	23300.41237	1.148134855	638.5522955	36.48943483	0	0	0	0
Trenchers25	Trenchers		25	8829.595006	28.91333408	0	0	112.361642	11.26812735	0	0	0	0	0	0
Trenchers50	Trenchers		50	15990.65	17.98	7230.65	2.211509339	10512.6169	28.47552476	8838.497205	1.189412256	0	0	0	0
Trenchers75	Trenchers		75	0	0	0	0	3368.11902	6.23446474	1851.993701	1.818644965	0	0	0	0
Trenchers100	Trenchers		100	9942.6	5.97	2398.05	4.146118721	4031.956354	5.11845722	1607.073615	2.508880936	0	0	0	0
Trenchers175	Trenchers		175	0	0	0	0	6583.342609	5.119144552	2071.139907	3.178608354	0	0	0	0
Trenchers300	Trenchers		300	0	0	0	0	3969.045094	1.969062197	700.7807412	5.66374739	0	0	0	0
Trenchers600	Trenchers		600	0	0	0	0	6463.892251	1.740505638	593.0356525	10.89966889	0	0	0	0
Trenchers750	Trenchers		750	0	0	0	0	237.8141345	0.098905424	18.98256136	12.52803191	0	0	0	0
Trenchers9999	Trenchers		9999	0	0	0	0	8461.750238	0.885704031	391.6977856	21.6027523	0	0	0	0
Welders25	Welders		25	0	0	0	0	23757.32692	73.03185889	0	0	0	0	0	0
Welders50	Welders		50	33872	67.39	14001.4	2.419186653	110949.05	145.35	93348.75	1.1885435	0	0	0	0
Welders75	Welders		75	0	0	0	0	0	0	0	0	0	0	0	0
Welders100	Welders		100	47493.8	68.78	14289.75	3.323627075	0	0	0	0	0	0	0	0
Welders175	Welders		175	5927.6	4.73	981.85	6.037174721	0	0	0	0	0	0	0	0
Welders300	Welders		300	0	0	0	0	0	0	0	0	0	0	0	0
Welders600	Welders		600	0	0	0	0	0	0	0	0	0	0	0	0
Welders750	Welders		750	0	0	0	0	0	0	0	0	0	0	0	0
Welders9999	Welders		9999	0	0	0	0	0	0	0	0	0	0	0	0

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2024
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bi	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consumptior	Total_Activity_	Total_Population	Horsepower_Hours_hhpy
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	100	Gasoline	2.48506E-07	3.00692E-07	3.57849E-07	3.66752E-06	9.44493E-07	0.000119196	8.96661E-09	8.24928E-09	1.07887E-09	9.71813E-10	3.863015446	19.87983976	0.011668846	103.0935603
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	100	Diesel	0.0121097	0.014652737	0.017437968	0.100938117	0.107818663	16.22799633	0.007732826	0.0071142	0.000148073	0.000132789	527844.3143	30510.12224	273.9035982	18866984.63
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	175	Gasoline	7.33867E-07	8.87979E-07	1.05677E-06	1.14482E-05	5.44333E-06	0.000642932	4.83651E-08	4.44959E-08	5.83753E-09	5.24188E-09	20.83677058	54.95962347	0.048416843	556.0777241
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	175	Diesel	0.008458869	0.010235231	0.012180771	0.090651349	0.085437191	15.190176	0.003993238	0.003673779	0.000138689	0.000124297	494087.3706	39523.09357	177.1893006	19633353.02
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	25	Gasoline	6.30813E-06	7.63284E-06	9.08371E-06	7.11432E-05	1.14914E-06	0.000187939	1.29213E-07	1.18876E-07	1.52359E-09	1.53228E-09	6.090898527	203.3883874	0.085344613	162.549806
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	25	Diesel	0.000628331	0.000760281	0.000904797	0.002381994	0.001738558	0.217703493	0.000106132	9.76414E-05	1.97247E-06	1.7814E-06	7081.191582	4828.256749	18.31868687	253106.3217
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	300	Diesel	0.004588787	0.005552432	0.006607853	0.029157106	0.040711327	12.79623259	0.001846293	0.001698589	0.000116908	0.000104708	416220.1225	26201.45888	59.92147081	16539173.15
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	50	Gasoline	5.90406E-06	7.14392E-06	8.50185E-06	0.000182522	1.61712E-05	0.003782706	2.84557E-07	2.61793E-07	3.42977E-08	3.08407E-08	122.5936457	392.3371416	0.431619488	3271.696825
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	50	Diesel	0.01302182	0.015756402	0.018751421	0.052053341	0.040635721	4.921451819	0.003393109	0.003121661	4.46254E-05	4.02708E-05	160078.9345	26113.06344	211.9229336	5721775.752
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	600	Diesel	0.006029571	0.007295781	0.008682582	0.047610869	0.05428238	17.09191056	0.002381377	0.002190867	0.000156157	0.000139858	555944.6543	21902.76268	46.36326338	22091351.35
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	75	Gasoline	1.91797E-07	2.32074E-07	2.76188E-07	2.92108E-06	7.54806E-07	9.58812E-05	7.21275E-09	6.63573E-09	8.68088E-10	7.81727E-10	3.107412698	60.77005131	0.013720024	82.92854136
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	75	Diesel	0.008628837	0.010440893	0.012425525	0.045893818	0.071807744	6.510487723	0.004549656	0.004185684	5.9292E-05	5.32734E-05	211765.1409	30346.22493	186.4744966	7569219.848
Sacramento	2024	Agricultural - Agricultural Tractors	Aggregate	750	Diesel	0.000185824	0.000224848	0.000267587	0.001648167	0.001942322	0.385588871	8.81762E-05	8.11221E-05	3.52137E-06	3.15516E-06	12541.96076	280.4979214	0.797955266	498374.9007
Sacramento	2024	Agricultural - ATVs	Aggregate	100	Gasoline	7.8096E-05	9.44961E-05	0.000112458	0.002759289	0.000297455	0.175854444	1.32288E-05	1.21705E-05	1.60036E-06	1.43376E-06	5699.262749	298.2396347	7.061538098	182517.7133
Sacramento	2024	Agricultural - ATVs	Aggregate	175	Gasoline	7.6732E-05	9.28457E-05	0.000110494	0.003179012	0.00041768	0.244702682	1.8408E-05	1.69353E-05	2.22787E-06	1.99508E-06	7930.563793	476.3133337	5.981723689	253974.6698
Sacramento	2024	Agricultural - ATVs	Aggregate	175	Diesel	8.27315E-06	1.00105E-05	1.19133E-05	0.000155766	8.5826E-05	0.028326647	3.36831E-06	3.09885E-06	2.58853E-07	2.31789E-07	921.3743428	784.4184139	0.443628451	43934.74242
Sacramento	2024	Agricultural - ATVs	Aggregate	25	Gasoline	0.010074377	0.012189997	0.014507103	0.125336075	0.004577831	0.447855038	0.000385602	0.000354753	3.77943E-06	3.6514E-06	14514.52393	3358.016923	81.65661526	464824.6319
Sacramento	2024	Agricultural - ATVs	Aggregate	25	Diesel	0.000268926	0.0003254	0.000387253	0.001606941	0.001378425	0.199940873	6.54814E-05	6.02429E-05	1.82077E-06	1.63606E-06	6503.430919	8415.356714	18.11185074	278946.1836
Sacramento	2024	Agricultural - ATVs	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	505.0067558	10.46318744	61412.51391
Sacramento	2024	Agricultural - ATVs	Aggregate	50	Gasoline	0.000233917	0.000283039	0.00033684	0.011498261	0.000598498	0.3409037	2.56448E-05	2.35932E-05	3.09991E-06	2.77941E-06	11048.34043	2798.499171	37.99200992	353820.8242
Sacramento	2024	Agricultural - ATVs	Aggregate	50	Diesel	0.000415599	0.000502875	0.000598463	0.003160469	0.00272571	0.44480803	0.000119778	0.000110196	4.05615E-06	3.63974E-06	14468.16876	7939.137929	26.60331115	620570.9728
Sacramento	2024	Agricultural - ATVs	Aggregate	75	Gasoline	7.59548E-05	9.19053E-05	0.000109375	0.00356183	0.000207278	0.124883361	9.39445E-06	8.6429E-06	1.13588E-06	1.01818E-06	4047.342075	1101.918076	7.524502854	129615.2946
Sacramento	2024	Agricultural - Bale Wagons (Self Propelled)	Aggregate	175	Diesel	0.000249975	0.00030247	0.000359964	0.0022268	0.002565386	0.363223122	0.000123596	0.000113709	3.31487E-06	2.97215E-06	11814.47516	5877.89034	3.411717622	450688.4094
Sacramento	2024	Agricultural - Bale Wagons (Self Propelled)	Aggregate	300	Diesel	2.94325E-05	3.56134E-05	4.23829E-05	0.000159858	0.000309582	0.057671353	1.3884E-05	1.27733E-05	5.26632E-07	4.71908E-07	1875.862885	2299.872025	0.472032239	71558.79842
Sacramento	2024	Agricultural - Balers (Self Propelled)	Aggregate	75	Diesel	1.10173E-05	1.3331E-05	1.5865E-05	7.92226E-05	0.000100135	0.012714716	5.15098E-06	4.7389E-06	1.1597E-07	1.04041E-07	413.568667	396.9918529	0.236948811	14191.08194
Sacramento	2024	Agricultural - Combine Harvesters	Aggregate	175	Diesel	0.000119351	0.000144415	0.000171865	0.001133882	0.001201199	0.191250577	5.49822E-05	5.05836E-05	1.74577E-06	1.56495E-06	6220.763637	654.4609152	2.315047655	267397.0579
Sacramento	2024	Agricultural - Combine Harvesters	Aggregate	300	Diesel	0.00018023	0.000218078	0.000259531	0.000965778	0.001781249	0.345248799	8.35623E-05	7.68773E-05	3.15255E-06	2.82507E-06	11229.8285	3271.76705	2.092165926	482709.7188
Sacramento	2024	Agricultural - Combine Harvesters	Aggregate	600	Diesel	0.000494736	0.00059863	0.000712419	0.004095851	0.005236198	1.047723824	0.000219353	0.000201805	9.5686E-06	8.57322E-06	34079.0725	8595.608018	4.150018047	1464875.392
Sacramento	2024	Agricultural - Combine Harvesters	Aggregate	750	Diesel	0.000663724	0.000803107	0.000955763	0.005311524	0.007448149	1.413626637	0.000311073	0.000286187	1.29104E-05	1.15673E-05	45980.70938	2212.177019	3.85012154	1976462.541
Sacramento	2024	Agricultural - Combine Harvesters	Aggregate	9999	Diesel	1.55022E-05	1.87577E-05	2.23232E-05	0.000122245	0.000219356	0.027906803	7.09105E-06	6.52377E-06	2.54796E-07	2.28353E-07	907.7181836	1636.834731	0.052806021	39017.90548
Sacramento	2024	Agricultural - Construction Equipment	Aggregate	100	Diesel	0.000280842	0.000339819	0.000404413	0.002097998	0.002454213	0.327498664	0.000179264	0.000164923	2.98718E-06	2.67983E-06	10652.47392	5431.068787	7.041575431	456907.5882
Sacramento	2024	Agricultural - Construction Equipment	Aggregate	175	Diesel	0.000757702	0.000916819	0.001091091	0.00775769	0.00864634	1.345015084	0.000368085	0.000338638	1.228E-05	1.10059E-05	43748.99712	7872.75127	28.11426987	2086123.772
Sacramento	2024	Agricultural - Construction Equipment	Aggregate	300	Diesel	0.000192865	0.000233367	0.000277725	0.000955519	0.002017285	0.311617306	9.50009E-05	8.74008E-05	2.84455E-06	2.54987E-06	10135.90463	4395.0929	2.45657168	483319.6839
Sacramento	2024	Agricultural - Construction Equipment	Aggregate	50	Diesel	4.19125E-05	5.07141E-05	6.03539E-05	0.000193795	0.000153578	0.02216313	1.00461E-05	9.2424E-06	2.01467E-07	1.81354E-07	720.8950594	1176.084019	0.722798137	30920.74507
Sacramento	2024	Agricultural - Construction Equipment	Aggregate	600	Diesel	0.000132628	0.00016048	0.000190984	0.001095382	0.0013803	0.22071865	6.31286E-05	5.80783E-05	2.01492E-06	1.80608E-06	7179.264915	3605.00079	1.14508678	342335.5065
Sacramento	2024	Agricultural - Construction Equipment	Aggregate	75	Diesel	8.64853E-05	0.000104647	0.000124539	0.000621891	0.000786051	0.099809553	4.04348E-05	3.72E-05	9.10355E-07	8.16713E-07	3246.482453	2980.069668	2.702308607	139248.6382
Sacramento	2024	Agricultural - Cotton Pickers	Aggregate	600	Diesel	5.69431E-05	6.89012E-05	8.19981E-05	0.000457805	0.000616492	0.121177837	2.53872E-05	2.33562E-05	1.1067E-06	9.91563E-07	3941.523716	2786.171331	0.53437816	169424.8306
Sacramento	2024	Agricultural - Forage & Silage Harvesters	Aggregate	600	Diesel	0.000113551	0.000137397	0.000163514	0.001010719	0.001129726	0.236457846	4.96886E-05	4.57135E-05	2.15945E-06	1.93487E-06	7691.210113	281.969234	0.625118487	330603.6153
Sacramento	2024	Agricultural - Forage & Silage Harvesters	Aggregate	750	Diesel	0.000316674	0.000383176	0.000456011	0.002600462	0.003452558	0.541609857	0.000158776	0.000146074	4.94456E-06	4.43184E-06	17616.81959	4663.586915	1.346507507	757251.99
Sacramento	2024	Agricultural - Forage & Silage Harvesters	Aggregate	9999	Diesel	0.000186344	0.000225477	0.000268336	0.001510553	0.002546441	0.287218685	8.88897E-05	8.17786E-05	2.62157E-06	2.35023E-06	9342.296275	2244.0637	0.53291019	401574.8926
Sacramento	2024	Agricultural - Forklifts	Aggregate	100	Diesel	0.000355565	0.000430234	0.000512014	0.002781893	0.002899153	0.445063989	0.000208692	0.000191997	4.0603E-06	3.64183E-06	14476.49428	10370.39798	9.01184929	620928.073
Sacramento	2024	Agricultural - Forklifts	Aggregate	175	Diesel	7.83343E-05	9.47845E-05	0.000112801	0.000747066	0.000784799	0.125551126	3.6163E-05	3.32699E-05	1.14606E-06	1.02735E-06	4083.772693	3095.564588	1.978426633	194730.2979
Sacramento	2024	Agricultural - Forklifts	Aggregate	50	Diesel	0.000400088	0.000484106	0.000576126	0.001898553	0.00154584	0.216790953	0.000101078	9.29913E-05	1.97097E-06	1.77394E-06	7051.509587	9112.178157	9.224912863	302454.4586
Sacramento	2024	Agricultural - Forklifts	Aggregate	75	Diesel	0.00108679	0.001315016	0.001564977	0.007850233	0.009899644	1.259892079	0.000512264	0.000471283	1.14915E-05	1.03093E-05	40980.22068	15244.84906	32.13348531	1757730.084
Sacramento	2024	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	175	Diesel	5.27117E-05	6.37811E-05	7.59048E-05	0.000512046	0.000516357	0.084570471	2.45831E-05	2.26164E-05	7.71978E-07	6.92016E-07	2750.804318	2581.841254	1.123989923	124922.989
Sacramento	2024	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	300	Diesel	0.000129429	0.000156609	0.000186378	0.000702973	0.001361377	0.253608335	6.10545E-05	5.61702E-05	2.31585E-06	2.0752E-06	8249.060136	1922.329415	2.122073415	374616.7016
Sacramento	2024	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	600	Diesel	7.48773E-06	9.06016E-06	1.07823E-05	6.01624E-05	8.11356E-05	0.016011818	3.33324E-06	3.06658E-06	1.46234E-07	1.3102E-07	520.8127196	396.9918529	0.078982938	23651.80296
Sacramento	2024	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	75	Diesel	4.33173E-06	5.24139E-06	6.23769E-06	3.11482E-05	3.93704E-05	0.004999088	2.02523E-06	1.86321E-06	4.55963E-08	4.09061E-08	162.6042006	1502.058062	0.110907112	6642.328596
Sacramento	2024	Agricultural - Nut Harvester	Aggregate	100	Diesel	0.00137056	0.001658377	0.001973606	0.010077996	0.011352499	1.568330704	0.000848537	0.000780654	1.43043E-05	1.28332E-05	51012.73308	17501.56985	26.3278832	1972411.092
Sacramento	2024	Agricultural - Nut Harvester	Aggregate	175	Diesel	0.000800895	0.000969082	0.001153288	0.007332329	0.008158784	1.213590081	0.000384954	0.000354158	1.10766E-05	9.93046E-06	39474.16619	13254.19439	16.23894546	1696781.353
Sacramento	2024	Agricultural - Nut Harvester	Aggregate	25	Diesel	8.88516E-05	0.00010751	0.000127946	0.000410833	0.000346716	0.046984342	1.80182E-05	1.65767E-05	4.27096E-07	3.84459E-07	1528.2489	311.0825501	3.767112302	59089.85641
Sacramento	2024	Agricultural - Nut Harvester	Aggregate	300	Diesel	0.000450237	0.000544786	0.000648341	0.002207091	0.004533139	0.682228701	0.000222626	0.000204816	6.22678E-06	5.58248E-06	22190.69648	3508.441115	4.423688799	953858.2707
Sacramento	2024	Agricultural - Nut Harvester	Aggregate	50	Diesel	0.000521052	0.000630473	0.000750314	0.002361184	0.001851207	0.253370959	0.000131454	0.000120938	2.30193E-06	2.07326E-06	8241.339061	5488.46042	9.498992631	318651.9824
Sacramento	2024	Agricultural - Nut Harvester	Aggregate	75	Diesel	0.000146209	0.000176913	0.000210542	0.001073898	0.001335934	0.170940756	6.95429E-05	6.39794E-05	1.55919E-06	1.39876E-06	5560.150746	3698.974913	3.411275443	214983.6382
Sacramento	2024	Agricultural - Other Harvesters	Aggregate	100	Diesel	0.000680508	0.000823415	0.000979932	0.005104124	0.005554145	0.805415152	0.000408336	0.000375669	7.34665E-06	6.59048E-06	26197.55389	10950.30317	12.91909934	1012930.353
Sacramento	2024	Agricultural - Other Harvesters	Aggregate	175	Diesel	0.000803303	0.000971996	0.001156756	0.007426106	0.008162961	1.235299275	0.000382177	0.000351603	1.12751E-05	1.01081E-05	40180.29618	12875.68301	16.15122817	1727134.076
Sacramento	2024	Agricultural - Other Harvesters	Aggregate	300	Diesel	0.000217374	0.000263022	0.000313018	0.001173042	0.002220141	0.421357248	0.000101697	9.35613E-05	3.8476E-06	3.44784E-06	13705.39056	2576.539687	2.516108442	589120.7671
Sacramento	2024	Agricultural - Other Harvesters	Aggregate	600	Diesel	0.000228818	0.00027687	0.000329498	0.001838508	0.002479432	0.489306746	0.000101861	9.3712E-05	4.46878E-06	4.00386E-06	15915.5683	2296.041789	1.970049873	684124.38
Sacramento	2024	Agricultural - Other Harvesters	Aggregate	75	Diesel	0.000107689	0.000130304	0.000155073	0.000774364	0.000978772	0.124280444	5.03484E-05	4.63205E-05	1.13355E-06	1.01695E-06	4042.441503	3403.387312	2.601727008	156301.2989
Sacramento	2024	Agricultural - Other Harvesters	Aggregate	750	Diesel	1.95973E-05	2.37128E-05	2.82201E-05	0.00015683	0.000219916	0.041739147	9.18482E-06	8.45003E-06	3.81197E-07	3.41539E-07	1357.639676	1502.058083	0.110907113	58357.60196
Sacramento	2024	Agricultural - Sprayers/Spray Rigs	Aggregate	100	Diesel	0.000104023	0.000125867	0.000149793	0.000778173	0.000850204	0.122619008	6.26159E-05	5.76066E-05	1.11846E-06	1.00336E-06	3988.400358	1621.521559	2.199078544	162924.8542
Sacramento	2024	Agricultural - Sprayers/Spray Rigs	Aggregate	175	Diesel	0.000427404	0.000517159	0.000615461	0.003950427	0.004338398	0.657118327	0.000203169	0.000186915	5.99778E-06	5.37701E-06	21373.93709	11216.61771	8.260563404	970660.1388
Sacramento	2024	Agricultural - Sprayers/Spray Rigs	Aggregate	25	Diesel	3.64805E-06	4.41414E-06	5.25319E-06	1.68679E-05	1.42354E-05	0.001929072	7.39785E-07	6.80603E-07	1.75356E-08	1.5785E-08	62.74648527	993.3247997	0.186291737	2563.173459
Sacramento	2024	Agricultural - Sprayers/Spray Rigs	Aggregate	300	Diesel	0.000513061	0.000620804	0.000738808	0.002557716	0.005201944	0.813220665	0.000251858	0.000231709	7.42307E-06	6.65435E-06	26451.44203	8992.612329	5.801648532	1201246.193
Sacramento	2024	Agricultural - Sprayers/Spray Rigs	Aggregate	50	Diesel	0.000169147	0.000204667	0.000243571	0.000787596	0.00062623	0.08991167	4.096E-05	3.76832E-05	8.1734E-07	7.35721E-07	2924.536272	6352.400257	3.846137266	119466.352
Sacramento	2024	Agricultural - Sprayers/Spray Rigs	Aggregate	600	Diesel	0.000644818	0.00078023	0.000928538	0.005376357	0.006674063	1.104963027	0.000303973	0.000279655	1.00877E-05	9.04159E-06	35940.87892	3765.589038	5.22164405	1632192.447
Sacramento	2024	Agricultural - Sprayers/Spray Rigs	Aggregate	75	Diesel	0.001740719	0.00210627	0.002506636	0.011390903	0.015165463	1.719084607	0.000943447	0.000867971	1.56721E-05	1.40668E-05	55916.2707	5939.022877	50.1370964	2284161.436
Sacramento	2024	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	100	Diesel	0.000253236	0.000306415	0.000364659	0.001987814	0.002046442	0.317094304	0.000148695	0.000136799	2.89284E-06	2.59469E-06	10314.0537	3260.155241	4.570281413	368660.012
Sacramento	2024	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	175	Diesel	6.22125E-05	7.52772E-05	8.9586E-05	0.000568261	0.000633755	0.093944793	2.99583E-05	2.75617E-05	8.57439E-07	7.68723E-07	3055.720731	2629.939041	1.010691314	121423.9578
Sacramento	2024	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	300	Diesel	0.000118149	0.00014296	0.000170135	0.000636554	0.001201483	0.228287526	5.52345E-05	5.08157E-05	2.08458E-06	1.86801E-06	7425.456003	2689.212579	1.483802611	295062.3856
Sacramento	2024	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	50	Diesel	0.000144981	0.000175426	0.000208772	0.000670363	0.000531244	0.076665109	3.47507E-05	3.19707E-05	6.969E-07	6.27328E-07	2493.668421	654.4608773	2.315047661	89132.34963
Sacramento	2024	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	75	Diesel	9.41841E-05	0.000113963	0.000135625	0.000679336	0.000856482	0.108834019	4.41558E-05	4.06234E-05	9.9267E-07	8.90557E-07	3540.019163	1947.357265	2.453833401	126532.5504
Sacramento	2024	Airport Ground Support - A/C Tug Narrow Body	Aggregate	100	Diesel	4.24679E-05	5.13862E-05	6.11538E-05	0.000496183	0.000408026	0.083590919	2.88079E-05	2.65033E-05	7.91841E-07	0	2716.301504	1045.469209	2.081538578	47795.70055
Sacramento	2024	Airport Ground Support - A/C Tug Narrow Body	Aggregate	175	Diesel	0.000103125	0.000124781	0.0001485	0.001513871	0.00093369	0.263334055	4.33638E-05	3.98947E-05	2.49451E-06	0	8557.086056	2570.914203	3.515547991	176510.9128
Sacramento	2024	Airport Ground Support - A/C Tug Narrow Body	Aggregate	300	Diesel	3.14002E-05	3.79942E-05	4.52162E-05	0.000237775	0.000327836	0.114416536	1.17524E-05	1.08122E-05	1.08385E-06	0	3717.985305	636.6233877	1.057263006	77137.54753
Sacramento	2024	Airport Ground Support - A/C Tug Narrow Body	Aggregate	50	Diesel	1.79139E-05	2.16758E-05	2.5796E-05	0.000142331	0.00011634	0.019658901	5.3533E-06	4.92503E-06	1.86225E-07	0	638.8194186	550.7009553	1.305175687	9780.790176
Sacramento	2024	Airport Ground Support - A/C Tug Narrow Body	Aggregate	600	Diesel	2.48549E-05	3.00744E-05	3.5791E-05	0.000208261	0.00015894	0.102486352	7.16134E-06	6.58843E-06	9.70833E-07	0	3330.3119	371.4382296	0.559680677	70013.90019
Sacramento	2024	Airport Ground Support - A/C Tug Narrow Body	Aggregate	75	Diesel	7.41254E-05	8.96917E-05	0.000106741	0.001182662	0.001038445	0.199789683	1.57121E-05	1.44551E-05	1.89257E-06	0	6492.200617	3114.122212	5.990913	115765.8121
Sacramento	2024	Airport Ground Support - A/C Tug Wide Body	Aggregate	100	Diesel	3.06564E-06	3.70943E-06	4.41452E-06	4.37538E-05	3.84272E-05	0.007316002	3.21302E-06	2.95598E-06	6.93031E-08	0	237.7347616	97.2945501	0.217287	4239.172412
Sacramento	2024	Airport Ground Support - A/C Tug Wide Body	Aggregate	175	Diesel	4.33471E-05	5.245E-05	6.24198E-05	0.000838178	0.000376703	0.140826082	1.61158E-05	1.48265E-05	1.33402E-06	0	4576.168106	1175.419904	1.490910677	91934.33386
Sacramento	2024	Airport Ground Support - A/C Tug Wide Body	Aggregate	300	Diesel	9.92702E-05	0.000120117	0.000142949	0.000710877	0.00090628	0.336423684	3.62403E-05	3.33411E-05	3.18688E-06	0	10932.14629	1695.645984	2.796450051	222360.0235
Sacramento	2024	Airport Ground Support - A/C Tug Wide Body	Aggregate	50	Diesel	1.17704E-06	1.42422E-06	1.69493E-06	1.26498E-05	1.22446E-05	0.001637409	6.09169E-07	5.60435E-07	1.55109E-08	0	53.20788329	53.25280976	0.155205	948.7774922
Sacramento	2024	Airport Ground Support - A/C Tug Wide Body	Aggregate	600	Diesel	9.32649E-05	0.000112851	0.000134301	0.000675611	0.000735581	0.309335664	3.3332E-05	3.06654E-05	2.93028E-06	0	10051.91638	978.1320263	1.489968	199265.153
Sacramento	2024	Airport Ground Support - A/C Tug Wide Body	Aggregate	75	Diesel	3.2143E-06	3.8893E-06	4.62859E-06	4.72346E-05	4.28955E-05	0.007987278	9.2006E-07	8.46455E-07	7.56619E-08	0	259.5479981	126.8941006	0.248328	4628.135598
Sacramento	2024	Airport Ground Support - A/C Tug Wide Body	Aggregate	750	Diesel	2.55195E-06	3.08786E-06	3.67481E-06	2.21306E-05	1.59406E-05	0.011084161	9.98998E-07	9.19078E-07	1.04998E-07	0	360.1817299	18.97044995	0.031041	7140.09795
Sacramento	2024	Airport Ground Support - AirCraft Tractor	Aggregate	75	Diesel	1.66553E-06	2.0153E-06	2.39837E-06	2.70841E-05	2.31468E-05	0.004546477	4.67438E-07	4.30043E-07	4.30679E-08	0	147.7385739	114.5079882	0.217287	2634.403494
Sacramento	2024	Airport Ground Support - Baggage Tug	Aggregate	100	Diesel	0.000118564	0.000143462	0.000170732	0.001140865	0.000922956	0.192618663	5.64961E-05	5.19764E-05	1.82464E-06	0	6259.177072	3196.189187	6.679354133	108260.6182
Sacramento	2024	Airport Ground Support - Baggage Tug	Aggregate	300	Diesel	4.63034E-06	5.60271E-06	6.66769E-06	2.62638E-05	6.69951E-05	0.011589896	2.34635E-06	2.15865E-06	1.09789E-07	0	376.6156898	108.2074065	0.186246	7465.87817
Sacramento	2024	Airport Ground Support - Baggage Tug	Aggregate	50	Diesel	3.77501E-05	4.56777E-05	5.43602E-05	0.000426878	0.000381535	0.063618851	1.3719E-05	1.26215E-05	6.02649E-07	0	2067.305673	2112.039161	5.001536497	32352.68155
Sacramento	2024	Airport Ground Support - Baggage Tug	Aggregate	75	Diesel	6.83739E-05	8.27324E-05	9.84584E-05	0.000788437	0.000818983	0.134252191	2.73961E-05	2.52044E-05	1.27174E-06	0	4362.548375	3237.238865	6.552392165	75496.23175
Sacramento	2024	Airport Ground Support - Belt Loader	Aggregate	100	Diesel	4.80888E-05	5.81874E-05	6.92479E-05	0.00046148	0.000370477	0.077380569	2.19247E-05	2.01708E-05	7.33011E-07	0	2514.495085	1502.097538	3.136484496	43881.56177
Sacramento	2024	Airport Ground Support - Belt Loader	Aggregate	175	Diesel	2.72009E-06	3.29131E-06	3.91693E-06	2.7753E-05	2.7376E-05	0.004831408	1.16722E-06	1.07384E-06	4.5767E-08	0	156.9974617	78.03391928	0.124164	3112.254624
Sacramento	2024	Airport Ground Support - Belt Loader	Aggregate	300	Diesel	4.30552E-07	5.20968E-07	6.19996E-07	4.35481E-06	5.41824E-07	0.002179562	4.59675E-08	4.22901E-08	2.06466E-08	0	70.82525172	20.64722564	0.031041	1404.011344
Sacramento	2024	Airport Ground Support - Belt Loader	Aggregate	50	Diesel	3.90678E-05	4.7272E-05	5.62576E-05	0.000475342	0.000406612	0.070578462	1.31078E-05	1.20592E-05	6.68576E-07	0	2293.459428	2810.021727	6.643406739	40179.38943
Sacramento	2024	Airport Ground Support - Belt Loader	Aggregate	75	Diesel	4.26607E-05	5.16195E-05	6.14314E-05	0.00044865	0.00048115	0.076720294	1.72597E-05	1.5879E-05	7.26756E-07	0	2493.039336	2070.139195	4.254967713	42331.67376
Sacramento	2024	Airport Ground Support - Belt Loader	Aggregate	750	Diesel	2.81306E-06	3.4038E-06	4.05081E-06	4.12133E-05	4.00872E-05	0.001747257	2.05477E-06	1.89039E-06	1.65514E-08	0	56.77740794	5.296623674	0.031041	1125.532531
Sacramento	2024	Airport Ground Support - Bobtail	Aggregate	100	Diesel	7.09624E-07	8.58645E-07	1.02186E-06	5.31789E-06	4.83366E-06	0.000865407	2.64818E-07	2.43633E-07	8.19783E-09	0	28.12154121	16.94087347	0.031041	501.4498547
Sacramento	2024	Airport Ground Support - Bobtail	Aggregate	175	Diesel	2.05262E-06	2.48367E-06	2.95577E-06	1.82992E-05	2.34544E-05	0.003157322	1.22708E-06	1.12891E-06	2.99087E-08	0	102.5977167	40.38679823	0.093123	2033.855929
Sacramento	2024	Airport Ground Support - Bobtail	Aggregate	50	Diesel	7.28976E-08	8.82061E-08	1.04973E-07	1.15838E-06	1.2698E-06	0.000162343	4.9228E-08	4.52898E-08	1.53785E-09	0	5.275379261	5.296623674	0.031041	94.06803646
Sacramento	2024	Airport Ground Support - Bobtail	Aggregate	600	Diesel	1.90829E-05	2.30903E-05	2.74794E-05	0.000162495	0.000164259	0.059069688	7.74149E-06	7.12217E-06	5.59556E-07	0	1919.479826	259.8055449	0.434574	38050.99712
Sacramento	2024	Airport Ground Support - Bobtail	Aggregate	75	Diesel	1.46594E-06	1.77379E-06	2.11096E-06	1.30356E-05	1.49066E-05	0.002113906	5.22941E-07	4.81106E-07	2.00246E-08	0	68.6917562	55.40556364	0.124164	1224.878498
Sacramento	2024	Airport Ground Support - Cargo Loader	Aggregate	100	Diesel	2.40817E-05	2.91389E-05	3.46777E-05	0.00032947	0.000241872	0.057223558	1.77714E-05	1.63497E-05	5.42068E-07	0	1859.489496	1054.205089	2.207300696	30708.75758
Sacramento	2024	Airport Ground Support - Cargo Loader	Aggregate	175	Diesel	0.000154913	0.000187445	0.000223075	0.002441362	0.001301039	0.418446732	5.51863E-05	5.07714E-05	3.96386E-06	0	13597.49955	6289.978189	7.923546894	270968.2021
Sacramento	2024	Airport Ground Support - Cargo Loader	Aggregate	300	Diesel	1.84128E-05	2.22795E-05	2.65144E-05	0.000103685	0.000220658	0.035233745	1.05066E-05	9.66605E-06	3.33762E-07	0	1144.926691	342.9818046	0.589779	22696.56687
Sacramento	2024	Airport Ground Support - Cargo Loader	Aggregate	50	Diesel	3.52974E-06	4.27098E-06	5.08282E-06	1.77463E-05	1.48692E-05	0.001730006	1.28069E-06	1.17824E-06	1.6388E-08	0	56.21685257	97.92327417	0.217287	1002.431991
Sacramento	2024	Airport Ground Support - Cargo Loader	Aggregate	600	Diesel	1.86082E-05	2.25159E-05	2.67958E-05	0.000129717	0.000162925	0.066018453	5.91932E-06	5.44578E-06	6.2538E-07	0	2145.281158	355.7602127	0.496656	42527.19205
Sacramento	2024	Airport Ground Support - Cargo Loader	Aggregate	75	Diesel	2.61796E-05	3.16773E-05	3.76986E-05	0.000393858	0.000351428	0.066960585	5.32919E-06	4.90286E-06	6.34305E-07	0	2175.895879	1545.833985	2.981251979	37731.51273
Sacramento	2024	Airport Ground Support - Cargo Tractor	Aggregate	100	Diesel	2.51907E-05	3.04807E-05	3.62746E-05	0.000326531	0.000229997	0.055176402	1.55448E-05	1.43012E-05	5.22675E-07	0	1792.966813	1019.685612	2.049809313	31258.97825
Sacramento	2024	Airport Ground Support - Cargo Tractor	Aggregate	175	Diesel	6.95465E-06	8.41513E-06	1.00147E-05	0.000103077	7.17971E-05	0.017931687	3.29348E-06	3.03E-06	1.69863E-07	0	582.6933116	227.5428117	0.31041	11551.07818
Sacramento	2024	Airport Ground Support - Cargo Tractor	Aggregate	300	Diesel	1.36476E-05	1.65136E-05	1.96526E-05	7.89027E-05	0.000141908	0.03307808	6.51458E-06	5.99342E-06	3.13342E-07	0	1074.877976	277.8547285	0.496656	21307.94927
Sacramento	2024	Airport Ground Support - Cargo Tractor	Aggregate	50	Diesel	2.40699E-05	2.91246E-05	3.46607E-05	0.000380124	0.000332082	0.06014581	7.84748E-06	7.21968E-06	5.6975E-07	0	1954.448598	2426.440162	5.990913	34850.79136
Sacramento	2024	Airport Ground Support - Cargo Tractor	Aggregate	600	Diesel	3.14267E-06	3.80263E-06	4.52545E-06	1.76051E-05	4.68774E-05	0.009354312	1.30521E-06	1.2008E-06	8.86116E-08	0	303.9700093	38.47154868	0.062082	6025.779377
Sacramento	2024	Airport Ground Support - Cargo Tractor	Aggregate	75	Diesel	5.31995E-05	6.43715E-05	7.66073E-05	0.000683674	0.000651271	0.120704261	2.22501E-05	2.04701E-05	1.14341E-06	0	3922.306016	3112.230578	6.247215007	62386.52822
Sacramento	2024	Airport Ground Support - Forklift	Aggregate	100	Diesel	2.74198E-05	3.3178E-05	3.94846E-05	0.000358229	0.000311566	0.059706285	2.04064E-05	1.87739E-05	5.65586E-07	0	1940.166161	1994.96627	3.446022338	34098.24693
Sacramento	2024	Airport Ground Support - Forklift	Aggregate	175	Diesel	5.88586E-05	7.1219E-05	8.47564E-05	0.000854078	0.000557141	0.145421873	2.13099E-05	1.96051E-05	1.37755E-06	0	4725.509126	3777.8494	5.494257	93676.59497
Sacramento	2024	Airport Ground Support - Forklift	Aggregate	300	Diesel	1.03016E-05	1.24649E-05	1.48342E-05	6.84779E-05	0.000112604	0.020786523	5.96406E-06	5.48694E-06	1.96907E-07	0	675.4616855	297.1749023	0.528451048	13208.48803
Sacramento	2024	Airport Ground Support - Forklift	Aggregate	50	Diesel	5.64693E-06	6.83279E-06	8.13158E-06	4.29256E-05	3.45454E-05	0.005954929	1.76173E-06	1.62079E-06	5.64099E-08	0	193.5064495	355.5033849	0.776651622	2644.555383
Sacramento	2024	Airport Ground Support - Forklift	Aggregate	600	Diesel	4.9421E-06	5.97995E-06	7.11663E-06	4.74798E-05	5.79553E-05	0.011738765	2.51568E-06	2.31443E-06	1.11199E-07	0	381.4532289	111.7961096	0.217287	7561.775602
Sacramento	2024	Airport Ground Support - Forklift	Aggregate	75	Diesel	1.59667E-05	1.93197E-05	2.2992E-05	0.00021562	0.000202988	0.035998612	5.17605E-06	4.76196E-06	3.41008E-07	0	1169.781171	1556.501642	3.104399058	20529.19415
Sacramento	2024	Airport Ground Support - Forklift	Aggregate	750	Diesel	8.36995E-07	1.01276E-06	1.20527E-06	6.55491E-06	7.38348E-06	0.003583901	4.39014E-07	4.03893E-07	3.39496E-08	0	116.4594812	17.75881524	0.031041	2308.645981
Sacramento	2024	Airport Ground Support - Fuel Truck	Aggregate	300	Diesel	3.37348E-06	4.08192E-06	4.85782E-06	1.78761E-05	3.70793E-05	0.008679321	1.35604E-06	1.24756E-06	8.22175E-08	0	282.0360359	63.05604246	0.093123	5590.969098
Sacramento	2024	Airport Ground Support - Fuel Truck	Aggregate	600	Diesel	8.50748E-07	1.0294E-06	1.22508E-06	5.16009E-06	6.78283E-06	0.002832378	2.70357E-07	2.48728E-07	2.68306E-08	0	92.03861578	16.0047066	0.031041	1824.536553
Sacramento	2024	Airport Ground Support - Generator	Aggregate	100	Diesel	8.12765E-08	9.83445E-08	1.17038E-07	1.46566E-06	1.16969E-06	0.000260517	5.19928E-08	4.78334E-08	2.46783E-09	0	8.465557935	5.296623674	0.031041	150.9537747
Sacramento	2024	Airport Ground Support - Generator	Aggregate	175	Diesel	8.42943E-07	1.01996E-06	1.21384E-06	1.08614E-05	1.05777E-05	0.001861384	5.02593E-07	4.62385E-07	1.76325E-08	0	60.48598811	21.03596377	0.031041	1199.049935
Sacramento	2024	Airport Ground Support - Lift	Aggregate	100	Diesel	2.30543E-05	2.78957E-05	3.31982E-05	0.000297936	0.000209266	0.05340036	1.30222E-05	1.19805E-05	5.05851E-07	0	1735.254007	930.7349211	2.054362228	26641.08213
Sacramento	2024	Airport Ground Support - Lift	Aggregate	175	Diesel	1.92895E-05	2.33403E-05	2.77769E-05	0.000308886	0.000178776	0.052817568	7.30864E-06	6.72395E-06	5.00331E-07	0	1716.31609	877.7652724	1.242111338	33959.19064
Sacramento	2024	Airport Ground Support - Lift	Aggregate	300	Diesel	4.36014E-06	5.27577E-06	6.27861E-06	2.60459E-05	5.10688E-05	0.013323088	1.8169E-06	1.67155E-06	1.26207E-07	0	432.9360765	114.7373114	0.186246	8582.350895
Sacramento	2024	Airport Ground Support - Lift	Aggregate	50	Diesel	1.44912E-05	1.75343E-05	2.08673E-05	0.000217525	0.000193288	0.034759285	5.70005E-06	5.24405E-06	3.29082E-07	0	1128.87211	1137.759044	2.85754302	18091.68227
Sacramento	2024	Airport Ground Support - Lift	Aggregate	75	Diesel	2.02527E-05	2.45058E-05	2.91639E-05	0.000244535	0.000245018	0.041611814	8.14057E-06	7.48932E-06	3.94181E-07	0	1352.183159	1107.001022	2.297034	24111.48249
Sacramento	2024	Airport Ground Support - Misc - A/C Tug Narrow Body	Aggregate	175	Gasoline	0.000348367	0.000320428	0.000383357	0.021916846	0.002282275	0.561464621	4.0251E-05	3.04119E-05	5.57756E-06	7.91376E-06	22589.85	2379.8	3.23	309374
Sacramento	2024	Airport Ground Support - Misc - A/C Tug Wide Body	Aggregate	600	Gasoline	0.000161188	0.000148261	0.000177378	0.017135277	0.001543185	0.489843218	3.6136E-05	2.73027E-05	5.00734E-06	6.85885E-06	19578.6	554.8	1.06	277400
Sacramento	2024	Airport Ground Support - Misc - Air Conditioner	Aggregate	175	Gasoline	1.41547E-07	1.30195E-07	1.55764E-07	1.58035E-05	1.66938E-06	0.00050296	3.60569E-08	2.7243E-08	4.99639E-09	1.27868E-09	3.65	0	0.08	0
Sacramento	2024	Airport Ground Support - Misc - Air Conditioner	Aggregate	175	Nat Gas	0	0	6.75847E-08	6.66542E-05	7.41102E-06	0.002702905	0	0	0	0	135.05	0	0.63	0
Sacramento	2024	Airport Ground Support - Misc - Air Start Unit	Aggregate	175	Gasoline	1.46149E-05	1.34428E-05	1.60828E-05	0.00152206	0.000160575	0.047576396	3.41072E-06	2.57699E-06	4.72622E-07	6.63636E-07	1894.35	178.85	2.36	23250.5
Sacramento	2024	Airport Ground Support - Misc - Baggage Tug	Aggregate	100	Gasoline	0.002726788	0.0025081	0.003000664	0.202429739	0.016233523	4.956935599	0.000345609	0.000261127	4.78909E-05	7.00436E-05	199939.7	38533.05	43.89	3853305
Sacramento	2024	Airport Ground Support - Misc - Baggage Tug	Aggregate	100	Nat Gas	0	0	8.85993E-05	0.035627132	0.003938362	0.814226789	0	0	0	0	45230.8	7267.15	8.75	726715
Sacramento	2024	Airport Ground Support - Misc - Belt Loader	Aggregate	100	Gasoline	0.000661338	0.000608299	0.000727762	0.049766192	0.00390845	1.18201916	8.24132E-05	6.22678E-05	1.142E-05	1.67367E-05	47774.85	16844.75	20.78	1010685
Sacramento	2024	Airport Ground Support - Misc - Belt Loader	Aggregate	100	Nat Gas	0	0	6.38891E-06	0.003051951	0.000323963	0.078494642	0	0	0	0	4321.6	1288.45	2.32	77307
Sacramento	2024	Airport Ground Support - Misc - Bobtail	Aggregate	100	Gasoline	0.000438246	0.000403098	0.000482263	0.032534248	0.002609029	0.796671268	5.55458E-05	4.1968E-05	7.69696E-06	1.12575E-05	32134.6	6194.05	7.05	619405
Sacramento	2024	Airport Ground Support - Misc - Bobtail	Aggregate	100	Nat Gas	0	0	1.03727E-06	0.000706209	6.41387E-05	0.01964075	0	0	0	0	1080.4	171.55	0.19	17155
Sacramento	2024	Airport Ground Support - Misc - Cargo Loader	Aggregate	100	Gasoline	0.000182097	0.000167493	0.000200386	0.013687118	0.00107708	0.326110804	2.27372E-05	1.71792E-05	3.15069E-06	4.61604E-06	13176.5	3985.8	5.54	279006
Sacramento	2024	Airport Ground Support - Misc - Cargo Loader	Aggregate	100	Nat Gas	0	0	8.9123E-06	0.003274092	0.000370532	0.069218133	0	0	0	0	3876.3	967.25	0.94	67707.5
Sacramento	2024	Airport Ground Support - Misc - Cargo Tractor	Aggregate	100	Gasoline	0.004969749	0.004571175	0.005468906	0.470861122	0.024502877	5.540751281	0.000386314	0.000291882	4.5745E-05	8.34953E-05	238337.7	46172.5	34.18	4386387.5
Sacramento	2024	Airport Ground Support - Misc - Cargo Tractor	Aggregate	175	Nat Gas	0	0	3.12049E-06	0.002586591	0.000283536	0.098854673	0	0	0	0	5336.3	565.75	3.73	88030.7
Sacramento	2024	Airport Ground Support - Misc - Cart	Aggregate	15	Gasoline	2.34338E-05	2.36682E-05	2.57874E-05	0.001322602	1.43968E-05	5.0883E-07	5.12236E-08	3.87022E-08	2.05358E-08	2.8347E-08	80.58732246	0	1.873735	0
Sacramento	2024	Airport Ground Support - Misc - Catering Truck	Aggregate	300	Gasoline	0.000698576	0.000642551	0.000768741	0.038796956	0.004011194	0.892192141	6.58174E-05	4.97287E-05	7.7937E-06	1.26717E-05	36171.5	3814.25	3.77	777725.575
Sacramento	2024	Airport Ground Support - Misc - Catering Truck	Aggregate	300	Nat Gas	0	0	3.15018E-06	0.002015686	0.000215099	0.068326264	0	0	0	0	3701.1	310.25	0.68	63601.25
Sacramento	2024	Airport Ground Support - Misc - Deicer	Aggregate	100	Gasoline	5.37724E-06	4.94599E-06	5.91733E-06	0.000197353	3.66537E-05	0.012201666	8.50729E-07	6.42773E-07	1.17885E-07	1.6495E-07	470.85	62.05	2.66	5770.65
Sacramento	2024	Airport Ground Support - Misc - Forklift	Aggregate	50	Gasoline	0.000191231	0.000175894	0.000210438	0.017841773	0.000428292	0.134919944	9.30126E-06	7.02762E-06	1.64038E-06	2.16992E-06	6194.05	3803.3	5.23	190165
Sacramento	2024	Airport Ground Support - Misc - Forklift	Aggregate	50	Nat Gas	0	0	1.25198E-05	0.003366817	0.000910401	0.271924827	2.41833E-05	0	0	0	14373.7	8891.4	12.23	444570
Sacramento	2024	Airport Ground Support - Misc - Fuel Truck	Aggregate	175	Gasoline	1.48721E-06	1.36793E-06	1.63658E-06	0.000165416	1.75571E-05	0.005265316	3.77467E-07	2.85197E-07	5.23054E-08	7.41635E-08	211.7	65.7	3.22	8541
Sacramento	2024	Airport Ground Support - Misc - Fuel Truck	Aggregate	175	Nat Gas	0	0	8.54242E-07	0.000509015	5.38395E-05	0.016542142	0	0	0	0	897.9	233.6	0.42	32704
Sacramento	2024	Airport Ground Support - Misc - Generator	Aggregate	100	Gasoline	5.44773E-05	5.01083E-05	5.9949E-05	0.003624058	0.000220342	0.046522282	3.24365E-06	2.45075E-06	3.84093E-07	6.96881E-07	1989.25	240.9	0.25	25776.3
Sacramento	2024	Airport Ground Support - Misc - Ground Power Unit	Aggregate	175	Gasoline	0.000284833	0.000261989	0.000313441	0.029003785	0.002600561	0.839574684	6.01886E-05	4.54758E-05	8.3403E-06	1.17434E-05	33521.6	3277.7	4.12	491655
Sacramento	2024	Airport Ground Support - Misc - Hydrant Truck	Aggregate	175	Gasoline	0.000940795	0.000865343	0.001035287	0.044703056	0.004566842	0.92836945	6.65542E-05	5.02854E-05	7.88094E-06	1.32829E-05	37916.2	4799.75	3.15	583169.625
Sacramento	2024	Airport Ground Support - Misc - Lav Cart	Aggregate	15	Gasoline	2.01322E-06	2.03334E-06	2.21542E-06	0.000113638	1.23684E-06	4.37184E-08	4.40112E-09	3.32528E-09	1.76441E-09	2.43554E-09	6.924007598	0	0.160990676	0
Sacramento	2024	Airport Ground Support - Misc - Lav Truck	Aggregate	175	Gasoline	0.000235206	0.000216342	0.00025883	0.017818904	0.001547441	0.451618431	3.23762E-05	2.4462E-05	4.48636E-06	6.36911E-06	18180.65	6102.8	5.02	793364
Sacramento	2024	Airport Ground Support - Misc - Lav Truck	Aggregate	175	Nat Gas	0	0	4.04679E-07	0.000271358	2.91155E-05	0.009433588	0	0	0	0	511	135.05	0.33	17556.5
Sacramento	2024	Airport Ground Support - Misc - Lift	Aggregate	100	Gasoline	0.000296989	0.00027317	0.000326818	0.016554632	0.001496431	0.404156228	2.81787E-05	2.12906E-05	3.90471E-06	5.7157E-06	16315.5	3460.2	9.17	346020
Sacramento	2024	Airport Ground Support - Misc - Lift	Aggregate	100	Nat Gas	0	0	7.25797E-07	0.000421054	4.29566E-05	0.011962677	0	0	0	0	653.35	105.85	0.3	10585
Sacramento	2024	Airport Ground Support - Misc - Maint. Truck	Aggregate	175	Gasoline	0.000172733	0.00015888	0.000190082	0.015132559	0.001423593	0.42855121	3.07226E-05	2.32126E-05	4.25721E-06	6.00341E-06	17136.75	2905.4	6.43	377702
Sacramento	2024	Airport Ground Support - Misc - Other	Aggregate	50	Gasoline	0.000141005	0.000129696	0.000155167	0.010354703	0.000300353	0.10316691	7.11223E-06	5.37369E-06	1.25432E-06	1.59324E-06	4547.9	1748.35	9.52	87417.5
Sacramento	2024	Airport Ground Support - Misc - Other	Aggregate	50	Nat Gas	0	0	1.17595E-05	0.001559792	0.000474023	0.09328595	0	0	0	0	4989.55	1835.95	1.8	91797.5

Sacramento	2024 Airport Ground Support - Misc - Passenger Stand	Aggregate	175	Gasoline	5.00473E-05	4.60335E-05	5.5074E-05	0.004593419	0.000484841	0.138381015	9.92044E-06	7.49545E-06	1.22471E-06	1.93337E-06	5518.8	824.9	4.41	103194.99
Sacramento	2024 Airport Ground Support - Misc - Passenger Stand	Aggregate	175	Nat Gas	0	0	9.26988E-09	9.28281E-06	1.03328E-06	0.000378157	0	0	0	0	3.65	0	0.17	0
Sacramento	2024 Airport Ground Support - Misc - Service Truck	Aggregate	300	Gasoline	0.00086462	0.000795277	0.000951461	0.051581993	0.005354755	1.243294416	9.17184E-05	6.92984E-05	1.27094E-05	1.75947E-05	50224	15622	18.6	2811960
Sacramento	2024 Airport Ground Support - Misc - Service Truck	Aggregate	300	Nat Gas	0	0	1.06659E-05	0.006087881	0.000530768	0.17358965	0	0	0	0	9500.95	2361.55	1.8	425079
Sacramento	2024 Airport Ground Support - Misc - Sweeper	Aggregate	100	Gasoline	7.04085E-06	6.47617E-06	7.74803E-06	0.000389267	3.57976E-05	0.009743298	6.79326E-07	5.13269E-07	8.04416E-08	1.32983E-07	379.6	156.95	0.43	8365.435
Sacramento	2024 Airport Ground Support - Misc - Sweeper	Aggregate	50	Nat Gas	0	0	9.23434E-08	2.46776E-05	7.23649E-06	0.002065296	0	0	0	0	98.55	51.1	0.15	2299.5
Sacramento	2024 Airport Ground Support - Misc - Water Truck	Aggregate	175	Gasoline	1.45306E-05	1.33652E-05	1.599E-05	0.001192741	0.000125486	0.034562762	2.47778E-06	1.8721E-06	3.43345E-07	4.85899E-07	1387	503.7	1.63	75555
Sacramento	2024 Airport Ground Support - Other	Aggregate	100	Diesel	8.22563E-06	9.95302E-06	1.18449E-05	0.000106359	8.93619E-05	0.017983186	6.19349E-06	5.69801E-06	1.70351E-07	0	584.3667545	349.5077458	0.713943	10420.1481
Sacramento	2024 Airport Ground Support - Other	Aggregate	175	Diesel	2.91885E-05	3.53181E-05	4.20314E-05	0.000428672	0.000266468	0.073187074	1.07764E-05	9.91429E-06	6.93287E-07	0	2378.226726	1073.750634	1.521009	47145.01143
Sacramento	2024 Airport Ground Support - Other	Aggregate	300	Diesel	4.72772E-05	5.72054E-05	6.80792E-05	0.000302958	0.000509411	0.134029665	2.08287E-05	1.91624E-05	1.26964E-06	0	4355.317352	1108.675723	1.831890338	86656.46393
Sacramento	2024 Airport Ground Support - Other	Aggregate	50	Diesel	3.34385E-05	4.04606E-05	4.81514E-05	0.000259682	0.00022952	0.031340009	1.19613E-05	1.10044E-05	2.96878E-07	0	1018.399074	1576.292492	3.600963838	17908.49875
Sacramento	2024 Airport Ground Support - Other	Aggregate	600	Diesel	3.17174E-05	3.8378E-05	4.5673E-05	0.000219276	0.000242406	0.113532706	1.04151E-05	9.58194E-06	1.07547E-06	0	3689.265086	622.2719482	0.93123	73134.50931
Sacramento	2024 Airport Ground Support - Other	Aggregate	75	Diesel	2.79561E-05	3.38268E-05	4.02567E-05	0.00029394	0.000313302	0.050008929	1.331E-05	1.22452E-05	4.73725E-07	0	1625.048875	1285.767913	2.795403073	27306.01999
Sacramento	2024 Airport Ground Support - Other	Aggregate	750	Diesel	3.63306E-06	4.396E-06	5.23161E-06	2.1467E-05	3.97356E-05	0.011451704	1.5087E-06	1.388E-06	1.0848E-07	0	372.1251248	34.43911771	0.062082	7376.859013
Sacramento	2024 Airport Ground Support - Other	Aggregate	9999	Diesel	1.60651E-05	1.94387E-05	2.31337E-05	0.000154972	0.000368313	0.079332136	8.71627E-06	8.01897E-06	7.51498E-07	0	2577.911603	54.98940196	0.093123	51103.48422
Sacramento	2024 Airport Ground Support - Passenger Stand	Aggregate	175	Diesel	8.53833E-07	1.03314E-06	1.22952E-06	1.46964E-05	7.65152E-06	0.002361472	3.7424E-07	3.443E-07	2.23698E-08	0	76.73642927	33.21380248	0.062082	1521.192153
Sacramento	2024 Airport Ground Support - Passenger Stand	Aggregate	300	Diesel	1.05405E-06	1.2754E-06	1.51784E-06	6.23829E-06	1.65684E-05	0.003216835	5.28465E-07	4.86188E-07	3.04725E-08	0	104.531616	18.8381161	0.031041	2072.192771
Sacramento	2024 Airport Ground Support - Passenger Stand	Aggregate	50	Diesel	5.81827E-06	7.04011E-06	8.37831E-06	4.00659E-05	3.47917E-05	0.004966067	1.59747E-06	1.46967E-06	4.70426E-08	0	161.3732231	185.4697166	0.465615	2877.530028
Sacramento	2024 Airport Ground Support - Passenger Stand	Aggregate	75	Diesel	9.59461E-06	1.16095E-05	1.38162E-05	7.19318E-05	8.4711E-05	0.011766126	3.56523E-06	3.28001E-06	1.11458E-07	0	382.3423284	315.6101442	0.62082	6817.745286
Sacramento	2024 Cargo Handling Equipment - Port Forklift	Aggregate	175	Diesel	0.0001744	0.0002108	0.0002508	0.001721792	0.001480769	0.254956872	0.0001182	0.0001087	0.000002416	5.72E-09	8292.923712	3610.167241	0	0
Sacramento	2024 Cargo Handling Equipment - Port Tractors/Loaders/Backhoes	Aggregate	300	Diesel	0.0000558	6.76E-05	0.0000804	0.000944178	0.0001162	0.526214918	0.0000087	0.000008	0.00000498	1.18E-08	17116.07193	2113.850092	0	0
Sacramento	2024 Commercial Harbor Craft - AE - Commercial Fishing	Aggregate	75	Diesel	0.000161347	0.00019523	0.00023234	0.000529539	0.001380225	0.085765387	6.2944E-05	6.01744E-05	0	0	2886.315653	1880.54087	1.583454026	49420.61304
Sacramento	2024 Commercial Harbor Craft - AE - Excursion	Aggregate	75	Diesel	1.13652E-05	1.37519E-05	1.63659E-05	5.42591E-05	0.000253949	0.037171642	7.44122E-06	7.1138E-06	0	0	1250.960287	963.4008189	5.102426052	20965.52788
Sacramento	2024 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	100	Diesel	5.46388E-06	6.6113E-06	7.86799E-06	2.41942E-05	0.0001084	0.0125824	3.4113E-06	3.2612E-06	0	0	423.4432922	235.4687796	1.541667	7579.74048
Sacramento	2024 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	175	Diesel	5.17768E-06	6.26499E-06	7.45586E-06	2.70742E-05	0.000109089	0.014454362	2.63287E-06	2.51702E-06	0	0	486.4160065	235.4687737	1.541667016	8712.344699
Sacramento	2024 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	50	Diesel	0.000111483	0.000134895	0.000160536	0.000509413	0.001908675	0.213484244	8.40095E-05	8.03131E-05	0	0	7184.49158	8882.677048	7.708333097	113826.9891
Sacramento	2024 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	300	Diesel	0.000255287	0.000308897	0.000367614	0.001014332	0.002810098	0.169794022	9.69893E-05	9.27217E-05	0	0	5714.183301	1578.696592	1.583454026	106562.0244
Sacramento	2024 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	50	Diesel	7.14952E-06	8.65092E-06	1.02953E-05	6.85447E-05	0.000140061	0.020404793	5.93357E-06	5.67249E-06	0	0	686.695117	1578.696655	1.583454013	11508.69916
Sacramento	2024 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	600	Diesel	0.000103659	0.000125428	0.000149269	0.000526675	0.002939756	0.288910432	5.00715E-05	4.78684E-05	0	0	9722.881545	1578.696655	1.583454013	181155.4366
Sacramento	2024 Commercial Harbor Craft - ME - Excursion	Aggregate	600	Diesel	2.89517E-05	3.50315E-05	4.16904E-05	0.000127893	0.000801049	0.131544057	8.44679E-06	8.07513E-06	0	0	4426.93356	1028.698958	5.102426009	82707.39844
Sacramento	2024 Commercial Harbor Craft - ME - Excursion	Aggregate	800	Diesel	0.000362391	0.000438493	0.000521843	0.00158588	0.009548583	1.455224224	0.000111968	0.000107041	0	0	48973.56145	5461.563942	5.102425999	914812.0001
Sacramento	2024 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	600	Diesel	0.000718886	0.000869852	0.001035196	0.002357711	0.014655896	1.470396074	0.000244786	0.000234015	0	0	49484.14903	7876.983942	9.249999901	924362.3112
Sacramento	2024 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	800	Diesel	3.96524E-05	4.79794E-05	5.70995E-05	0.000242129	0.000830092	0.181572741	1.72541E-05	1.64949E-05	0	0	6110.579804	471.4464519	3.083333127	114160.7524
Sacramento	2024 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	9999	Diesel	0.000192742	0.000233218	0.000277548	0.002120212	0.004299037	1.611361962	0.000111668	0.000106755	0	0	54228.16126	2489.793787	3.083333042	1081068.468
Sacramento	2024 Commercial Harbor Craft - ME - Work Boat	Aggregate	300	Diesel	0.000157206	0.000190219	0.000226376	0.000556873	0.002696505	0.239450833	5.95594E-05	5.69388E-05	0	0	8058.387102	1960.344748	3.068023	150142.7979
Sacramento	2024 Commercial Harbor Craft - ME - Work Boat	Aggregate	600	Diesel	0.000543701	0.000657878	0.00078293	0.001843859	0.00881037	0.739174305	0.000204135	0.000195153	0	0	24875.89009	3920.688978	6.136045	463484.2811
Sacramento	2024 Commercial Harbor Craft - ME - Work Boat	Aggregate	9999	Diesel	0.005267622	0.006373822	0.007585375	0.024754236	0.044189606	8.760500772	0.001936344	0.001851145	0	0	294822.5548	11762.06952	18.40813927	5816402.499
Sacramento	2024 Construction and Mining - Bore/Drill Rigs	Aggregate	100	Diesel	7.33072E-05	8.87017E-05	0.000105562	0.000785178	0.00076546	0.128604721	5.55979E-05	5.11501E-05	1.21825E-06	0	4179.032859	1692.11628	3.313413669	74294.93822
Sacramento	2024 Construction and Mining - Bore/Drill Rigs	Aggregate	175	Diesel	0.000393306	0.000475901	0.000566361	0.005394304	0.003938191	0.923875301	0.00017915	0.000164818	8.75169E-06	0	30021.4891	8540.812521	13.12802896	597665.3996
Sacramento	2024 Construction and Mining - Bore/Drill Rigs	Aggregate	300	Diesel	0.000457425	0.000553484	0.000658692	0.002612383	0.005187669	1.095253897	0.000220185	0.00020257	1.03751E-05	0	35590.46648	6273.453376	10.27166972	709080.5887
Sacramento	2024 Construction and Mining - Bore/Drill Rigs	Aggregate	50	Diesel	4.71852E-05	5.70941E-05	6.79467E-05	0.000375611	0.000316583	0.043688001	1.73108E-05	1.59259E-05	4.13848E-07	0	1419.649221	1274.763178	2.689915946	25314.505
Sacramento	2024 Construction and Mining - Bore/Drill Rigs	Aggregate	600	Diesel	0.000598013	0.000723595	0.000861138	0.004685197	0.006272921	1.576492744	0.000270663	0.00024901	1.49338E-05	0	51228.40677	5067.859832	8.827670534	1029166.231
Sacramento	2024 Construction and Mining - Bore/Drill Rigs	Aggregate	75	Diesel	8.04209E-05	9.73093E-05	0.000115806	0.00101077	0.000999366	0.169008948	3.47778E-05	3.19955E-05	1.60099E-06	0	5491.975255	3059.748841	6.265910165	97362.05651
Sacramento	2024 Construction and Mining - Bore/Drill Rigs	Aggregate	750	Diesel	0.00021858	0.000264481	0.000314755	0.001265583	0.002399234	0.655081751	9.43158E-05	8.67705E-05	6.20546E-06	0	21286.99579	1291.621108	2.29626971	421984.8548
Sacramento	2024 Construction and Mining - Bore/Drill Rigs	Aggregate	9999	Diesel	6.6534E-05	8.05061E-05	9.5809E-05	0.000400873	0.001128681	0.216206266	2.62195E-05	2.41219E-05	2.04808E-06	0	7025.660333	326.6814549	0.557665501	139273.8687
Sacramento	2024 Construction and Mining - Bucket	Aggregate	100	Diesel	5.80263E-06	7.02119E-06	8.35579E-06	6.06375E-05	5.70898E-05	0.009940227	4.0073E-06	3.68672E-06	9.41618E-08	0	323.0094187	184.6940297	0.360842383	5759.749257
Sacramento	2024 Construction and Mining - Bucket	Aggregate	175	Diesel	5.4836E-06	6.63515E-06	7.89638E-06	9.61059E-05	4.84325E-05	0.016260422	1.93174E-06	1.7772E-06	1.54032E-07	0	528.3852632	214.608262	0.360842383	10474.49724
Sacramento	2024 Construction and Mining - Bucket	Aggregate	300	Diesel	1.31444E-05	1.59047E-05	1.8928E-05	9.22884E-05	8.37414E-05	0.04235493	4.01504E-06	3.69384E-06	4.0122E-07	0	1376.330847	291.9763554	0.426450089	27283.82992
Sacramento	2024 Construction and Mining - Bucket	Aggregate	50	Diesel	2.70822E-06	3.27695E-06	3.89984E-06	2.60997E-05	2.38039E-05	0.003424747	1.01575E-06	9.34494E-07	3.2442E-08	0	111.2877543	128.3618207	0.295234677	1984.429936
Sacramento	2024 Construction and Mining - Bucket	Aggregate	75	Diesel	3.79607E-06	4.59324E-06	5.46634E-06	5.79711E-05	5.38562E-05	0.00984059	1.20342E-06	1.10715E-06	9.3218E-08	0	319.7717039	220.4460131	0.426450089	5702.015877
Sacramento	2024 Construction and Mining - Bucket	Aggregate	750	Diesel	7.57778E-06	9.16911E-06	1.0912E-05	6.50042E-05	5.69713E-05	0.033328919	3.17156E-06	2.91784E-06	3.15718E-07	0	1083.029032	75.73561641	0.131215412	21469.53254
Sacramento	2024 Construction and Mining - Compactor	Aggregate	100	Diesel	1.08713E-06	1.31543E-06	1.56547E-06	2.76019E-05	1.72483E-05	0.004757476	1.33572E-06	1.22886E-06	4.50666E-08	0	154.5949967	90.32494619	0.196823118	2756.663942
Sacramento	2024 Construction and Mining - Compactor	Aggregate	175	Diesel	2.23522E-05	2.70461E-05	3.21871E-05	0.000478757	0.000187136	0.081640799	7.23836E-06	6.65929E-06	7.73367E-07	0	2652.932018	1070.457524	1.574584944	52590.6588
Sacramento	2024 Construction and Mining - Compactor	Aggregate	300	Diesel	5.6729E-06	6.86421E-06	8.16898E-06	4.16514E-05	3.91334E-05	0.020815192	1.74813E-06	1.60828E-06	1.97178E-07	0	676.3933106	157.9126199	0.262430824	13408.54932
Sacramento	2024 Construction and Mining - Compactor	Aggregate	50	Diesel	3.3097E-06	4.00473E-06	4.76596E-06	3.48628E-05	2.99587E-05	0.00505019	8.29259E-07	7.62918E-07	4.78395E-08	0	164.1067994	242.321745	0.557665501	2926.273852
Sacramento	2024 Construction and Mining - Compactor	Aggregate	600	Diesel	1.33787E-05	1.61882E-05	1.92653E-05	0.000101541	0.000115764	0.053518651	3.95195E-06	3.63579E-06	5.06972E-07	0	1739.097906	217.3389234	0.360842383	34475.17839
Sacramento	2024 Construction and Mining - Compactor	Aggregate	75	Diesel	2.05448E-06	2.48592E-06	2.95845E-06	3.15519E-05	2.84385E-05	0.005424996	5.00021E-07	4.60019E-07	5.13899E-08	0	176.2861797	129.4414797	0.295234677	3143.450727
Sacramento	2024 Construction and Mining - Compactor	Aggregate	9999	Diesel	2.47904E-06	2.99964E-06	3.56982E-06	2.98064E-05	5.16892E-05	0.015838143	8.99113E-07	8.27184E-07	1.50032E-07	0	514.6632289	18.00064423	0.032803853	10202.47714
Sacramento	2024 Construction and Mining - Concrete Mixer	Aggregate	175	Diesel	1.27414E-06	1.5417E-06	1.83476E-06	2.84704E-05	1.03612E-05	0.004643682	4.47832E-07	4.12006E-07	4.39887E-08	0	150.8972712	63.17300826	0.098411559	2991.326898
Sacramento	2024 Construction and Mining - Concrete Mixer	Aggregate	300	Diesel	1.20963E-06	1.46365E-06	1.74186E-06	1.13166E-05	7.34289E-06	0.005545136	3.04019E-07	2.79698E-07	5.2528E-08	0	180.1901758	42.95355547	0.065607706	3572.017673
Sacramento	2024 Construction and Mining - Concrete Mixer	Aggregate	50	Diesel	7.74415E-07	9.37042E-07	1.11516E-06	1.35892E-05	1.17556E-05	0.002321222	1.32017E-07	1.21456E-07	2.19885E-08	0	75.4285115	136.854405	0.32803853	1345.005092
Sacramento	2024 Construction and Mining - Concrete Mixer	Aggregate	600	Diesel	1.30818E-06	1.58289E-06	1.88377E-06	7.78415E-06	1.65845E-05	0.00411921	4.9707E-07	4.57305E-07	3.90205E-08	0	133.8544512	22.00229585	0.032803853	2653.47688
Sacramento	2024 Construction and Mining - Concrete Mixer	Aggregate	75	Diesel	3.4865E-07	4.21866E-07	5.02055E-07	4.24509E-06	3.33251E-06	0.000653105	6.09315E-08	5.6057E-08	6.18674E-09	0	21.22277663	17.81706162	0.032803853	378.4343888
Sacramento	2024 Construction and Mining - Concrete Pump	Aggregate	100	Diesel	2.14472E-06	2.59512E-06	3.0884E-06	2.46133E-05	2.24365E-05	0.004003906	1.38208E-06	1.27151E-06	3.79282E-08	0	130.1076126	69.77939865	0.131215412	2320.016636
Sacramento	2024 Construction and Mining - Concrete Pump	Aggregate	175	Diesel	2.02236E-05	2.44706E-05	2.9122E-05	0.000424847	0.000159176	0.070991606	5.56668E-06	5.12135E-06	6.7249E-07	0	2306.884616	847.1812682	1.049723296	45730.75409
Sacramento	2024 Construction and Mining - Concrete Pump	Aggregate	300	Diesel	6.65617E-06	8.05397E-06	9.58489E-06	6.13505E-05	2.71173E-05	0.028646031	1.61038E-06	1.48155E-06	2.71358E-07	0	930.8577725	247.567206	0.393646236	18452.95061
Sacramento	2024 Construction and Mining - Concrete Pump	Aggregate	50	Diesel	3.69122E-07	4.46638E-07	5.31536E-07	2.7865E-06	2.44042E-06	0.000378849	1.00353E-07	9.23246E-08	3.58876E-09	0	12.31076224	12.4444227	0.032803853	219.5196164
Sacramento	2024 Construction and Mining - Concrete Pump	Aggregate	600	Diesel	2.41159E-05	2.91802E-05	3.47268E-05	0.000122498	0.000349819	0.06491489	1.02716E-05	9.44988E-06	6.14926E-07	0	2109.420688	300.5340555	0.590469354	41816.30848
Sacramento	2024 Construction and Mining - Concrete Pump	Aggregate	75	Diesel	2.34567E-06	2.83826E-06	3.37776E-06	2.8303E-05	2.80739E-05	0.004730837	9.58578E-07	8.81892E-07	4.48143E-08	0	153.729358	115.4630655	0.229626971	2741.228286
Sacramento	2024 Construction and Mining - Crane less than 35ton	Aggregate	100	Diesel	2.1402E-06	2.58964E-06	3.08188E-06	3.55894E-05	3.05546E-05	0.006488429	2.01708E-06	1.85571E-06	6.14636E-08	0	210.8426173	143.0387185	0.688880913	3759.644574
Sacramento	2024 Construction and Mining - Crane less than 35ton	Aggregate	175	Diesel	1.63416E-05	1.97733E-05	2.35319E-05	0.000250225	0.000196552	0.045922502	8.86453E-06	8.15537E-06	4.35015E-07	0	1492.259723	689.5833649	2.461825475	26863.55028
Sacramento	2024 Construction and Mining - Crane less than 35ton	Aggregate	300	Diesel	3.11374E-06	3.76763E-06	4.48379E-06	2.25719E-05	4.35298E-05	0.0123733	1.48149E-06	1.36297E-06	1.1721E-07	0	402.0725318	118.299392	0.426450089	7970.524382
Sacramento	2024 Construction and Mining - Crane less than 35ton	Aggregate	50	Diesel	1.04083E-06	1.25941E-06	1.4988E-06	1.99087E-05	1.95292E-05	0.003573343	5.1829E-07	4.76826E-07	3.38496E-08	0	116.1163936	189.2420792	1.115331002	2070.531919
Sacramento	2024 Construction and Mining - Crane less than 35ton	Aggregate	600	Diesel	2.70427E-06	3.27217E-06	3.89415E-06	3.12882E-05	3.19004E-05	0.009665368	1.42178E-06	1.30803E-06	9.15582E-08	0	314.0778293	57.96853455	0.229626971	6226.152742
Sacramento	2024 Construction and Mining - Crane less than 35ton	Aggregate	75	Diesel	1.95324E-06	2.36342E-06	2.81267E-06	3.65965E-05	3.3179E-05	0.006900771	7.29365E-07	6.71016E-07	6.53697E-08	0	224.24175	171.0047497	0.78756038	3488.826879
Sacramento	2024 Construction and Mining - Crane less than 35ton	Aggregate	750	Diesel	3.24303E-07	3.92406E-07	4.66996E-07	3.65411E-06	4.12682E-06	0.002119203	2.27269E-07	2.09087E-07	2.00748E-08	0	68.86388408	7.806541885	0.032803853	1365.129979
Sacramento	2024 Construction and Mining - Crane less than 35ton	Aggregate	9999	Diesel	3.99556E-06	4.83463E-06	5.75361E-06	5.4375E-05	5.71624E-05	0.002519909	2.86942E-06	2.63987E-06	2.38706E-08	0	81.88489162	5.597424838	0.032803853	1623.253203
Sacramento	2024 Construction and Mining - Cranes	Aggregate	100	Diesel	3.22858E-05	3.90658E-05	4.64915E-05	0.000316425	0.000345158	0.060388372	2.34004E-05	2.15284E-05	5.72047E-07	0	1962.330684	950.9339847	4.959391216	23604.63785
Sacramento	2024 Construction and Mining - Cranes	Aggregate	175	Diesel	0.000209495	0.000253489	0.000301673	0.002439623	0.002539584	0.450069073	0.000125058	0.000115053	4.26342E-06	0	14625.07306	5811.372154	22.29980517	244984.4046
Sacramento	2024 Construction and Mining - Cranes	Aggregate	25	Diesel	6.24944E-07	7.56182E-07	8.99919E-07	1.97843E-06	1.36049E-06	0.000122804	1.1649E-07	1.07171E-07	1.1633E-09	0	3.99053351	11.28137652	0.065607706	71.15728237
Sacramento	2024 Construction and Mining - Cranes	Aggregate	300	Diesel	0.000473384	0.000572795	0.000681673	0.003739256	0.005598766	1.450140792	0.000262997	0.000241957	1.37369E-05	0	47122.57805	12718.35063	50.15776168	880734.1317
Sacramento	2024 Construction and Mining - Cranes	Aggregate	50	Diesel	4.57714E-06	5.53833E-06	6.59108E-06	3.08283E-05	2.68969E-05	0.005052556	1.52477E-06	1.40278E-06	4.78619E-08	0	164.1836796	165.0968507	0.853398284	1917.143067
Sacramento	2024 Construction and Mining - Cranes	Aggregate	600	Diesel	0.000528748	0.000639785	0.000761397	0.00569028	0.006448991	2.008682884	0.000262428	0.000241434	1.90279E-05	0	65272.50076	10420.97276	40.08483672	1261710.747
Sacramento	2024 Construction and Mining - Cranes	Aggregate	75	Diesel	1.46936E-05	1.77792E-05	2.11587E-05	0.000109576	0.000164626	0.019962915	1.01059E-05	9.29744E-06	1.89105E-07	0	648.6984175	453.4789218	2.52768173	8064.913787
Sacramento	2024 Construction and Mining - Cranes	Aggregate	750	Diesel	6.95319E-05	8.41336E-05	0.000100126	0.000659946	0.000949803	0.313527634	3.72511E-05	3.42711E-05	2.96999E-06	0	10188.13515	1084.252315	4.625343273	201965.4993
Sacramento	2024 Construction and Mining - Cranes	Aggregate	9999	Diesel	2.31205E-05	2.79758E-05	3.32935E-05	0.000189486	0.000560514	0.106958056	1.27496E-05	1.17296E-05	1.01319E-06	0	3475.620698	262.4083547	1.082527149	68899.30876
Sacramento	2024 Construction and Mining - Crawler Tractors	Aggregate	100	Diesel	0.000417757	0.000505486	0.000601571	0.003977936	0.004269708	0.668478609	0.000304167	0.000279834	6.33237E-06	0	21722.32903	9842.811126	28.15583413	371973.9398
Sacramento	2024 Construction and Mining - Crawler Tractors	Aggregate	175	Diesel	0.001006305	0.001217629	0.001449079	0.014248341	0.011013776	2.418773811	0.000517871	0.000476441	2.29126E-05	0	78598.477	26589.97423	57.81279469	1547579.65
Sacramento	2024 Construction and Mining - Crawler Tractors	Aggregate	300	Diesel	0.001075145	0.001300925	0.001548208	0.007424702	0.011507735	2.983969318	0.000537393	0.000494401	2.82666E-05	0	96964.60359	20249.9644	46.83183661	1912363.868
Sacramento	2024 Construction and Mining - Crawler Tractors	Aggregate	50	Diesel	4.15852E-05	5.03181E-05	5.98827E-05	0.000218686	0.000182221	0.025566814	1.42468E-05	1.3107E-05	2.42189E-07	0	830.7980839	769.1258516	2.822117014	12947.04508
Sacramento	2024 Construction and Mining - Crawler Tractors	Aggregate	600	Diesel	0.001651601	0.001998438	0.002378306	0.014354972	0.017928064	5.235531248	0.00073005	0.000671646	4.95952E-05	0	170129.5013	20484.90548	46.78904702	3433417.963
Sacramento	2024 Construction and Mining - Crawler Tractors	Aggregate	75	Diesel	0.000155878	0.000188612	0.000224464	0.001097127	0.001698018	0.17404893	0.000104038	9.57153E-05	1.64873E-06	0	5655.750343	3271.072867	11.19037427	93658.70286
Sacramento	2024 Construction and Mining - Crawler Tractors	Aggregate	750	Diesel	9.31587E-05	0.000112722	0.000134149	0.000867931	0.001042612	0.331034961	4.43442E-05	4.07967E-05	3.13583E-06	0	10757.03882	832.1997821	2.139063345	230955.8208
Sacramento	2024 Construction and Mining - Crawler Tractors	Aggregate	9999	Diesel	0.000146442	0.000177195	0.000210876	0.001426218	0.002801087	0.551705218	7.85006E-05	7.22206E-05	5.2262E-06	0	17927.75733	1019.945615	2.529862156	373655.7505
Sacramento	2024 Construction and Mining - Crushing/Processing Equipment	Aggregate	100	Diesel	2.1816E-06	2.63973E-06	3.1415E-06	5.25765E-05	3.01028E-05	0.009108556	2.04184E-06	1.87849E-06	8.62836E-08	0	295.9841272	170.8125387	0.32803853	5277.847202
Sacramento	2024 Construction and Mining - Crushing/Processing Equipment	Aggregate	175	Diesel	3.03102E-05	3.66754E-05	4.36467E-05	0.000764808	0.000232873	0.12998987	7.8831E-06	7.25246E-06	1.23137E-06	0	4224.043516	1784.202348	2.591504387	83735.7421
Sacramento	2024 Construction and Mining - Crushing/Processing Equipment	Aggregate	300	Diesel	1.56122E-05	1.88908E-05	2.24816E-05	0.000127067	9.37527E-05	0.063606994	4.20503E-06	3.86863E-06	6.02537E-07	0	2066.920367	515.4161734	0.885704031	40973.7992
Sacramento	2024 Construction and Mining - Crushing/Processing Equipment	Aggregate	50	Diesel	1.09537E-06	1.32539E-06	1.57733E-06	1.74186E-05	1.6196E-05	0.002839419	3.98793E-07	3.6689E-07	2.68973E-08	0	92.26740711	110.3182354	0.295234677	1645.268214
Sacramento	2024 Construction and Mining - Crushing/Processing Equipment	Aggregate	600	Diesel	7.42571E-05	8.98511E-05	0.00010693	0.000678854	0.000306181	0.352428666	1.72382E-05	1.58591E-05	3.33849E-06	0	11452.23099	1651.796059	2.788327505	227024.4275
Sacramento	2024 Construction and Mining - Crushing/Processing Equipment	Aggregate	75	Diesel	4.45291E-06	5.38802E-06	6.41219E-06	8.21765E-05	7.13274E-05	0.01424056	6.98553E-07	6.42669E-07	1.34898E-07	0	462.7494863	337.280165	0.754488619	8251.527216
Sacramento	2024 Construction and Mining - Crushing/Processing Equipment	Aggregate	750	Diesel	8.29505E-06	1.0037E-05	1.19449E-05	6.3365E-05	7.06659E-05	0.033080773	3.05456E-06	2.8102E-06	3.13368E-07	0	1074.965487	85.36449139	0.164019265	21309.68407
Sacramento	2024 Construction and Mining - Crushing/Processing Equipment	Aggregate	9999	Diesel	1.28046E-05	1.54936E-05	1.84387E-05	0.000138059	0.000249462	0.072104966	6.0297E-06	5.54732E-06	6.83036E-07	0	2343.063446	138.8174844	0.262430824	46447.94869
Sacramento	2024 Construction and Mining - Excavators	Aggregate	100	Diesel	0.000622825	0.000753618	0.000896867	0.009938049	0.007294336	1.671206317	0.000511742	0.000470803	1.5831E-05	0	54306.14084	28305.19236	53.37533449	963742.2189
Sacramento	2024 Construction and Mining - Excavators	Aggregate	175	Diesel	0.003274609	0.003962277	0.004715437	0.056129013	0.029810718	9.425958213	0.00124094	0.001141665	8.92903E-05	0	306298.1566	108994.9343	151.6619793	6070306.948
Sacramento	2024 Construction and Mining - Excavators	Aggregate	25	Diesel	3.12699E-07	3.78366E-07	4.50287E-07	1.01365E-06	8.10587E-07	7.31673E-05	6.94054E-08	6.3853E-08	6.93099E-10	0	2.377582863	13.94602596	0.032803853	42.39591893
Sacramento	2024 Construction and Mining - Excavators	Aggregate	300	Diesel	0.003208322	0.00388207	0.004619984	0.021394446	0.030062976	10.06171764	0.001195539	0.001099896	9.53127E-05	0	326957.2701	72599.93179	112.9940789	6484234.274
Sacramento	2024 Construction and Mining - Excavators	Aggregate	50	Diesel	0.001822633	0.002205386	0.002624592	0.020134156	0.016973932	2.714067884	0.000638573	0.000587487	2.57098E-05	0	88194.10939	116538.1872	245.1435377	1571984.128
Sacramento	2024 Construction and Mining - Excavators	Aggregate	600	Diesel	0.003203	0.00387563	0.00461232	0.024366682	0.024420368	11.63459602	0.000994704	0.000915127	0.000110212	0	378068.2275	52523.90559	78.77141613	7515862.3
Sacramento	2024 Construction and Mining - Excavators	Aggregate	75	Diesel	0.000883473	0.001069002	0.001272201	0.012820621	0.011665357	2.156401678	0.000246973	0.000227215	2.04272E-05	0	70072.64873	53164.20012	101.3986727	1246469.378
Sacramento	2024 Construction and Mining - Excavators	Aggregate	750	Diesel	9.93224E-05	0.00012018	0.000143024	0.000657931	0.001202311	0.338499638	4.19987E-05	3.86388E-05	3.20654E-06	0	10999.60479	865.0170862	1.64067348	220130.2038
Sacramento	2024 Construction and Mining - Excavators	Aggregate	9999	Diesel	0.000425661	0.000515049	0.000612951	0.003154251	0.007918745	1.642637042	0.000192487	0.000177088	1.55604E-05	0	53377.77728	1770.966141	3.05273044	1085394.786
Sacramento	2024 Construction and Mining - Graders	Aggregate	100	Diesel	7.37785E-05	8.9272E-05	0.000106241	0.000450928	0.000730634	0.068166169	5.62835E-05	5.17808E-05	6.45725E-07	0	2215.071559	1051.85169	4.036607293	36670.58591
Sacramento	2024 Construction and Mining - Graders	Aggregate	175	Diesel	0.000697896	0.000844454	0.00100497	0.006388737	0.00840274	1.094859668	0.000434901	0.000400109	1.03714E-05	0	35577.65594	11111.31316	34.39257336	658505.6162
Sacramento	2024 Construction and Mining - Graders	Aggregate	300	Diesel	0.001032003	0.001248724	0.001486085	0.007716504	0.011619362	3.63653969	0.000460972	0.000424094	3.44482E-05	0	118169.9917	24973.22376	64.32233872	2322129.997
Sacramento	2024 Construction and Mining - Graders	Aggregate	50	Diesel	1.6384E-05	1.98246E-05	2.35929E-05	7.76306E-05	6.43711E-05	0.008712227	5.45912E-06	5.02239E-06	8.25292E-08	0	283.1053473	301.9777128	1.214033291	4466.596629
Sacramento	2024 Construction and Mining - Graders	Aggregate	600	Diesel	0.000200752	0.000242909	0.000289082	0.001722442	0.001710472	0.882079143	7.28719E-05	6.70422E-05	8.35576E-06	0	28663.31564	4034.881761	9.516733233	568769.7021
Sacramento	2024 Construction and Mining - Graders	Aggregate	75	Diesel	2.88234E-05	3.48763E-05	4.15057E-05	0.000189599	0.000301432	0.032277926	1.98219E-05	1.82361E-05	3.05763E-07	0	1048.876822	564.3062377	2.331718273	14124.80262
Sacramento	2024 Construction and Mining - Graders	Aggregate	750	Diesel	6.10193E-06	7.38333E-06	8.78678E-06	6.18868E-05	4.85791E-05	0.033698959	2.71726E-06	2.49988E-06	3.19224E-07	0	1095.053566	74.98460216	0.196823118	21707.90207
Sacramento	2024 Construction and Mining - Graders	Aggregate	9999	Diesel	5.37133E-06	6.49931E-06	7.73472E-06	4.36234E-05	0.000108032	0.024346275	2.2344E-06	2.05565E-06	2.30628E-07	0	791.1364551	50.93427084	0.131215412	15683.17133
Sacramento	2024 Construction and Mining - Hopper Tractor Trailer	Aggregate	300	Diesel	1.15185E-06	1.39374E-06	1.65867E-06	1.21735E-05	1.5226E-06	0.006160439	1.28006E-07	1.17765E-07	5.83566E-08	0	200.1845494	46.79771995	0.065607706	3968.378105
Sacramento	2024 Construction and Mining - Hopper Tractor Trailer	Aggregate	600	Diesel	1.30231E-06	1.57579E-06	1.87532E-06	1.0315E-05	8.64516E-06	0.005290909	4.05968E-07	3.7349E-07	5.01198E-08	0	171.9290028	29.13233348	0.065607706	3408.251498
Sacramento	2024 Construction and Mining - Misc - Asphalt Pavers	Aggregate	100	Gasoline	4.83567E-05	4.44784E-05	5.32135E-05	0.002378569	0.000127362	0.056918358	3.96848E-06	2.99841E-06	5.49911E-07	8.05569E-07	2299.5	609.55	1.55	37182.55
Sacramento	2024 Construction and Mining - Misc - Asphalt Pavers	Aggregate	15	Gasoline	0.000154235	0.000155778	0.000169726	0.00510307	0.000115065	2.01586E-07	6.53136E-05	0.000049348	8.14638E-08	1.1245E-07	319.1741672	0	2.840242692	0
Sacramento	2024 Construction and Mining - Misc - Asphalt Pavers	Aggregate	25	Gasoline	0.000682088	0.000688908	0.000750596	0.022676182	0.000445526	8.4393E-07	0.000273434	0.000206594	3.60494E-07	4.97614E-07	1417.86509	0	4.864339236	0
Sacramento	2024 Construction and Mining - Misc - Asphalt Pavers	Aggregate	50	Gasoline	0.000101581	9.34338E-05	0.000111783	0.00803833	0.000144986	0.054975974	3.78999E-06	2.86355E-06	6.68408E-07	9.0147E-07	2573.25	1105.95	2.81	35390.4
Sacramento	2024 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	100	Gasoline	4.65545E-05	4.28209E-05	5.12304E-05	0.001645313	0.000150703	0.069477283	4.84412E-06	3.66E-06	6.71247E-07	9.56453E-07	2730.2	434.35	3.99	38222.8
Sacramento	2024 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	15	Gasoline	0.000020145	2.03464E-05	2.21684E-05	0.0007285	1.50328E-05	2.87778E-08	0.000009324	7.0448E-06	1.15752E-08	1.59781E-08	45.3206912	0	0.973614094	0
Sacramento	2024 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	15	Diesel	1.08013E-05	1.29916E-05	0.000015527	6.81464E-05	8.13586E-05	0.000155965	2.86121E-06	2.1618E-06	1.48021E-09	1.27507E-09	5.073022881	0	0.972786126	0
Sacramento	2024 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	175	Gasoline	1.07194E-05	9.85975E-06	1.17961E-05	0.000776918	5.83666E-05	0.023947877	1.71681E-06	1.29714E-06	2.37897E-07	3.33736E-07	952.65	102.2	1.01	12877.2
Sacramento	2024 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	25	Gasoline	0.000192666	0.000194593	0.000212018	0.00697797	0.000125865	2.59696E-07	8.41416E-05	6.35738E-05	1.10482E-07	1.52506E-07	434.0668618	0	4.881165216	0
Sacramento	2024 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	25	Diesel	6.57528E-05	7.90861E-05	9.45207E-05	0.000269932	0.000499763	0.00072248	1.68064E-05	1.26982E-05	6.85683E-09	5.90654E-09	23.49993042	0	3.69731954	0
Sacramento	2024 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	50	Gasoline	7.88975E-06	7.25699E-06	8.68219E-06	0.000469612	1.37717E-05	0.005565679	3.83693E-07	2.89901E-07	6.76685E-08	8.18356E-08	233.6	87.6	0.88	2803.2
Sacramento	2024 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	15	Gasoline	0.007436172	0.007510534	0.008183054	0.230841416	0.005290982	9.03852E-06	0.002928478	0.002212628	3.7549E-06	5.18314E-06	14497.85484	0	689.8358614	0
Sacramento	2024 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	15	Diesel	7.47238E-05	8.98763E-05	0.000107417	0.000471439	0.000562841	0.001078968	1.97939E-05	1.49554E-05	1.02402E-08	8.82096E-09	35.09534052	0	29.77988519	0
Sacramento	2024 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	25	Gasoline	0.000100603	0.000101609	0.000110708	0.003178424	6.36742E-05	1.17842E-07	3.81806E-05	2.88476E-05	5.08774E-08	7.02298E-08	199.3865018	0	2.878044388	0
Sacramento	2024 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	25	Diesel	1.92589E-05	2.31642E-05	0.000027685	7.86496E-05	0.000146235	0.000210964	5.10036E-06	3.85361E-06	2.00219E-09	1.7247E-09	6.86196294	0	2.645012657	0
Sacramento	2024 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	5	Gasoline	0.00326994	0.00330264	0.00359837	0.088574468	0.001480324	3.33406E-06	0.000042009	3.17402E-05	1.46446E-06	2.0215E-06	5617.084318	0	407.1377854	0
Sacramento	2024 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	100	Gasoline	5.86361E-05	5.39335E-05	6.45255E-05	0.00288892	0.000148313	0.136487887	9.51626E-06	7.19007E-06	1.31866E-06	1.87327E-06	5347.25	1135.15	1.86	74919.9
Sacramento	2024 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	15	Gasoline	0.005164144	0.005215786	0.005682826	0.167939276	0.003852444	6.63406E-06	0.002149434	0.001624016	2.6806E-06	3.70022E-06	10515.34604	0	101.0320032	0
Sacramento	2024 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	25	Gasoline	0.003222884	0.003255112	0.003546586	0.10535121	0.002105058	3.92082E-06	0.001270344	0.000959816	1.67653E-06	2.31424E-06	6594.279342	0	31.61185868	0
Sacramento	2024 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	25	Diesel	1.31406E-05	1.58052E-05	1.88898E-05	5.39454E-05	9.98765E-05	0.000144386	3.35873E-06	2.5377E-06	1.37032E-09	1.18041E-09	4.696411764	0	0.982201378	0
Sacramento	2024 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	5	Gasoline	0.000275254	0.000278008	0.000302902	0.007317626	0.000124612	2.75444E-07	3.4706E-06	2.62224E-06	1.20697E-07	1.66606E-07	464.723048	0	22.506866	0
Sacramento	2024 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	50	Gasoline	0.00014268	0.000131237	0.000157011	0.01059928	0.000231702	0.127714713	8.80454E-06	6.65232E-06	1.55278E-06	1.92058E-06	5482.3	1981.95	3.24	69368.25
Sacramento	2024 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	50	Diesel	3.36847E-05	4.00876E-05	4.8506E-05	0.000373177	0.000318809	0.050384651	9.99089E-06	9.19162E-06	6.32892E-07	4.12283E-07	1638.85	1189.9	2.04	39266.7
Sacramento	2024 Construction and Mining - Misc - Cranes	Aggregate	100	Gasoline	7.12279E-05	6.55155E-05	7.8382E-05	0.003063748	0.000186999	0.066738366	4.65316E-06	3.51572E-06	6.44786E-07	9.5006E-07	2711.95	817.6	1.98	60502.4
Sacramento	2024 Construction and Mining - Misc - Cranes	Aggregate	175	Gasoline	3.37275E-06	3.10226E-06	3.71151E-06	0.000157987	1.37237E-05	0.004385626	3.14403E-07	2.37549E-07	4.35666E-08	6.13767E-08	175.2	36.5	0.08	4562.5
Sacramento	2024 Construction and Mining - Misc - Cranes	Aggregate	50	Gasoline	3.6371E-05	3.3454E-05	4.00241E-05	0.002621511	5.15308E-05	0.016874165	1.16329E-06	8.7893E-07	2.05159E-07	2.77474E-07	792.05	405.15	1.01	14990.55
Sacramento	2024 Construction and Mining - Misc - Crushing/Proc. Equipment	Aggregate	15	Gasoline	2.95534E-05	0.000029849	3.25218E-05	0.001026638	0.000022051	4.0555E-08	1.31398E-05	9.92786E-06	1.63187E-08	2.25258E-08	64.01958086	0	0.607944196	0
Sacramento	2024 Construction and Mining - Misc - Crushing/Proc. Equipment	Aggregate	25	Gasoline	3.62376E-05	0.0000366	3.98772E-05	0.001265384	2.36716E-05	4.70934E-08	1.52582E-05	1.15284E-05	2.00576E-08	2.7687E-08	78.8827538	0	0.397101354	0
Sacramento	2024 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	100	Gasoline	3.9805E-06	3.66126E-06	4.3803E-06	0.000143716	1.26432E-05	0.005720473	3.98845E-07	3.0135E-07	5.52677E-08	8.05569E-08	229.95	87.6	0.73	5781.6
Sacramento	2024 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	15	Gasoline	0.000679034	0.000685824	0.000747236	0.018685738	0.000500934	7.36438E-07	0.000238606	0.00018028	3.05526E-07	4.21738E-07	1183.58082	0	44.39171236	0
Sacramento	2024 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	25	Gasoline	0.00027909	0.000281882	0.000307122	0.00773961	0.000180938	2.87754E-07	9.32322E-05	7.04422E-05	1.2523E-07	1.72864E-07	489.9553756	0	8.216296892	0
Sacramento	2024 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	25	Diesel	9.45604E-06	1.13735E-05	1.35932E-05	3.88195E-05	7.18719E-05	0.000103901	2.41589E-06	1.82534E-06	9.86094E-10	8.49431E-10	3.379572815	0	1.366003105	0
Sacramento	2024 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	5	Gasoline	0.000180892	0.0001827	0.00019906	0.00407773	0.000081905	1.53491E-07	1.93398E-06	1.46123E-06	6.95272E-08	9.59732E-08	262.5454506	0	20.81762002	0
Sacramento	2024 Construction and Mining - Misc - Excavators	Aggregate	25	Diesel	6.75802E-05	8.12841E-05	9.71476E-05	0.000277435	0.000513652	0.000742559	1.72735E-05	1.30511E-05	7.0474E-09	6.07069E-09	24.15304915	0	2.147016093	0
Sacramento	2024 Construction and Mining - Misc - Other	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.476362142	0
Sacramento	2024 Construction and Mining - Misc - Other	Aggregate	15	Diesel	0.000164461	0.00019781	0.000236415	0.001037598	0.001238767	0.002374719	4.35648E-05	3.29156E-05	2.25377E-08	1.94142E-08	77.24194478	0	17.81945489	0
Sacramento	2024 Construction and Mining - Misc - Other	Aggregate	175	Gasoline	5.47473E-05	5.03565E-05	6.0246E-05	0.004663492	0.000181907	0.141263297	1.01271E-05	7.65157E-06	1.4033E-06	1.96917E-06	5621	1025.65	2.77	129231.9
Sacramento	2024 Construction and Mining - Misc - Other	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.476362142	0
Sacramento	2024 Construction and Mining - Misc - Other	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.476362142	0
Sacramento	2024 Construction and Mining - Misc - Other	Aggregate	25	Diesel	3.52818E-05	4.24362E-05	5.07181E-05	0.000144841	0.000268164	0.00038767	9.01802E-06	6.81362E-06	3.67925E-09	3.16934E-09	12.60964524	0	2.820750084	0
Sacramento	2024 Construction and Mining - Misc - Other	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.476362142	0
Sacramento	2024 Construction and Mining - Misc - Pavers	Aggregate	25	Diesel	1.78109E-05	2.14226E-05	2.56035E-05	7.31186E-05	0.000135374	0.000195703	4.55745E-06	3.44341E-06	1.85736E-09	1.59995E-09	6.365597633	0	0.8477046	0
Sacramento	2024 Construction and Mining - Misc - Paving Equipment	Aggregate	100	Gasoline	1.40937E-05	1.29634E-05	1.55093E-05	0.000709649	3.63578E-05	0.031508802	2.19687E-06	1.65986E-06	3.04419E-07	4.33473E-07	1237.35	343.1	1.99	22644.6
Sacramento	2024 Construction and Mining - Misc - Paving Equipment	Aggregate	15	Gasoline	0.014144448	0.014285894	0.015565104	0.437515986	0.010550316	1.72831E-05	0.005599712	0.004230894	7.02834E-06	9.70172E-06	27484.516	0	485.419725	0
Sacramento	2024 Construction and Mining - Misc - Paving Equipment	Aggregate	25	Gasoline	0.000729936	0.000737234	0.00080325	0.022697016	0.000476726	8.44706E-07	0.000273684	0.000206784	3.62864E-07	5.00886E-07	1425.313001	0	10.78399789	0
Sacramento	2024 Construction and Mining - Misc - Paving Equipment	Aggregate	25	Diesel	3.02431E-05	3.63758E-05	0.000043475	0.000124156	0.000229867	0.000332306	7.73014E-06	5.84055E-06	3.15381E-09	2.71672E-09	10.80883398	0	2.106426415	0
Sacramento	2024 Construction and Mining - Misc - Paving Equipment	Aggregate	5	Gasoline	0.003838758	0.003877144	0.004224318	0.092338656	0.001738032	3.47574E-06	4.37944E-05	0.000033089	1.54412E-06	2.13146E-06	5911.736674	0	287.1212506	0
Sacramento	2024 Construction and Mining - Misc - Paving Equipment	Aggregate	50	Gasoline	7.99183E-05	7.35088E-05	8.79452E-05	0.006058523	0.000129303	0.069315136	4.77852E-06	3.61044E-06	8.42746E-07	1.0498E-06	2996.65	1343.2	7.65	49698.4
Sacramento	2024 Construction and Mining - Misc - Plate Compactors	Aggregate	15	Gasoline	0.004999603	0.0050496	0.005501758	0.153522064	0.003731794	6.08049E-06	0.001970079	0.001488505	2.47486E-06	3.41621E-06	9648.908849	0	227.5143792	0
Sacramento	2024 Construction and Mining - Misc - Plate Compactors	Aggregate	15	Diesel	6.42705E-05	7.73033E-05	9.23899E-05	0.000405489	0.000484104	0.000928029	1.70249E-05	1.28633E-05	8.80764E-09	7.58698E-09	30.18579575	0	18.76369173	0
Sacramento	2024 Construction and Mining - Misc - Plate Compactors	Aggregate	5	Gasoline	0.002765996	0.002793656	0.00304381	0.064988782	0.001252356	2.44626E-06	3.08228E-05	2.32884E-05	1.09086E-06	1.50578E-06	4169.094434	0	204.732091	0
Sacramento	2024 Construction and Mining - Misc - Rollers	Aggregate	100	Gasoline	0.00033469	0.000307848	0.000368306	0.015261409	0.00080968	0.251015369	1.75014E-05	1.32233E-05	2.42516E-06	3.66214E-06	10453.6	2310.45	3.71	173283.75
Sacramento	2024 Construction and Mining - Misc - Rollers	Aggregate	15	Gasoline	0.001409676	0.001423772	0.001551262	0.046127834	0.001051634	1.82217E-06	0.000590384	0.000446068	7.3746E-07	1.01797E-06	2887.107222	0	34.9118341	0
Sacramento	2024 Construction and Mining - Misc - Rollers	Aggregate	15	Diesel	0.000233084	0.000280349	0.000335062	0.001470548	0.001755657	0.003365598	6.17427E-05	0.00004665	3.19418E-08	2.7515E-08	109.4720414	0	40.09712423	0
Sacramento	2024 Construction and Mining - Misc - Rollers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.043195422	0
Sacramento	2024 Construction and Mining - Misc - Rollers	Aggregate	25	Gasoline	0.002122952	0.00214418	0.002336178	0.069804792	0.00138664	2.5979E-06	0.00084172	0.000635966	1.11153E-06	1.53433E-06	4367.684816	0	23.57729498	0
Sacramento	2024 Construction and Mining - Misc - Rollers	Aggregate	25	Diesel	0.000211783	0.000254728	0.000304441	0.000869425	0.001609685	0.002327033	5.41317E-05	4.08995E-05	2.20852E-08	1.90244E-08	75.69087943	0	16.65208303	0
Sacramento	2024 Construction and Mining - Misc - Rollers	Aggregate	5	Gasoline	0.000158458	0.000160043	0.000174374	0.004453344	7.17324E-05	1.67629E-07	2.11214E-06	1.59583E-06	7.33968E-08	1.01315E-07	281.641498	0	21.59181154	0
Sacramento	2024 Construction and Mining - Misc - Rollers	Aggregate	50	Gasoline	0.000176518	0.000162362	0.000194248	0.013517903	0.00022928	0.066617701	4.59256E-06	3.46994E-06	8.0995E-07	1.17255E-06	3347.05	1222.75	1.98	45241.75
Sacramento	2024 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	100	Gasoline	0.000618412	0.000568815	0.000680524	0.026580497	0.001625107	0.580839042	4.04975E-05	3.05981E-05	5.61171E-06	8.2833E-06	23644.7	4635.5	11.22	394017.5
Sacramento	2024 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	175	Gasoline	2.54856E-05	2.34417E-05	2.80454E-05	0.001196277	0.000103834	0.033229551	2.38221E-06	1.79989E-06	3.30101E-07	4.62883E-07	1321.3	131.4	0.32	18658.8
Sacramento	2024 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	50	Gasoline	4.91946E-05	4.52492E-05	5.41357E-05	0.00354315	6.97689E-05	0.022874575	1.57695E-06	1.19148E-06	2.78113E-07	3.83604E-07	1095	328.5	0.84	15439.5
Sacramento	2024 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	100	Gasoline	0.000335512	0.000308604	0.000369211	0.015836667	0.000847016	0.305585128	2.13061E-05	1.6098E-05	2.95238E-06	4.39611E-06	12548.7	3365.3	6.57	242301.6
Sacramento	2024 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.06494545	0
Sacramento	2024 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.06494545	0
Sacramento	2024 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.06494545	0
Sacramento	2024 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25	Diesel	1.21155E-05	1.45723E-05	1.74162E-05	4.97373E-05	9.20855E-05	0.000133123	3.09672E-06	2.33975E-06	1.26343E-09	1.08833E-09	4.330058501	0	0.545254808	0
Sacramento	2024 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.06494545	0
Sacramento	2024 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	50	Gasoline	5.84755E-05	5.37858E-05	6.43487E-05	0.004556912	7.89804E-05	0.025858204	1.78264E-06	1.34688E-06	3.14389E-07	4.39866E-07	1255.6	503.7	1.01	20148
Sacramento	2024 Construction and Mining - Misc - Signal Boards	Aggregate	15	Gasoline	0.000176852	0.00017862	0.000194615	0.00600403	0.000131947	2.37176E-07	7.68448E-05	5.80606E-05	9.57508E-08	1.32172E-07	374.924744	0	4.552253946	0
Sacramento	2024 Construction and Mining - Misc - Signal Boards	Aggregate	15	Diesel	0.001004711	0.001208446	0.001444287	0.00633881	0.007567772	0.014507437	0.000266142	0.000201085	1.37686E-07	1.18604E-07	471.8800692	0	164.0705459	0
Sacramento	2024 Construction and Mining - Misc - Signal Boards	Aggregate	5	Gasoline	9.60058E-06	9.69658E-06	1.05648E-05	0.000255732	4.34632E-06	9.62606E-09	1.21288E-07	9.164E-08	4.19932E-09	5.7966E-09	16.2383813	0	0.645803148	0
Sacramento	2024 Construction and Mining - Misc - Signal Boards	Aggregate	50	Diesel	1.48343E-05	1.7654E-05	2.13614E-05	0.000161765	0.000139447	0.022218621	4.35952E-06	4.01076E-06	2.79753E-07	1.81809E-07	722.7	438	0.81	16206
Sacramento	2024 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	100	Gasoline	0.000251631	0.000231451	0.000276905	0.01320955	0.000638607	0.542709924	3.7839E-05	2.85895E-05	5.24333E-06	7.47901E-06	21348.85	5000.5	16.11	400040
Sacramento	2024 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	15	Gasoline	6.7447E-05	6.81214E-05	7.42212E-05	0.001944214	5.02996E-05	7.68018E-08	2.48838E-05	1.88011E-05	3.12688E-08	4.31624E-08	122.7321248	0	0.982659084	0
Sacramento	2024 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.074368042	0
Sacramento	2024 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	25	Gasoline	0.00582059	0.005878796	0.006405204	0.173661412	0.003801214	6.4631E-06	0.002094042	0.001582164	2.7826E-06	3.84102E-06	10936.14722	0	60.9321866	0
Sacramento	2024 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	25	Diesel	0.003494821	0.004203501	0.005023861	0.014329551	0.026586593	0.038372796	0.000908146	0.000686155	3.64184E-07	3.13712E-07	1248.143144	0	221.1802943	0
Sacramento	2024 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.074368042	0
Sacramento	2024 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	50	Gasoline	0.000437751	0.000402644	0.000481719	0.034325651	0.000688269	0.366993704	2.53002E-05	1.91157E-05	4.46197E-06	5.6019E-06	15990.65	8358.5	26.94	267472
Sacramento	2024 Construction and Mining - Misc - Surfacing Equipment	Aggregate	15	Gasoline	0.008864714	0.008953362	0.009755078	0.235058102	0.0066097	9.28542E-06	0.00300848	0.002273074	3.8208E-06	5.27414E-06	14930.9158	0	156.0726079	0
Sacramento	2024 Construction and Mining - Misc - Surfacing Equipment	Aggregate	25	Gasoline	0.000303568	0.000306604	0.00033406	0.008092792	0.000198217	3.01186E-07	9.75844E-05	7.37304E-05	1.30795E-07	1.80546E-07	513.841811	0	2.131554704	0
Sacramento	2024 Construction and Mining - Misc - Surfacing Equipment	Aggregate	5	Gasoline	0.000918008	0.000927188	0.001010212	0.020643696	0.000415662	7.77054E-07	9.79088E-06	7.39756E-06	3.46554E-07	4.78372E-07	1329.439564	0	52.55742638	0
Sacramento	2024 Construction and Mining - Misc - Tampers/Rammers	Aggregate	15	Gasoline	0.000944894	0.000954343	0.001039798	0.036631844	0.000732933	1.61136E-06	0.000522081	0.000394462	5.9201E-07	8.17192E-07	2270.046427	0	126.4180689	0
Sacramento	2024 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	100	Gasoline	0.000176852	0.000162668	0.000194615	0.012402246	0.000456619	0.214097498	1.49274E-05	1.12785E-05	2.06848E-06	3.10208E-06	8854.9	3029.5	3.46	190858.5

Sacramento	2024	Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.16294032	0
Sacramento	2024	Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.16294032	0
Sacramento	2024	Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.16294032	0
Sacramento	2024	Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25	Diesel	0.000323228	0.000388772	0.000464645	0.001326934	0.002456733	0.003551566	8.25935E-05	0.000062404	3.37068E-08	2.90354E-08	115.5209579	0	15.77142011	0
Sacramento	2024	Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.16294032	0
Sacramento	2024	Construction and Mining - Misc - Trenchers	Aggregate	100	Gasoline	0.000256865	0.000236264	0.000282664	0.010995418	0.000678607	0.244522489	1.70487E-05	1.28812E-05	2.36243E-06	3.48313E-06	9942.6	2398.05	5.97	158271.3
Sacramento	2024	Construction and Mining - Misc - Trenchers	Aggregate	15	Gasoline	0.002525282	0.002550534	0.002778918	0.08161413	0.001883824	3.22398E-06	0.00104457	0.00078923	1.30374E-06	1.79965E-06	5112.220832	0	37.30243714	0
Sacramento	2024	Construction and Mining - Misc - Trenchers	Aggregate	15	Diesel	9.22321E-05	0.000110935	0.000132585	0.000581901	0.000694719	0.001331778	2.44318E-05	1.84596E-05	1.26395E-08	1.08878E-08	43.31842242	0	13.32311366	0
Sacramento	2024	Construction and Mining - Misc - Trenchers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.046017878	0
Sacramento	2024	Construction and Mining - Misc - Trenchers	Aggregate	25	Gasoline	0.00434134	0.004384754	0.00477738	0.14100529	0.002835558	5.24774E-06	0.001700268	0.001284648	2.24502E-06	3.09896E-06	8829.595006	0	28.91333408	0
Sacramento	2024	Construction and Mining - Misc - Trenchers	Aggregate	25	Diesel	0.000314388	0.000378139	0.000451937	0.001290645	0.002389546	0.003454436	8.03575E-05	6.07146E-05	3.2785E-08	2.82413E-08	112.361642	0	11.26812735	0
Sacramento	2024	Construction and Mining - Misc - Trenchers	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.046017878	0
Sacramento	2024	Construction and Mining - Misc - Trenchers	Aggregate	50	Gasoline	0.00071951	0.000661805	0.000791777	0.05160505	0.001026089	0.338717205	2.33509E-05	1.76429E-05	4.11818E-06	5.6019E-06	15990.65	7230.65	17.98	216919.5
Sacramento	2024	Construction and Mining - Nurse Rig Other	Aggregate	175	Diesel	4.52058E-07	5.4699E-07	6.50964E-07	6.03086E-06	4.84066E-06	0.001024521	3.65894E-07	3.36622E-07	9.70509E-09	0	33.29198295	18.33241385	0.032803853	659.9668986
Sacramento	2024	Construction and Mining - Off-Highway Tractors	Aggregate	100	Diesel	0.000221312	0.000267788	0.00031869	0.002356454	0.002232455	0.380135244	0.000156178	0.000143684	3.60095E-06	0	12352.56109	5955.416068	9.415408438	219716.9114
Sacramento	2024	Construction and Mining - Off-Highway Tractors	Aggregate	175	Diesel	0.000746921	0.000903775	0.001075567	0.012785131	0.005976047	2.069884907	0.000271536	0.000249813	1.96076E-05	0	67261.27118	21175.34832	20.8323527	1335584.502
Sacramento	2024	Construction and Mining - Off-Highway Tractors	Aggregate	300	Diesel	0.000367028	0.000444104	0.00052852	0.002236551	0.003553671	0.924040771	0.000157436	0.000144841	8.75326E-06	0	30026.86606	6410.274015	8.137739431	599383.5587
Sacramento	2024	Construction and Mining - Off-Highway Tractors	Aggregate	50	Diesel	0.000604795	0.000731802	0.000870905	0.004091872	0.003384227	0.453578114	0.000195306	0.000179681	4.29666E-06	0	14739.09996	15973.13133	26.37834214	256090.3279
Sacramento	2024	Construction and Mining - Off-Highway Tractors	Aggregate	600	Diesel	0.000782194	0.000946454	0.001126359	0.005432979	0.005387766	2.444649762	0.000239677	0.000220503	2.31577E-05	0	79439.32054	9730.112372	10.56970089	1608976.532
Sacramento	2024	Construction and Mining - Off-Highway Tractors	Aggregate	75	Diesel	0.000268893	0.00032536	0.000387205	0.002436307	0.002742452	0.39814912	0.000133682	0.000122988	3.77159E-06	0	12937.92512	8707.412053	14.24343874	222537.8357
Sacramento	2024	Construction and Mining - Off-Highway Tractors	Aggregate	750	Diesel	6.05817E-05	7.33039E-05	8.72377E-05	0.000446755	0.000422729	0.199538292	2.17884E-05	2.00453E-05	1.89019E-06	0	6484.031618	509.22265	0.689026485	129212.8393
Sacramento	2024	Construction and Mining - Off-Highway Tractors	Aggregate	9999	Diesel	4.48695E-05	5.4292E-05	6.4612E-05	0.000352308	0.000741905	0.177272657	1.7976E-05	1.65379E-05	1.67927E-06	0	5760.505919	183.950579	0.230345971	127673.2036
Sacramento	2024	Construction and Mining - Off-Highway Trucks	Aggregate	100	Diesel	6.17042E-06	7.4662E-06	8.8854E-06	6.23507E-05	5.66233E-05	0.010244721	3.48492E-06	3.20613E-06	9.70463E-08	0	332.9039928	182.9150023	0.295234677	5936.184563
Sacramento	2024	Construction and Mining - Off-Highway Trucks	Aggregate	175	Diesel	0.000233665	0.000282735	0.000336477	0.003143096	0.002310068	0.529956636	0.000119247	0.000109707	5.02018E-06	0	17221.03333	5696.691505	6.364434751	341613.1466
Sacramento	2024	Construction and Mining - Off-Highway Trucks	Aggregate	300	Diesel	0.0005596	0.000677116	0.000805825	0.003324497	0.005941265	1.234070171	0.000285681	0.000262827	1.16901E-05	0	40101.32552	9145.463875	12.63443589	798630.141
Sacramento	2024	Construction and Mining - Off-Highway Trucks	Aggregate	50	Diesel	2.0151E-05	2.43827E-05	2.90174E-05	0.000170513	0.00014707	0.019415022	7.56022E-06	6.9554E-06	1.83915E-07	0	630.8945214	1053.007563	1.705800356	11249.80895
Sacramento	2024	Construction and Mining - Off-Highway Trucks	Aggregate	600	Diesel	0.002772412	0.003354618	0.003992273	0.019727252	0.02022036	9.157914336	0.000841234	0.000773935	8.67511E-05	0	297588.0241	36008.11615	43.34476311	5939034.127
Sacramento	2024	Construction and Mining - Off-Highway Trucks	Aggregate	75	Diesel	1.47387E-05	1.78338E-05	2.12237E-05	0.000133085	0.000158706	0.021853896	7.91955E-06	7.28598E-06	2.07018E-07	0	710.1461571	449.1239214	0.853648661	11569.3569
Sacramento	2024	Construction and Mining - Off-Highway Trucks	Aggregate	750	Diesel	0.000368901	0.00044637	0.000531217	0.002722749	0.003952009	1.11880679	0.000161312	0.000148407	1.05982E-05	0	36355.82184	3229.337859	5.63038394	844668.7847
Sacramento	2024	Construction and Mining - Off-Highway Trucks	Aggregate	9999	Diesel	0.001302804	0.001576392	0.001876037	0.008658447	0.022113793	4.319332744	0.000560292	0.000515469	4.09162E-05	0	140357.4711	6576.2617	9.822994102	2973829.611
Sacramento	2024	Construction and Mining - Other Construction Equipment	Aggregate	100	Diesel	0.000181278	0.000219346	0.00026104	0.002071225	0.001973414	0.359854948	0.000134241	0.000123502	3.40884E-06	0	11693.54931	5506.786437	17.03177567	198049.2688
Sacramento	2024	Construction and Mining - Other Construction Equipment	Aggregate	175	Diesel	0.000441766	0.000534536	0.000636142	0.006602535	0.004682051	1.159824357	0.000204784	0.000188402	1.09868E-05	0	37688.69484	13369.35401	29.99315553	736252.8524
Sacramento	2024	Construction and Mining - Other Construction Equipment	Aggregate	300	Diesel	0.000391385	0.000473576	0.000563595	0.002718589	0.004569646	1.100306474	0.000200281	0.000184258	1.0423E-05	0	35754.65085	7148.239481	18.65272156	697048.4964
Sacramento	2024	Construction and Mining - Other Construction Equipment	Aggregate	50	Diesel	0.000240273	0.00029073	0.000345993	0.001973084	0.00181644	0.274634888	8.71706E-05	8.01969E-05	2.60156E-06	0	8924.308585	9305.071246	30.05193597	152276.3252
Sacramento	2024	Construction and Mining - Other Construction Equipment	Aggregate	600	Diesel	0.000957397	0.001158451	0.001378652	0.0083463	0.009828241	3.469040175	0.000405561	0.000373116	3.28615E-05	0	112727.0657	13290.89479	32.11286327	2263216.65
Sacramento	2024	Construction and Mining - Other Construction Equipment	Aggregate	75	Diesel	0.000224153	0.000271225	0.000322781	0.002671348	0.002916393	0.464452823	0.000107027	9.84651E-05	4.39967E-06	0	15092.47552	9466.740213	29.00511331	258097.3016
Sacramento	2024	Construction and Mining - Other Construction Equipment	Aggregate	750	Diesel	0.000121801	0.000147379	0.000175393	0.001090431	0.001332181	0.550806156	5.3768E-05	4.94665E-05	5.21768E-06	0	17898.54212	1322.94157	3.512020852	359280.0049
Sacramento	2024	Construction and Mining - Other Construction Equipment	Aggregate	9999	Diesel	0.000164375	0.000198894	0.000236701	0.001432422	0.003519619	0.738077332	8.23442E-05	7.57566E-05	6.99166E-06	0	23983.95166	982.7929005	2.559603388	481600.0623
Sacramento	2024	Construction and Mining - Other Material Handling Equipment	Aggregate	100	Diesel	6.62111E-05	8.01154E-05	9.5344E-05	0.000687595	0.000692906	0.115176238	4.71443E-05	4.33728E-05	1.09104E-06	0	3742.671947	1863.374519	4.790039287	65753.30049
Sacramento	2024	Construction and Mining - Other Material Handling Equipment	Aggregate	175	Diesel	0.000192637	0.00023309	0.000277397	0.002795696	0.002051654	0.48038268	9.3331E-05	8.58645E-05	4.55057E-06	0	15610.119	5959.313375	11.64682391	308346.2307
Sacramento	2024	Construction and Mining - Other Material Handling Equipment	Aggregate	300	Diesel	0.000171799	0.000207877	0.000247391	0.001155557	0.001784326	0.496640831	8.00482E-05	7.36443E-05	4.70458E-06	0	16138.43044	3419.864751	7.28431014	319404.6398
Sacramento	2024	Construction and Mining - Other Material Handling Equipment	Aggregate	50	Diesel	4.02677E-05	4.87239E-05	5.79855E-05	0.000375922	0.000339789	0.054116742	1.49293E-05	1.3735E-05	5.12637E-07	0	1758.532967	2118.384179	6.102875614	28735.59888
Sacramento	2024	Construction and Mining - Other Material Handling Equipment	Aggregate	600	Diesel	0.000230448	0.000278843	0.000331846	0.001852521	0.002012146	0.880890322	8.19627E-05	7.54057E-05	8.3445E-06	0	28624.68471	3589.17784	7.021271387	569270.194
Sacramento	2024	Construction and Mining - Other Material Handling Equipment	Aggregate	75	Diesel	3.0844E-05	3.73212E-05	4.44153E-05	0.000384941	0.000406999	0.065103886	1.42757E-05	1.31336E-05	6.16716E-07	0	2115.56212	1460.428372	3.838050801	37723.69053
Sacramento	2024	Construction and Mining - Other Material Handling Equipment	Aggregate	750	Diesel	3.20992E-05	3.884E-05	4.62228E-05	0.000333292	0.000325415	0.096391253	1.7543E-05	1.61395E-05	9.13096E-07	0	3132.250583	226.7144018	0.623273207	62092.47751
Sacramento	2024	Construction and Mining - Other Material Handling Equipment	Aggregate	9999	Diesel	7.17656E-05	8.68364E-05	0.000103342	0.000617545	0.001468166	0.327004292	3.5252E-05	3.24319E-05	3.09765E-06	0	10626.06152	543.8353158	1.148134855	210646.7757
Sacramento	2024	Construction and Mining - Pavers	Aggregate	100	Diesel	0.000118891	0.000143858	0.000171203	0.001373002	0.001282974	0.231590721	8.44301E-05	7.76757E-05	2.19381E-06	0	7525.580878	3783.617474	8.69378706	133103.2186
Sacramento	2024	Construction and Mining - Pavers	Aggregate	175	Diesel	0.000304387	0.000368308	0.000438317	0.004594971	0.002977867	0.780318394	0.000127846	0.000117618	7.3918E-06	0	25356.58235	8548.487246	15.38586655	502387.8358
Sacramento	2024	Construction and Mining - Pavers	Aggregate	300	Diesel	0.000267722	0.000323944	0.00038552	0.001898526	0.002436345	0.947593611	9.18246E-05	8.44786E-05	8.97637E-06	0	30792.2197	6379.462826	11.38347728	610357.7614
Sacramento	2024	Construction and Mining - Pavers	Aggregate	50	Diesel	6.48987E-05	7.85274E-05	9.34541E-05	0.000368457	0.00030984	0.04202126	1.9674E-05	1.81001E-05	3.98059E-07	0	1365.488172	1539.862371	4.363136965	23936.72348
Sacramento	2024	Construction and Mining - Pavers	Aggregate	600	Diesel	4.58379E-05	5.54638E-05	6.60065E-05	0.000321608	0.000412684	0.167408785	1.59285E-05	1.46542E-05	1.58583E-06	0	5439.97766	684.7426319	1.181376401	108767.3918
Sacramento	2024	Construction and Mining - Pavers	Aggregate	75	Diesel	0.000132223	0.00015999	0.000190402	0.001286142	0.001486921	0.21446727	6.53852E-05	6.01544E-05	2.03161E-06	0	6969.151363	4406.958324	11.31844069	122477.9452
Sacramento	2024	Construction and Mining - Pavers	Aggregate	750	Diesel	1.21467E-06	1.46975E-06	1.74913E-06	1.32655E-05	5.41235E-06	0.006943107	3.86944E-07	3.55989E-07	6.57707E-08	0	225.6174682	16.90306149	0.032803853	4472.550071
Sacramento	2024	Construction and Mining - Pavers	Aggregate	9999	Diesel	4.20323E-05	5.08591E-05	6.05265E-05	0.00030444	0.000821939	0.159052205	1.93984E-05	1.78465E-05	1.50667E-06	0	5168.429135	125.5310985	0.229626971	102456.8633
Sacramento	2024	Construction and Mining - Paving Equipment	Aggregate	100	Diesel	6.13206E-05	7.41979E-05	8.83016E-05	0.0007532	0.000668593	0.131438679	4.40318E-05	4.05092E-05	1.24509E-06	0	4271.122815	2305.740436	5.415547122	71650.68437
Sacramento	2024	Construction and Mining - Paving Equipment	Aggregate	175	Diesel	0.000275284	0.000333094	0.000396409	0.005082234	0.002449076	0.867035053	0.000105741	9.72817E-05	8.21325E-06	0	28174.45533	11452.68287	17.4865033	556772.3374
Sacramento	2024	Construction and Mining - Paving Equipment	Aggregate	300	Diesel	0.000119343	0.000144406	0.000171855	0.000817371	0.001180263	0.38968555	4.7026E-05	4.3264E-05	3.69142E-06	0	12662.89993	2976.379143	5.545535621	250308.0054
Sacramento	2024	Construction and Mining - Paving Equipment	Aggregate	50	Diesel	7.89112E-05	9.54825E-05	0.000113632	0.000779891	0.000672343	0.109355842	2.58941E-05	2.38225E-05	1.03591E-06	0	3553.53718	4686.83162	12.0724312	62182.6286
Sacramento	2024	Construction and Mining - Paving Equipment	Aggregate	600	Diesel	0.000227989	0.000275866	0.000328304	0.001821143	0.001461165	0.926775553	7.05226E-05	6.48808E-05	8.77917E-06	0	30115.73329	4682.064733	8.007379401	600179.8167
Sacramento	2024	Construction and Mining - Paving Equipment	Aggregate	75	Diesel	4.4093E-05	5.33525E-05	6.34939E-05	0.000474211	0.000525159	0.078929284	2.01751E-05	1.85611E-05	7.47682E-07	0	2564.820858	1939.946653	4.756558685	45734.65717
Sacramento	2024	Construction and Mining - Paving Equipment	Aggregate	750	Diesel	4.16292E-05	5.03714E-05	5.99461E-05	0.000388267	0.000328426	0.201798465	1.73607E-05	1.59718E-05	1.9116E-06	0	6557.476325	567.4401166	1.082527149	129992.7769
Sacramento	2024	Construction and Mining - Paving Equipment	Aggregate	9999	Diesel	3.29641E-05	3.98866E-05	4.74683E-05	0.00023934	0.000592177	0.126536074	1.50056E-05	1.38052E-05	1.19865E-06	0	4111.811805	226.6758679	0.426450089	81510.90576
Sacramento	2024	Construction and Mining - Rollers	Aggregate	100	Diesel	0.000368056	0.000445348	0.000530001	0.003855013	0.003871996	0.649867085	0.000268875	0.000247365	6.15606E-06	0	21117.54429	11147.5575	29.59778475	363336.2002
Sacramento	2024	Construction and Mining - Rollers	Aggregate	175	Diesel	0.001275602	0.001543479	0.001836867	0.021767294	0.012084444	3.743492295	0.000514564	0.000473399	3.54614E-05	0	121645.4352	47666.9779	80.1815421	2404412.108
Sacramento	2024	Construction and Mining - Rollers	Aggregate	300	Diesel	0.000123114	0.000148968	0.000177285	0.000827647	0.001441303	0.319847165	6.41318E-05	5.90013E-05	3.02985E-06	0	10393.48944	2371.163052	5.321934303	201384.1297
Sacramento	2024	Construction and Mining - Rollers	Aggregate	50	Diesel	0.001020182	0.00123442	0.001469062	0.007929177	0.006868486	1.053474861	0.000329809	0.000303424	9.97936E-06	0	34232.8494	44440.89899	122.69693	590247.4115
Sacramento	2024	Construction and Mining - Rollers	Aggregate	600	Diesel	8.44505E-05	0.000102185	0.000121609	0.000749693	0.00089946	0.259216449	3.72133E-05	3.42362E-05	2.45551E-06	0	8423.283719	1132.115972	2.299394534	171351.5737
Sacramento	2024	Construction and Mining - Rollers	Aggregate	75	Diesel	0.000222975	0.000269799	0.000321083	0.002497227	0.002790603	0.418465047	0.000105314	9.68891E-05	3.96404E-06	0	13598.09473	9381.069729	24.93203252	240718.5171
Sacramento	2024	Construction and Mining - Rollers	Aggregate	750	Diesel	1.79013E-06	2.16606E-06	2.57779E-06	1.14607E-05	1.91765E-05	0.006272777	7.54064E-07	6.93739E-07	5.94208E-08	0	203.8349735	14.83059035	0.032803853	4040.742647
Sacramento	2024	Construction and Mining - Rollers	Aggregate	9999	Diesel	6.41662E-05	7.76411E-05	9.23993E-05	0.000537248	0.001155291	0.285068338	2.90085E-05	2.66878E-05	2.7004E-06	0	9263.345374	206.9727917	0.426450089	183632.8382
Sacramento	2024	Construction and Mining - Rough Terrain Forklifts	Aggregate	100	Diesel	0.000351528	0.000425349	0.0005062	0.00522859	0.004190894	0.931139048	0.000269944	0.000248348	8.8205E-06	0	30257.52581	15156.10767	47.57617538	522091.9736
Sacramento	2024	Construction and Mining - Rough Terrain Forklifts	Aggregate	175	Diesel	0.001714707	0.002074795	0.002469178	0.033991272	0.017178725	5.99591858	0.000671917	0.000618164	5.67982E-05	0	194838.4204	79744.79392	166.9083329	3859704.701
Sacramento	2024	Construction and Mining - Rough Terrain Forklifts	Aggregate	300	Diesel	1.48634E-05	1.79847E-05	2.14033E-05	0.000118587	0.000159757	0.051276153	6.9416E-06	6.38627E-06	4.85729E-07	0	1666.227536	385.4252246	1.01754677	32217.19807
Sacramento	2024	Construction and Mining - Rough Terrain Forklifts	Aggregate	50	Diesel	2.12985E-05	2.57712E-05	3.06698E-05	0.000217251	0.000199511	0.033599553	7.32748E-06	6.74128E-06	3.18282E-07	0	1091.823342	1101.988163	4.067677772	19468.87093
Sacramento	2024	Construction and Mining - Rough Terrain Forklifts	Aggregate	600	Diesel	2.9446E-06	3.56297E-06	4.24022E-06	2.6975E-05	2.81802E-05	0.014510575	8.77954E-07	8.07718E-07	1.37456E-07	0	471.5236609	69.06939749	0.164061446	9315.35867
Sacramento	2024	Construction and Mining - Rough Terrain Forklifts	Aggregate	75	Diesel	0.000419122	0.000507138	0.000603536	0.007597568	0.006966993	1.338056524	0.000102633	9.44224E-05	1.26751E-05	0	43480.38018	27382.10804	83.09485756	770711.4309
Sacramento	2024	Construction and Mining - Rough Terrain Forklifts	Aggregate	750	Diesel	6.11836E-07	7.40322E-07	8.81044E-07	8.89606E-06	1.66345E-06	0.004687576	1.28017E-07	1.17775E-07	4.44045E-08	0	152.3235972	12.08278091	0.032846034	3020.695226
Sacramento	2024	Construction and Mining - Rubber Tired Dozers	Aggregate	100	Diesel	2.9372E-05	3.55401E-05	4.22957E-05	0.00027257	0.000290454	0.045414817	2.32755E-05	2.14135E-05	4.30206E-07	0	1475.762416	718.8365812	1.641251478	24925.14783
Sacramento	2024	Construction and Mining - Rubber Tired Dozers	Aggregate	175	Diesel	6.99773E-05	8.46726E-05	0.000100767	0.000852985	0.000762421	0.141045607	3.67459E-05	3.38062E-05	1.3361E-06	0	4583.301603	1588.322995	2.723815183	90669.78085
Sacramento	2024	Construction and Mining - Rubber Tired Dozers	Aggregate	300	Diesel	7.16101E-05	8.66483E-05	0.000103119	0.00049779	0.000685216	0.175392834	3.61765E-05	3.32823E-05	1.66146E-06	0	5699.420733	1239.590565	2.200074096	112923.9071
Sacramento	2024	Construction and Mining - Rubber Tired Dozers	Aggregate	50	Diesel	8.36137E-06	1.01173E-05	1.20404E-05	6.03471E-05	4.46756E-05	0.010227815	2.30821E-06	2.12356E-06	9.68861E-08	0	332.3546169	220.4732825	0.5918509	3431.400847
Sacramento	2024	Construction and Mining - Rubber Tired Dozers	Aggregate	600	Diesel	0.000373671	0.000452142	0.000538087	0.003622648	0.003930695	0.916942083	0.00018908	0.000173954	8.68601E-06	0	29796.19296	4265.71996	8.037435039	664840.0679
Sacramento	2024	Construction and Mining - Rubber Tired Dozers	Aggregate	75	Diesel	1.46393E-05	1.77135E-05	2.10806E-05	0.000126645	0.000164307	0.021460437	8.1792E-06	7.52486E-06	2.03291E-07	0	697.3606506	448.1223427	0.985015581	11062.87524
Sacramento	2024	Construction and Mining - Rubber Tired Dozers	Aggregate	750	Diesel	1.76493E-05	2.13556E-05	2.54149E-05	0.000193853	0.000222547	0.032821198	1.04466E-05	9.61088E-06	3.10909E-07	0	1066.530563	84.04769439	0.164287173	22471.05806
Sacramento	2024	Construction and Mining - Rubber Tired Dozers	Aggregate	9999	Diesel	1.78559E-05	2.16057E-05	2.57125E-05	0.000159905	0.000415402	0.080642587	1.01069E-05	9.29833E-06	7.63912E-07	0	2620.49493	99.10234066	0.164019265	51947.63899
Sacramento	2024	Construction and Mining - Rubber Tired Loaders	Aggregate	100	Diesel	0.000408551	0.000494346	0.000588313	0.004830437	0.00423952	0.80601238	0.000295232	0.000271613	7.6352E-06	0	26191.51292	14665.97642	27.36683658	455818.9985
Sacramento	2024	Construction and Mining - Rubber Tired Loaders	Aggregate	175	Diesel	0.002632753	0.003185631	0.003791164	0.036553442	0.02604873	6.110165958	0.001230668	0.001132215	5.78804E-05	0	198550.9088	74050.95197	102.231484	3929528.584
Sacramento	2024	Construction and Mining - Rubber Tired Loaders	Aggregate	300	Diesel	0.003738533	0.004523625	0.005383487	0.025320259	0.032937097	11.51018231	0.001372962	0.001263125	0.000109034	0	374025.3824	91477.03845	129.3923631	7423250.241
Sacramento	2024	Construction and Mining - Rubber Tired Loaders	Aggregate	50	Diesel	8.29707E-05	0.000100395	0.000119478	0.000548783	0.000442067	0.064157025	2.71171E-05	2.49478E-05	6.07747E-07	0	2084.793721	2466.295564	5.052972243	34993.49044
Sacramento	2024	Construction and Mining - Rubber Tired Loaders	Aggregate	600	Diesel	0.002687994	0.003252473	0.003870711	0.020748462	0.021732977	8.870114446	0.00091908	0.000845554	8.40249E-05	0	288235.9165	41736.19844	57.49465516	5763893.218
Sacramento	2024	Construction and Mining - Rubber Tired Loaders	Aggregate	75	Diesel	0.000284752	0.00034455	0.000410042	0.002990743	0.003229101	0.495784569	0.00013105	0.000120566	4.69647E-06	0	16110.60608	11662.2035	22.54175743	278896.3031
Sacramento	2024	Construction and Mining - Rubber Tired Loaders	Aggregate	750	Diesel	7.71584E-05	9.33616E-05	0.000111108	0.000734195	0.000834799	0.221074973	3.72027E-05	3.42265E-05	2.0942E-06	0	7183.869804	773.9427201	1.58514591	189867.9421
Sacramento	2024	Construction and Mining - Rubber Tired Loaders	Aggregate	9999	Diesel	0.000214433	0.000259464	0.000308784	0.001482006	0.004033785	0.775043198	9.68008E-05	8.90567E-05	7.34183E-06	0	25185.16394	1471.367479	2.329571669	502923.9809
Sacramento	2024	Construction and Mining - Scrapers	Aggregate	100	Diesel	1.05094E-05	1.27163E-05	1.51335E-05	0.000132713	0.000119066	0.024281966	7.33142E-06	6.74491E-06	2.30018E-07	0	789.046734	315.1685825	1.017915655	12474.69478
Sacramento	2024	Construction and Mining - Scrapers	Aggregate	175	Diesel	0.000149995	0.000181494	0.000215992	0.001289773	0.001843015	0.193196156	0.000103281	9.50186E-05	1.83011E-06	0	6277.942802	1685.16949	6.170714216	120922.0349
Sacramento	2024	Construction and Mining - Scrapers	Aggregate	300	Diesel	0.001147032	0.001387909	0.001651727	0.008214265	0.014201064	2.844865104	0.000665248	0.000612028	2.69489E-05	0	92444.3879	15310.96484	48.73317927	1756721.129
Sacramento	2024	Construction and Mining - Scrapers	Aggregate	50	Diesel	3.18337E-06	3.85188E-06	4.58405E-06	1.78015E-05	1.27282E-05	0.002919174	9.04115E-07	8.31786E-07	2.76528E-08	0	94.8590694	38.56831399	0.164492992	767.1306355
Sacramento	2024	Construction and Mining - Scrapers	Aggregate	600	Diesel	0.003289945	0.003980833	0.00473752	0.037174973	0.038911045	9.869496815	0.001690979	0.001555701	9.34918E-05	0	320711.0209	32422.33079	101.8010566	6785762.643
Sacramento	2024	Construction and Mining - Scrapers	Aggregate	75	Diesel	1.37499E-05	1.66374E-05	1.97999E-05	0.000115438	0.000152676	0.020343845	8.35876E-06	7.69006E-06	1.92713E-07	0	661.0767993	334.5988857	1.280139103	10414.96822
Sacramento	2024	Construction and Mining - Scrapers	Aggregate	750	Diesel	0.000372866	0.000451168	0.000536927	0.003832197	0.004602808	1.64510777	0.000171177	0.000157483	1.55838E-05	0	53458.064	4186.181662	15.35542721	1239088.035
Sacramento	2024	Construction and Mining - Skid Steer Loaders	Aggregate	100	Diesel	0.001349858	0.001633328	0.001943795	0.0217934	0.016539641	3.701166177	0.001062671	0.000977657	3.50604E-05	0	120270.0407	69087.87848	146.7336203	2141654.685
Sacramento	2024	Construction and Mining - Skid Steer Loaders	Aggregate	175	Diesel	0.00026901	0.000325502	0.000387374	0.006427692	0.002099567	1.093012061	6.641E-05	6.10972E-05	1.03539E-05	0	35517.61761	16970.23958	25.42395958	703230.2178
Sacramento	2024	Construction and Mining - Skid Steer Loaders	Aggregate	300	Diesel	3.16352E-05	3.82786E-05	4.55547E-05	0.000207618	0.000289941	0.089021663	1.32036E-05	1.21473E-05	8.43285E-07	0	2892.774467	744.9789322	1.377761826	57345.19918
Sacramento	2024	Construction and Mining - Skid Steer Loaders	Aggregate	50	Diesel	0.00097544	0.001180282	0.001404633	0.007725782	0.006618766	1.025692563	0.000304705	0.000280329	9.71619E-06	0	33330.05877	37379.33101	96.51631213	580613.9815
Sacramento	2024	Construction and Mining - Skid Steer Loaders	Aggregate	600	Diesel	1.5679E-05	1.89715E-05	2.25777E-05	0.00011804	0.000107338	0.062058799	4.70278E-06	4.32656E-06	5.87871E-07	0	2016.611496	228.6909475	0.393646236	39976.49634
Sacramento	2024	Construction and Mining - Skid Steer Loaders	Aggregate	75	Diesel	0.003036271	0.003673888	0.00437223	0.04308115	0.040370025	7.311587638	0.000922272	0.00084849	6.92613E-05	0	237591.3159	170373.7365	376.0047938	4225438.575
Sacramento	2024	Construction and Mining - Skid Steer Loaders	Aggregate	750	Diesel	2.34902E-06	2.84231E-06	3.38259E-06	1.11233E-05	3.29485E-05	0.005875899	9.82145E-07	9.03574E-07	5.56613E-08	0	190.938374	15.93451898	0.032803853	3785.085637
Sacramento	2024	Construction and Mining - Skid Steer Loaders	Aggregate	9999	Diesel	0.000103386	0.000125097	0.000148876	0.00092662	0.001926214	0.457308906	4.62329E-05	4.25343E-05	4.332E-06	0	14860.33268	349.8314194	0.721684766	294585.2665
Sacramento	2024	Construction and Mining - Spray Truck	Aggregate	100	Diesel	4.97707E-06	6.02226E-06	7.16698E-06	4.42825E-05	4.52824E-05	0.00724127	3.5098E-06	3.22901E-06	6.85951E-08	0	235.3063417	139.7691536	0.262430824	4195.869991
Sacramento	2024	Construction and Mining - Spray Truck	Aggregate	175	Diesel	8.02032E-06	9.70459E-06	1.15493E-05	0.000145886	7.02052E-05	0.023514386	3.55048E-06	3.26645E-06	2.22747E-07	0	764.1040616	260.0698201	0.426450089	15147.29202
Sacramento	2024	Construction and Mining - Spray Truck	Aggregate	300	Diesel	9.88465E-06	1.19604E-05	1.42339E-05	5.58485E-05	9.73832E-05	0.021543876	4.78362E-06	4.40093E-06	2.04081E-07	0	700.0720104	143.9117239	0.230001213	13647.53271
Sacramento	2024	Construction and Mining - Spray Truck	Aggregate	50	Diesel	1.17063E-05	1.41646E-05	1.6857E-05	0.000136281	0.000122948	0.016696105	5.69675E-06	5.24101E-06	1.58159E-07	0	542.5428543	748.0737539	1.508977238	9674.36434
Sacramento	2024	Construction and Mining - Spray Truck	Aggregate	600	Diesel	2.8735E-05	3.47694E-05	4.13784E-05	0.000272777	0.000227571	0.087404084	1.09174E-05	1.0044E-05	8.27962E-07	0	2840.210969	354.573723	0.524861648	56303.2015
Sacramento	2024	Construction and Mining - Spray Truck	Aggregate	75	Diesel	5.66435E-06	6.85386E-06	8.15666E-06	6.14564E-05	7.03234E-05	0.009926616	2.83978E-06	2.61259E-06	9.40329E-08	0	322.5671322	237.7746877	0.459253942	5751.862616
Sacramento	2024	Construction and Mining - Spreader Tractor Trailer	Aggregate	50	Diesel	8.28151E-07	1.00206E-06	1.19254E-06	7.26798E-06	6.47089E-06	0.000952538	2.26738E-07	2.08599E-07	9.02321E-09	0	30.9528817	57.44946226	0.131215412	551.9369624
Sacramento	2024	Construction and Mining - Spreader Tractor Trailer	Aggregate	600	Diesel	6.23653E-06	7.5462E-06	8.9806E-06	3.79508E-05	7.1954E-05	0.019866792	2.29814E-06	2.11428E-06	1.88194E-07	0	645.5748664	103.7084024	0.196823118	12797.61686
Sacramento	2024	Construction and Mining - Spreader Truck	Aggregate	100	Diesel	4.89782E-06	5.92637E-06	7.05287E-06	6.86447E-05	6.05289E-05	0.011653301	4.54774E-06	4.18392E-06	1.10389E-07	0	378.6760366	193.8504802	0.426450089	6752.369727
Sacramento	2024	Construction and Mining - Spreader Truck	Aggregate	175	Diesel	3.69223E-06	4.4676E-06	5.31681E-06	8.81506E-05	2.14845E-05	0.014084311	1.10885E-06	1.02014E-06	1.33418E-07	0	457.6721548	170.9466583	0.196823118	9072.708978
Sacramento	2024	Construction and Mining - Spreader Truck	Aggregate	300	Diesel	3.14229E-06	3.80217E-06	4.52489E-06	2.0307E-05	2.42697E-05	0.009993368	9.34775E-07	8.59993E-07	9.46652E-08	0	324.7362495	65.64679272	0.098411559	6437.440983
Sacramento	2024	Construction and Mining - Spreader Truck	Aggregate	50	Diesel	1.83603E-07	2.22159E-07	2.64388E-07	2.2875E-06	1.78298E-06	0.000287317	6.30782E-08	5.80319E-08	2.7217E-09	0	9.336410285	17.52446281	0.032803853	166.4823967
Sacramento	2024	Construction and Mining - Spreader Truck	Aggregate	600	Diesel	2.84572E-05	3.44332E-05	4.09784E-05	0.000237082	0.000215678	0.093086928	1.03758E-05	9.54574E-06	8.81794E-07	0	3024.875955	390.4505533	0.65607706	59963.92602
Sacramento	2024	Construction and Mining - Spreader Truck	Aggregate	75	Diesel	5.12487E-07	6.20109E-07	7.37981E-07	9.13622E-06	8.17394E-06	0.001623167	3.27177E-07	3.01003E-07	1.53759E-08	0	52.74509572	33.44684516	0.065607706	940.5252859
Sacramento	2024	Construction and Mining - Surfacing Equipment	Aggregate	100	Diesel	1.10669E-05	1.3391E-05	1.59364E-05	0.000144478	0.000114549	0.02688083	8.48183E-06	7.80328E-06	2.54637E-07	0	873.4972711	487.8922251	1.018881446	12643.46824
Sacramento	2024	Construction and Mining - Surfacing Equipment	Aggregate	175	Diesel	4.29926E-05	5.20211E-05	6.19094E-05	0.000579796	0.000444997	0.098623109	2.17256E-05	1.99876E-05	9.34238E-07	0	3204.77513	1584.601974	2.460726668	63195.74355
Sacramento	2024	Construction and Mining - Surfacing Equipment	Aggregate	300	Diesel	4.33081E-05	5.24028E-05	6.23636E-05	0.000275138	0.000461614	0.115174734	1.98671E-05	1.82777E-05	1.09103E-06	0	3742.623069	1024.1636	1.872668374	73239.65107
Sacramento	2024	Construction and Mining - Surfacing Equipment	Aggregate	50	Diesel	1.45967E-05	1.7662E-05	2.10192E-05	9.39542E-05	7.7516E-05	0.011698453	4.56121E-06	4.19631E-06	1.10817E-07	0	380.1432801	526.1813866	1.115829108	5808.153456
Sacramento	2024	Construction and Mining - Surfacing Equipment	Aggregate	600	Diesel	0.00019069	0.000230735	0.000274594	0.001486322	0.001533348	0.662634756	6.72477E-05	6.18679E-05	6.27701E-06	0	21532.43202	3648.528744	5.611125463	428112.7412
Sacramento	2024	Construction and Mining - Surfacing Equipment	Aggregate	75	Diesel	1.00123E-05	1.21149E-05	1.44177E-05	0.000116645	0.00011646	0.020097832	4.14511E-06	3.8135E-06	1.90383E-07	0	653.0825619	537.7975366	1.08332402	10313.94701
Sacramento	2024	Construction and Mining - Surfacing Equipment	Aggregate	750	Diesel	7.31032E-05	8.84549E-05	0.000105269	0.00052683	0.000678579	0.278620374	3.05082E-05	2.80675E-05	2.63932E-06	0	9053.817675	941.8622492	1.672996503	179479.2452
Sacramento	2024	Construction and Mining - Surfacing Equipment	Aggregate	9999	Diesel	3.14177E-05	3.80154E-05	4.52415E-05	0.0002512	0.000588389	0.124192735	1.40334E-05	1.29107E-05	1.17645E-06	0	4035.664607	333.2146851	0.658567591	90875.46113
Sacramento	2024	Construction and Mining - Tank Truck	Aggregate	100	Diesel	5.5055E-07	6.66166E-07	7.92792E-07	1.77109E-05	7.01935E-06	0.002937641	5.68019E-07	5.22578E-07	2.78277E-08	0	95.45915095	53.32649943	0.065607706	1702.181862
Sacramento	2024	Construction and Mining - Tank Truck	Aggregate	175	Diesel	1.86152E-06	2.25244E-06	2.68059E-06	2.44193E-05	2.19904E-05	0.004092818	1.0713E-06	9.85601E-07	3.87705E-08	0	132.9968363	51.64767223	0.164019265	2636.475866
Sacramento	2024	Construction and Mining - Tank Truck	Aggregate	300	Diesel	6.33404E-05	7.66419E-05	9.12101E-05	0.000418546	0.000480464	0.20004791	1.90207E-05	1.7499E-05	1.89502E-06	0	6500.59175	1478.303155	2.066642739	128865.1199
Sacramento	2024	Construction and Mining - Tank Truck	Aggregate	600	Diesel	2.62738E-05	3.17913E-05	3.78343E-05	0.000158673	0.000203961	0.079889999	9.33794E-06	8.59091E-06	7.56782E-07	0	2596.039443	377.8670586	0.557665501	51462.84325
Sacramento	2024	Construction and Mining - Tanker Truck Trailer	Aggregate	100	Diesel	8.9778E-07	1.08631E-06	1.2928E-06	2.68146E-05	1.19953E-05	0.004353665	9.56704E-07	8.80167E-07	4.12414E-08	0	141.4731147	79.0313542	0.098411559	2522.680826
Sacramento	2024	Construction and Mining - Tanker Truck Trailer	Aggregate	175	Diesel	2.594E-06	3.13874E-06	3.73536E-06	3.56156E-05	2.06838E-05	0.005879456	8.05392E-07	7.4096E-07	5.56949E-08	0	191.0539392	70.39800033	0.098411559	3787.376556
Sacramento	2024	Construction and Mining - Tanker Truck Trailer	Aggregate	300	Diesel	4.40134E-07	5.32562E-07	6.33793E-07	4.66419E-06	5.83556E-07	0.002361883	4.90332E-08	4.51106E-08	2.23737E-08	0	76.74979871	21.99909173	0.032803853	1521.457184
Sacramento	2024	Construction and Mining - Tanker Truck Trailer	Aggregate	50	Diesel	1.30183E-06	1.57521E-06	1.87463E-06	9.63452E-06	8.44927E-06	0.001215186	3.21593E-07	2.95866E-07	1.15112E-08	0	39.48767818	51.95219127	0.098411559	704.1253657
Sacramento	2024	Construction and Mining - Tanker Truck Trailer	Aggregate	600	Diesel	1.2345E-06	1.49375E-06	1.77768E-06	1.30336E-05	1.83627E-06	0.006782784	1.39516E-07	1.28354E-07	6.4252E-08	0	220.4077395	24.30886003	0.032803853	4369.274502
Sacramento	2024	Construction and Mining - Tanker Truck Trailer	Aggregate	75	Diesel	6.00376E-07	7.26454E-07	8.64541E-07	8.86242E-06	7.3546E-06	0.001450074	8.15962E-08	7.50685E-08	1.37363E-08	0	47.1204232	35.41784985	0.065607706	840.2288193
Sacramento	2024	Construction and Mining - Telescopic Handler	Aggregate	100	Diesel	1.19349E-05	1.44412E-05	1.71862E-05	0.000334284	0.000188511	0.059706158	1.19803E-05	1.10219E-05	5.65585E-07	0	1940.162009	1244.214824	3.674031536	34596.03974
Sacramento	2024	Construction and Mining - Telescopic Handler	Aggregate	175	Diesel	7.32913E-05	8.86825E-05	0.000105539	0.001878512	0.000686282	0.332341384	2.36645E-05	2.17714E-05	3.14821E-06	0	10799.49126	5020.004779	10.16919443	214084.7772
Sacramento	2024	Construction and Mining - Telescopic Handler	Aggregate	300	Diesel	1.64803E-06	1.99411E-06	2.37316E-06	1.87969E-05	3.64835E-06	0.009682969	2.34193E-07	2.15458E-07	9.17249E-08	0	314.6497723	88.61244554	0.196823118	6237.49071
Sacramento	2024	Construction and Mining - Telescopic Handler	Aggregate	50	Diesel	2.20348E-06	2.66621E-06	3.17301E-06	2.61494E-05	2.40159E-05	0.004307108	5.88766E-07	5.41664E-07	4.08004E-08	0	139.9602178	182.5626424	0.65607706	2495.703573
Sacramento	2024	Construction and Mining - Telescopic Handler	Aggregate	600	Diesel	6.8096E-07	8.23961E-07	9.80582E-07	8.46798E-06	1.20291E-06	0.004521759	8.88328E-08	8.17262E-08	4.28337E-08	0	146.9353594	15.29825393	0.032803853	2912.787549
Sacramento	2024	Construction and Mining - Telescopic Handler	Aggregate	75	Diesel	3.29791E-05	3.99047E-05	4.74899E-05	0.000691322	0.00061095	0.122936815	5.29236E-06	4.86898E-06	1.16456E-06	0	3994.853244	2929.597919	8.594609486	71234.3098
Sacramento	2024	Construction and Mining - Telescopic Handler	Aggregate	750	Diesel	7.01036E-07	8.48253E-07	1.00949E-06	9.23449E-06	1.53414E-06	0.004970527	1.54566E-07	1.42201E-07	4.70848E-08	0	161.5181369	12.55635558	0.032803853	3201.870673
Sacramento	2024	Construction and Mining - Telescopic Handler	Aggregate	9999	Diesel	8.39873E-06	1.01625E-05	1.20942E-05	6.91866E-05	0.000231442	0.037216103	4.69486E-06	4.31927E-06	3.52541E-07	0	1209.343776	23.50347578	0.065607706	23973.54529
Sacramento	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	100	Diesel	0.005338868	0.00646003	0.007687969	0.066604678	0.056750558	11.19391303	0.003799096	0.003495169	0.000106038	0	363748.1568	198839.4459	415.5277472	6437525.028
Sacramento	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	175	Diesel	0.004053996	0.004905335	0.005837754	0.070428903	0.037343627	11.9156059	0.00156595	0.001440674	0.000112874	0	387199.6924	163456.1961	246.5270026	7649358.888
Sacramento	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	25	Diesel	1.87065E-07	2.26348E-07	2.69373E-07	2.06846E-06	1.65813E-06	0.000245038	1.06438E-07	9.79231E-08	2.32119E-09	0	7.962538401	16.68439146	0.065607706	141.9841713
Sacramento	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	300	Diesel	0.001584835	0.001917651	0.002282163	0.010978002	0.014604217	5.04038192	0.000607529	0.000558927	4.77466E-05	0	163788.0899	40008.68423	67.85362317	3243990.271
Sacramento	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	50	Diesel	0.001414072	0.001711027	0.002036264	0.008865846	0.007406737	1.054948211	0.000448773	0.000412871	9.99332E-06	0	34280.72618	41837.49409	105.9737285	578605.3931
Sacramento	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	600	Diesel	0.001122418	0.001358126	0.001616282	0.008848551	0.010009764	3.827616474	0.000405379	0.000372949	3.62583E-05	0	124379.0651	17168.73479	28.90859701	2477351.771
Sacramento	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	75	Diesel	0.002710829	0.003280103	0.003903594	0.028810426	0.031668344	4.802930741	0.001223186	0.001125331	4.54972E-05	0	156072.0724	111324.9233	250.2972515	2724920.992
Sacramento	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	750	Diesel	4.74049E-05	5.73599E-05	6.8263E-05	0.000431127	0.000425676	0.177250499	2.15322E-05	1.98096E-05	1.67906E-06	0	5759.785875	449.5271823	0.853398284	116123.6353
Sacramento	2024	Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	9999	Diesel	0.000239575	0.000289886	0.000344988	0.002070309	0.004054294	0.71704223	0.000120808	0.000111144	6.7924E-06	0	23300.41237	638.5522955	1.148134855	461898.0164
Sacramento	2024	Construction and Mining - Trenchers	Aggregate	100	Diesel	9.28063E-05	0.000112296	0.000133641	0.000753044	0.000858313	0.124078618	6.26451E-05	5.76335E-05	1.17537E-06	0	4031.956354	1607.073615	5.11845722	70304.6717
Sacramento	2024	Construction and Mining - Trenchers	Aggregate	175	Diesel	9.6672E-05	0.000116973	0.000139208	0.001200032	0.001061657	0.202594469	5.07927E-05	4.67292E-05	1.91914E-06	0	6583.342609	2071.139907	5.119144552	129040.1099
Sacramento	2024	Construction and Mining - Trenchers	Aggregate	300	Diesel	5.61496E-05	6.79411E-05	8.08555E-05	0.000330622	0.000719664	0.1221426	3.2132E-05	2.95614E-05	1.15703E-06	0	3969.045094	700.7807412	1.969062197	78347.09877
Sacramento	2024	Construction and Mining - Trenchers	Aggregate	50	Diesel	0.000310513	0.00037572	0.000447138	0.002361406	0.002131839	0.32351317	0.000101153	9.30612E-05	3.06458E-06	0	10512.6169	8838.497205	28.47552476	184204.5603
Sacramento	2024	Construction and Mining - Trenchers	Aggregate	600	Diesel	6.3965E-05	7.73977E-05	9.21097E-05	0.000475089	0.000752391	0.198918527	2.88151E-05	2.65098E-05	1.88432E-06	0	6463.892251	593.0356525	1.740505638	130922.6066
Sacramento	2024	Construction and Mining - Trenchers	Aggregate	75	Diesel	8.13035E-05	9.83773E-05	0.000117077	0.000633644	0.0009061	0.103649821	5.11295E-05	4.70392E-05	9.81855E-07	0	3368.11902	1851.993701	6.23446474	57290.78705
Sacramento	2024	Construction and Mining - Trenchers	Aggregate	750	Diesel	2.8944E-06	3.50223E-06	4.16794E-06	1.69911E-05	4.87774E-05	0.007318445	1.43677E-06	1.32182E-06	6.93262E-08	0	237.8141345	18.98256136	0.098905424	6062.859661
Sacramento	2024	Construction and Mining - Trenchers	Aggregate	9999	Diesel	4.98979E-05	6.03765E-05	7.1853E-05	0.000539561	0.000954677	0.260400209	2.22899E-05	2.05067E-05	2.46672E-06	0	8461.750238	391.6977856	0.885704031	167742.3381
Sacramento	2024	Construction and Mining - Vacuum Truck	Aggregate	100	Diesel	4.28659E-06	5.18677E-06	6.17269E-06	7.69088E-05	5.41145E-05	0.012709627	3.86424E-06	3.5551E-06	1.20396E-07	0	413.0015324	213.9390262	0.426450089	7364.445528
Sacramento	2024	Construction and Mining - Vacuum Truck	Aggregate	175	Diesel	5.01693E-05	6.07049E-05	7.22438E-05	0.000653685	0.000526528	0.111338265	2.48825E-05	2.28919E-05	1.05469E-06	0	3617.956343	1312.662536	2.165054298	71720.91342
Sacramento	2024	Construction and Mining - Vacuum Truck	Aggregate	300	Diesel	4.22176E-05	5.10833E-05	6.07933E-05	0.000246407	0.000453471	0.124042737	1.65504E-05	1.52264E-05	1.17503E-06	0	4030.790372	881.8345134	1.377761826	79904.7694
Sacramento	2024	Construction and Mining - Vacuum Truck	Aggregate	50	Diesel	7.62052E-06	9.22083E-06	1.09735E-05	4.69984E-05	3.89246E-05	0.005334249	2.2661E-06	2.08482E-06	5.05303E-08	0	173.3373458	239.4666984	0.557665501	3090.868534
Sacramento	2024	Construction and Mining - Vacuum Truck	Aggregate	600	Diesel	5.15075E-05	6.23241E-05	7.41708E-05	0.0003225	0.000516958	0.169272558	1.84337E-05	1.6959E-05	1.60349E-06	0	5500.541309	862.3993672	1.672996503	109040.5217
Sacramento	2024	Construction and Mining - Vacuum Truck	Aggregate	75	Diesel	3.48845E-06	4.22103E-06	5.02337E-06	4.88639E-05	4.36263E-05	0.008167934	1.42901E-06	1.31469E-06	7.73733E-08	0	265.4184347	190.1878072	0.360842383	4732.814411
Sacramento	2024	Construction and Mining - Water Truck	Aggregate	175	Diesel	1.68424E-05	2.03794E-05	2.42531E-05	0.000195427	0.000177825	0.032293337	8.6737E-06	7.9798E-06	3.05909E-07	0	1049.37763	387.6176228	0.688880913	20802.44066
Sacramento	2024	Construction and Mining - Water Truck	Aggregate	300	Diesel	0.000117545	0.00014223	0.000169265	0.000661752	0.001392503	0.205977449	6.87796E-05	6.32773E-05	1.95118E-06	0	6693.273129	1507.826223	2.92316308	131928.9763
Sacramento	2024	Construction and Mining - Water Truck	Aggregate	50	Diesel	1.49372E-06	1.8074E-06	2.15095E-06	1.52876E-05	1.39505E-05	0.001849205	5.36158E-07	4.93266E-07	1.75172E-08	0	60.09022882	77.09309385	0.131215412	1071.500181
Sacramento	2024	Construction and Mining - Water Truck	Aggregate	600	Diesel	0.000307799	0.000372437	0.000443231	0.002128702	0.002793165	0.960232719	0.00011527	0.000106048	9.0961E-06	0	31202.92973	4017.751358	6.561787734	620402.6408
Sacramento	2024	Construction and Mining - Water Truck	Aggregate	75	Diesel	1.07399E-05	1.29953E-05	1.54655E-05	6.1553E-05	0.000108775	0.009374787	8.20632E-06	7.54981E-06	8.88055E-08	0	304.6353501	233.5563607	0.524861648	5432.111666
Sacramento	2024	Construction and Mining - Water Truck	Aggregate	750	Diesel	8.92124E-06	1.07947E-05	1.28466E-05	7.54605E-05	0.000130087	0.015518062	4.93538E-06	4.54055E-06	1.47E-07	0	504.2621368	41.86574539	0.098411559	9996.290067
Sacramento	2024	Construction and Mining - Water Truck	Aggregate	9999	Diesel	1.50335E-05	1.81905E-05	2.16482E-05	0.000103164	0.000266775	0.05481082	6.59705E-06	6.06929E-06	5.19212E-07	0	1781.087159	113.4027123	0.196823118	35307.55647
Sacramento	2024	Forestry - Extraction	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Extraction	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Extraction	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Extraction	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Extraction	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Extraction	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Extraction	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Extraction	Aggregate	9999	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Maintenance & Construction	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Maintenance & Construction	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Maintenance & Construction	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Maintenance & Construction	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Maintenance & Construction	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Maintenance & Construction	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Maintenance & Construction	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Manufacturing	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Manufacturing	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Manufacturing	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Manufacturing	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Manufacturing	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Forestry - Manufacturing	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024	Industrial - Aerial Lifts	Aggregate	100	Diesel	3.12748E-05	3.78425E-05	4.50358E-05	0.000632784	0.000448711	0.114895816	2.8836E-05	2.65291E-05	1.08839E-06	0	3733.559595	2669.743302	9.415370489	66513.94842
Sacramento	2024	Industrial - Aerial Lifts	Aggregate	175	Diesel	4.6334E-05	5.60642E-05	6.6721E-05	0.00096769	0.000485486	0.171448457	2.05356E-05	1.88928E-05	1.6241E-06	0	5571.247531	2996.747969	6.667001218	110405.6524
Sacramento	2024	Industrial - Aerial Lifts	Aggregate	300	Diesel	7.17674E-07	8.68386E-07	1.03345E-06	6.96444E-06	4.68895E-06	0.003676821	1.71566E-07	1.57841E-07	3.48298E-08	0	119.4789461	32.63490697	0.07898693	2368.50264
Sacramento	2024	Industrial - Aerial Lifts	Aggregate	50	Diesel	0.00011746	0.000142126	0.000169142	0.001735876	0.001686658	0.295845685	4.6165E-05	4.24718E-05	2.80249E-06	0	9613.557163	11799.37726	50.0165083	170146.5879
Sacramento	2024	Industrial - Aerial Lifts	Aggregate	600	Diesel	4.64114E-07	5.61577E-07	6.68324E-07	4.01986E-06	5.63768E-06	0.002155622	1.47043E-07	1.35279E-07	2.04198E-08	0	70.04729891	11.91468961	0.031594772	1388.58952
Sacramento	2024	Industrial - Aerial Lifts	Aggregate	75	Diesel	0.00017804	0.000215428	0.000256377	0.003300654	0.003032021	0.588127829	5.66187E-05	5.20892E-05	5.57122E-06	0	19111.31643	16101.99368	54.53511587	339454.5216
Sacramento	2024	Industrial - Boom	Aggregate	100	Diesel	1.48025E-05	1.7911E-05	2.13156E-05	0.000340568	0.000200063	0.058978135	1.45854E-05	1.34186E-05	5.58688E-07	0	1916.504785	1280.009532	2.559176532	34174.19547

Sacramento	2024	Industrial - Boom	Aggregate	175	Diesel	1.71131E-05	2.07068E-05	2.46428E-05	0.000316004	0.000148167	0.053354939	6.02802E-06	5.54578E-06	5.05421E-07	0	1733.778037	888.1423395	1.137411792	34369.71946
Sacramento	2024	Industrial - Boom	Aggregate	300	Diesel	2.15236E-06	2.60436E-06	3.0994E-06	1.64821E-05	1.73048E-05	0.008035052	6.33347E-07	5.82679E-07	7.61145E-08	0	261.1004325	72.11098936	0.110710719	5372.788107
Sacramento	2024	Industrial - Boom	Aggregate	50	Diesel	0.000158061	0.000191253	0.000227607	0.002451256	0.002120748	0.386428407	5.18986E-05	4.77467E-05	3.66056E-06	0	12557.05852	13795.15399	33.68002695	223911.4536
Sacramento	2024	Industrial - Boom	Aggregate	600	Diesel	3.32009E-06	4.01731E-06	4.78094E-06	1.88423E-05	3.07938E-05	0.007608079	1.62271E-06	1.49289E-06	7.20699E-08	0	247.2258538	38.71376557	0.063189544	4900.90603
Sacramento	2024	Industrial - Boom	Aggregate	75	Diesel	0.000231178	0.000279726	0.000332897	0.003830502	0.003318656	0.649759144	4.56714E-05	4.20177E-05	6.15504E-06	0	21114.03674	16381.62378	31.21563474	376495.3911
Sacramento	2024	Industrial - Boom	Aggregate	9999	Diesel	8.89424E-07	1.0762E-06	1.28077E-06	1.01378E-05	1.75327E-05	0.005343009	3.10159E-07	2.85346E-07	5.06133E-08	0	173.6220227	10.12298013	0.015797386	3441.813244
Sacramento	2024	Industrial - Forklifts	Aggregate	100	Diesel	0.000353441	0.000427664	0.000508955	0.004977444	0.004042826	0.855419472	0.000275009	0.000253008	8.10322E-06	0	27797.00497	28765.9937	70.44692151	484771.6136
Sacramento	2024	Industrial - Forklifts	Aggregate	175	Diesel	0.000845702	0.001023299	0.001217811	0.014819919	0.007956887	2.532176021	0.00033243	0.000305836	2.39868E-05	0	82283.50158	64506.86537	106.0962771	1629386.585
Sacramento	2024	Industrial - Forklifts	Aggregate	25	Diesel	9.79968E-09	1.18576E-08	1.41115E-08	3.18817E-08	2.55077E-08	2.30495E-06	2.17737E-09	2.00318E-09	2.18344E-11	0	0.074899843	5.56490888	0.015797386	1.335578131
Sacramento	2024	Industrial - Forklifts	Aggregate	300	Diesel	7.6956E-05	9.31168E-05	0.000110817	0.000536478	0.000740084	0.229307323	3.27839E-05	3.01611E-05	2.17218E-06	0	7451.381462	3447.566964	6.685258918	147959.5462
Sacramento	2024	Industrial - Forklifts	Aggregate	50	Diesel	0.000112438	0.00013605	0.000161911	0.000965109	0.000823024	0.1352823	3.61043E-05	3.32159E-05	1.2815E-06	0	4396.021938	8484.556092	23.29507067	71844.08244
Sacramento	2024	Industrial - Forklifts	Aggregate	600	Diesel	2.38975E-05	2.8916E-05	3.44124E-05	0.000217033	0.000244236	0.069308118	1.07267E-05	9.86858E-06	6.56542E-07	0	2252.179377	634.2980718	1.264241534	45067.50221
Sacramento	2024	Industrial - Forklifts	Aggregate	75	Diesel	0.000511612	0.00061905	0.000736721	0.00764597	0.007195329	1.311717067	0.00016275	0.00014973	1.24256E-05	0	42624.47496	56412.16876	132.7016931	749493.8138
Sacramento	2024	Industrial - Forklifts	Aggregate	750	Diesel	9.59995E-07	1.16159E-06	1.38239E-06	1.0241E-05	5.32076E-06	0.005338984	3.44466E-07	3.16909E-07	5.05752E-08	0	173.4912115	23.44922792	0.047392158	3439.220095
Sacramento	2024	Industrial - Forklifts	Aggregate	9999	Diesel	2.53248E-05	3.0643E-05	3.64677E-05	0.000185861	0.000497631	0.098804958	1.19186E-05	1.09651E-05	9.3596E-07	0	3210.684341	157.0440636	0.31594772	63647.31683
Sacramento	2024	Industrial - Garbage Refuse	Aggregate	175	Diesel	2.25747E-07	2.73154E-07	3.25076E-07	3.36245E-06	3.1234E-06	0.000591491	1.41505E-07	1.30184E-07	5.60308E-09	0	19.2206185	9.115354578	0.015797386	381.0218214
Sacramento	2024	Industrial - Garbage Refuse	Aggregate	300	Diesel	7.05056E-07	8.53117E-07	1.01528E-06	5.38728E-06	5.34711E-06	0.002797838	2.01169E-07	1.85076E-07	2.65034E-08	0	90.91624405	20.09686782	0.031594772	1802.287106
Sacramento	2024	Industrial - Garbage Refuse	Aggregate	50	Diesel	3.76815E-08	4.55946E-08	5.42613E-08	6.43008E-07	6.66911E-07	9.97629E-05	1.9465E-08	1.79078E-08	9.45035E-10	0	3.2418133	6.084890756	0.015797386	57.80646218
Sacramento	2024	Industrial - Garbage Refuse	Aggregate	600	Diesel	1.04535E-05	1.26487E-05	1.5053E-05	8.01638E-05	6.91946E-05	0.041778212	2.70474E-06	2.48836E-06	3.95757E-07	0	1357.590275	145.4938022	0.205366018	26912.32435
Sacramento	2024	Industrial - Garbage Refuse	Aggregate	75	Diesel	1.94549E-07	2.35404E-07	2.80151E-07	2.69651E-06	2.26244E-06	0.000433138	6.64595E-08	6.11428E-08	4.10303E-09	0	14.07488846	8.925201641	0.015797386	250.9766701
Sacramento	2024	Industrial - Garbage Refuse	Aggregate	9999	Diesel	1.92886E-06	2.33393E-06	2.77756E-06	2.03268E-05	3.55559E-05	0.010574775	8.51653E-07	7.83521E-07	1.00173E-07	0	343.6291606	18.97959506	0.031594772	6811.966465
Sacramento	2024	Industrial - Garbage Transfer	Aggregate	300	Diesel	9.95528E-07	1.20459E-06	1.43356E-06	6.09091E-06	9.96523E-06	0.002956718	3.39489E-07	3.1233E-07	2.80084E-08	0	96.07907225	21.83485927	0.031594772	1904.632939
Sacramento	2024	Industrial - Garbage Transfer	Aggregate	600	Diesel	1.53142E-06	1.85302E-06	2.20525E-06	1.43072E-05	5.39282E-06	0.007278188	3.09687E-07	2.84912E-07	6.89449E-08	0	236.506001	22.95422264	0.031594772	4688.399974
Sacramento	2024	Industrial - Misc - Aerial Lifts	Aggregate	100	Gasoline	0.000159184	0.000146417	0.000175172	0.008747482	0.000404824	0.322424725	2.24802E-05	1.69851E-05	3.11507E-06	4.46388E-06	12742.15	4467.6	12.38	299329.2
Sacramento	2024	Industrial - Misc - Aerial Lifts	Aggregate	15	Gasoline	2.75216E-05	2.77968E-05	3.02858E-05	0.000779982	2.05238E-05	3.08114E-08	9.98288E-06	7.54262E-06	1.25743E-08	1.73572E-08	49.29805502	0	0.45536251	0
Sacramento	2024	Industrial - Misc - Aerial Lifts	Aggregate	15	Diesel	2.97565E-05	3.57906E-05	4.27755E-05	0.000187737	0.000224135	0.000429667	7.88234E-06	5.95555E-06	4.07784E-09	3.51269E-09	13.97568445	0	6.512930543	0
Sacramento	2024	Industrial - Misc - Aerial Lifts	Aggregate	15	Electric	3.23846E-06	2.93093E-07	3.20573E-06	0.000114481	3.12922E-06	1.05181E-08	2.92109E-07	2.20705E-07	2.39677E-10	2.15631E-09	6.160716167	0	0.15544708	0
Sacramento	2024	Industrial - Misc - Aerial Lifts	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.14659553	0
Sacramento	2024	Industrial - Misc - Aerial Lifts	Aggregate	25	Gasoline	0.001494536	0.001509482	0.001644646	0.0396475	0.00097586	1.47555E-06	0.000478076	0.000361214	6.40982E-07	8.84792E-07	2518.320998	0	14.92068735	0
Sacramento	2024	Industrial - Misc - Aerial Lifts	Aggregate	25	Diesel	5.60535E-05	6.74201E-05	8.05779E-05	0.000229661	0.000427159	0.000615193	1.50007E-05	1.13338E-05	5.8386E-09	5.02943E-09	20.0102399	0	9.32200712	0
Sacramento	2024	Industrial - Misc - Aerial Lifts	Aggregate	25	Electric	0.000269485	2.43894E-05	0.000266761	0.00688953	0.000189361	6.06525E-07	0.000018542	1.40095E-05	1.47191E-08	1.32423E-07	378.3429343	0	6.133162278	0
Sacramento	2024	Industrial - Misc - Aerial Lifts	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.14659553	0
Sacramento	2024	Industrial - Misc - Aerial Lifts	Aggregate	50	Gasoline	0.000202319	0.000186093	0.00022264	0.016512882	0.000309885	0.160610578	1.10723E-05	8.36577E-06	1.95273E-06	2.48192E-06	7084.65	4467.6	12.38	147430.8
Sacramento	2024	Industrial - Misc - Forklifts	Aggregate	100	Gasoline	0.010802505	0.009936144	0.011887498	1.022444026	0.054608495	12.82110164	0.000893918	0.000675405	0.00012387	0.000191768	547401.45	261018.8	144.87	18271316
Sacramento	2024	Industrial - Misc - Forklifts	Aggregate	100	Nat Gas	0	0	0.001943665	0.921446625	0.092285491	20.48319986	0.001821646	0	0	0	1139303.7	478715.75	265.72	33510102.5
Sacramento	2024	Industrial - Misc - Forklifts	Aggregate	175	Gasoline	0.00056353	0.000518335	0.000620131	0.039676972	0.003390894	0.950513616	6.81417E-05	5.14848E-05	9.44236E-06	1.3453E-05	38401.65	9541.1	5.32	1393000.6
Sacramento	2024	Industrial - Misc - Forklifts	Aggregate	175	Nat Gas	0	0	8.9256E-05	0.054012593	0.004604435	1.56341448	0.00013904	0	0	0	85512.2	17523.65	9.73	2558452.9
Sacramento	2024	Industrial - Misc - Forklifts	Aggregate	25	Gasoline	9.60036E-06	9.69636E-06	1.05646E-05	0.00080184	5.37348E-06	2.16888E-07	1.94079E-08	1.46638E-08	1.22666E-08	1.69325E-08	48.25387782	0	0.115750006	0
Sacramento	2024	Industrial - Misc - Forklifts	Aggregate	25	Electric	5.05488E-05	4.57486E-06	5.00379E-05	0.000726848	2.02923E-05	5.62317E-08	2.24232E-06	1.6942E-06	1.6404E-09	1.47582E-08	42.16517792	0	0.216073086	0
Sacramento	2024	Industrial - Misc - Forklifts	Aggregate	50	Gasoline	0.005115977	0.004705676	0.005629821	0.601689788	0.01203046	2.164195832	0.000149198	0.000112727	2.63127E-05	4.14868E-05	118424.25	74379.7	41.29	3049567.7
Sacramento	2024	Industrial - Misc - Forklifts	Aggregate	50	Nat Gas	0	0	0.000327565	0.054660503	0.014301452	3.418338622	0.000304005	0	0	0	182072.95	136396.85	75.71	5592270.85
Sacramento	2024	Industrial - Misc - Other General Industrial Equipment	Aggregate	100	Gasoline	4.94441E-05	4.54787E-05	5.44102E-05	0.003586104	0.000298105	0.092522669	6.4509E-06	4.87402E-06	8.93898E-07	1.30298E-06	3719.35	930.75	1.31	73529.25
Sacramento	2024	Industrial - Misc - Other General Industrial Equipment	Aggregate	15	Gasoline	0.000312412	0.000315536	0.000343791	0.018492414	0.000161521	7.26551E-06	1.54655E-06	1.1685E-06	2.87529E-07	3.96897E-07	1124.781879	0	15.61743564	0
Sacramento	2024	Industrial - Misc - Other General Industrial Equipment	Aggregate	15	Diesel	1.68707E-05	2.02918E-05	2.42519E-05	0.000119472	0.000142635	0.00026405	5.01618E-06	0.00000379	2.50601E-09	2.1587E-09	8.58867876	0	1.570113227	0
Sacramento	2024	Industrial - Misc - Other General Industrial Equipment	Aggregate	175	Gasoline	6.93317E-06	6.37713E-06	7.62953E-06	0.000673737	6.01714E-05	0.019179952	1.375E-06	1.03889E-06	1.90533E-07	2.65966E-07	759.2	83.95	0.12	14607.3
Sacramento	2024	Industrial - Misc - Other General Industrial Equipment	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.013688882	0
Sacramento	2024	Industrial - Misc - Other General Industrial Equipment	Aggregate	25	Gasoline	0.000277018	0.000279788	0.000304842	0.024452922	0.000155051	6.6142E-06	5.91864E-07	4.47186E-07	3.73534E-07	5.15616E-07	1469.501069	0	5.244705052	0
Sacramento	2024	Industrial - Misc - Other General Industrial Equipment	Aggregate	25	Diesel	0.000048743	5.86271E-05	7.00688E-05	0.000200103	0.000370477	0.000535579	1.24587E-05	9.41325E-06	5.08301E-09	4.37856E-09	17.42065614	0	1.624873952	0
Sacramento	2024	Industrial - Misc - Other General Industrial Equipment	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.013688882	0
Sacramento	2024	Industrial - Misc - Other General Industrial Equipment	Aggregate	50	Gasoline	0.000159783	0.000146969	0.000175832	0.015300943	0.000359819	0.108131543	7.45449E-06	5.63228E-06	1.31468E-06	1.76074E-06	5026.05	2817.8	3.96	84534
Sacramento	2024	Industrial - Misc - Other Material Handling Equipment	Aggregate	100	Gasoline	0.000112387	0.000103374	0.000123675	0.005763935	0.000517778	0.127913082	8.91841E-06	6.73835E-06	1.23582E-06	1.81828E-06	5190.3	1905.3	4.96	102886.2
Sacramento	2024	Industrial - Misc - Other Material Handling Equipment	Aggregate	50	Gasoline	4.32669E-06	3.97969E-06	4.76126E-06	0.000348176	8.91754E-06	0.002219721	1.53026E-07	1.15619E-07	2.69878E-08	3.58031E-08	102.2	14.6	0.04	598.6
Sacramento	2024	Industrial - Misc - Sweepers/Scrubbers	Aggregate	100	Gasoline	0.000261436	0.000240469	0.000287695	0.016653021	0.001677533	0.560609138	3.9087E-05	2.95324E-05	5.41627E-06	7.78589E-06	22224.85	4971.3	9.61	338048.4
Sacramento	2024	Industrial - Misc - Sweepers/Scrubbers	Aggregate	15	Gasoline	0.000126289	0.000127552	0.000138973	0.007796206	6.35902E-05	3.20518E-06	3.22664E-07	2.43792E-07	1.20909E-07	1.66899E-07	473.4958892	0	6.926601432	0
Sacramento	2024	Industrial - Misc - Sweepers/Scrubbers	Aggregate	15	Diesel	6.8196E-06	8.20247E-06	9.80328E-06	4.82939E-05	0.000057657	0.000106736	2.02767E-06	1.53202E-06	1.013E-09	8.72605E-10	3.471775424	0	0.745402749	0
Sacramento	2024	Industrial - Misc - Sweepers/Scrubbers	Aggregate	175	Gasoline	2.02507E-06	1.86266E-06	2.22847E-06	0.000220242	1.98697E-05	0.006526322	4.67868E-07	3.535E-07	6.48322E-08	9.07864E-08	259.15	29.2	0.05	4088
Sacramento	2024	Industrial - Misc - Sweepers/Scrubbers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.009488562	0
Sacramento	2024	Industrial - Misc - Sweepers/Scrubbers	Aggregate	25	Gasoline	0.000277396	0.00028017	0.000305258	0.026516938	0.00015526	7.17248E-06	6.41822E-07	4.84932E-07	4.04202E-07	5.57948E-07	1590.544428	0	6.888961712	0
Sacramento	2024	Industrial - Misc - Sweepers/Scrubbers	Aggregate	25	Diesel	9.87889E-06	1.18821E-05	1.42011E-05	4.05554E-05	7.50858E-05	0.000108547	2.52504E-06	1.90781E-06	1.03019E-09	8.87415E-10	3.530696738	0	0.565017318	0
Sacramento	2024	Industrial - Misc - Sweepers/Scrubbers	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.009488562	0
Sacramento	2024	Industrial - Misc - Sweepers/Scrubbers	Aggregate	50	Gasoline	0.000448014	0.000412083	0.000493012	0.038929572	0.0009886	0.349514148	2.40952E-05	1.82053E-05	4.24945E-06	5.46764E-06	15607.4	5945.85	11.53	208104.75
Sacramento	2024	Industrial - Mower	Aggregate	100	Diesel	2.80272E-05	3.39129E-05	4.03592E-05	0.000517213	0.000375509	0.086824081	2.53465E-05	2.33188E-05	8.22468E-07	0	2821.363673	1470.806472	2.622518272	50312.50688
Sacramento	2024	Industrial - Mower	Aggregate	175	Diesel	7.09514E-06	8.58512E-06	1.0217E-05	0.000159545	5.9256E-05	0.026736176	2.10694E-06	1.93839E-06	2.53267E-07	0	868.796716	373.6852951	0.584743156	17392.85361
Sacramento	2024	Industrial - Mower	Aggregate	300	Diesel	4.55968E-07	5.51721E-07	6.56594E-07	2.13254E-06	6.76714E-06	0.001068292	2.15489E-07	1.9825E-07	1.01197E-08	0	34.71434325	10.34831877	0.015797386	688.1631979
Sacramento	2024	Industrial - Mower	Aggregate	50	Diesel	0.000209304	0.000253258	0.000301398	0.002187741	0.001853528	0.281469882	7.64426E-05	7.03272E-05	2.66631E-06	0	9146.412922	12205.49083	25.08656863	162922.0928
Sacramento	2024	Industrial - Mower	Aggregate	75	Diesel	7.98544E-05	9.66238E-05	0.00011499	0.001137518	0.001009715	0.188899368	2.31231E-05	2.12733E-05	1.78941E-06	0	6138.317914	4986.863283	9.525823758	109455.5452
Sacramento	2024	Industrial - Mower	Aggregate	9999	Diesel	1.51428E-05	1.83228E-05	2.18057E-05	9.80985E-05	0.000263195	0.050147051	7.46798E-06	6.87055E-06	4.75033E-07	0	1629.537159	58.81107883	0.126379088	32303.29015
Sacramento	2024	Industrial - Other General Industrial Equipment	Aggregate	100	Diesel	4.11598E-05	4.98033E-05	5.92701E-05	0.000442534	0.000430575	0.073625734	3.02649E-05	2.78437E-05	6.97442E-07	0	2392.481073	1454.525331	3.618466916	42486.41147
Sacramento	2024	Industrial - Other General Industrial Equipment	Aggregate	175	Diesel	8.89962E-05	0.000107685	0.000128154	0.001371143	0.000887517	0.232596931	4.21432E-05	3.87718E-05	2.20335E-06	0	7558.277852	3388.121077	5.925339815	150632.7795
Sacramento	2024	Industrial - Other General Industrial Equipment	Aggregate	300	Diesel	6.00646E-05	7.26782E-05	8.6493E-05	0.000382308	0.000623308	0.154353541	2.8441E-05	2.61657E-05	1.46216E-06	0	5015.745246	1258.098647	2.654622949	100244.2768
Sacramento	2024	Industrial - Other General Industrial Equipment	Aggregate	50	Diesel	0.000210106	0.000254228	0.000302553	0.001545359	0.001387634	0.187796924	7.30182E-05	6.71768E-05	1.77896E-06	0	6102.493805	9173.020785	23.25463245	108288.6535
Sacramento	2024	Industrial - Other General Industrial Equipment	Aggregate	600	Diesel	0.000158593	0.000191897	0.000228373	0.001200391	0.00157649	0.489416287	6.56307E-05	6.03802E-05	4.63615E-06	0	15903.66763	2427.13449	4.761424629	331687.4229
Sacramento	2024	Industrial - Other General Industrial Equipment	Aggregate	75	Diesel	5.37886E-05	6.50842E-05	7.74556E-05	0.000612965	0.000662105	0.102838833	2.74106E-05	2.52178E-05	9.74172E-07	0	3341.765823	2894.364214	6.809712315	59154.84158
Sacramento	2024	Industrial - Other General Industrial Equipment	Aggregate	750	Diesel	3.35629E-05	4.06111E-05	4.83306E-05	0.000233459	0.000354382	0.114058681	1.47447E-05	1.35651E-05	1.08046E-06	0	3706.356742	323.5481567	0.71088237	73473.32744
Sacramento	2024	Industrial - Other General Industrial Equipment	Aggregate	9999	Diesel	4.95303E-05	5.99316E-05	7.13236E-05	0.000365837	0.000956462	0.187517811	2.39879E-05	2.20688E-05	1.77632E-06	0	6093.423986	328.3342259	0.63189544	120793.5897
Sacramento	2024	Industrial - Other Truck	Aggregate	100	Diesel	2.56153E-06	3.09945E-06	3.6886E-06	6.42226E-05	3.31275E-05	0.010687012	2.5626E-06	2.35759E-06	1.01236E-07	0	347.276324	212.9537149	0.31594772	6192.465089
Sacramento	2024	Industrial - Other Truck	Aggregate	175	Diesel	2.6769E-05	3.23905E-05	3.85474E-05	0.00052401	0.000196092	0.085497012	7.33482E-06	6.74803E-06	8.09897E-07	0	2778.240315	959.6148381	1.011243484	55516.07522
Sacramento	2024	Industrial - Other Truck	Aggregate	300	Diesel	5.65118E-05	6.83792E-05	8.13769E-05	0.000345399	0.000550821	0.154453891	2.20337E-05	2.0271E-05	1.46311E-06	0	5019.006125	1124.914932	1.437562126	99494.76159
Sacramento	2024	Industrial - Other Truck	Aggregate	50	Diesel	6.0701E-06	7.34482E-06	8.74094E-06	6.76626E-05	5.49366E-05	0.008796868	1.92843E-06	1.77415E-06	8.3331E-08	0	285.8557541	476.091309	0.805666686	5097.242904
Sacramento	2024	Industrial - Other Truck	Aggregate	600	Diesel	0.000175465	0.000212312	0.000252669	0.001182181	0.001162948	0.566463179	5.26216E-05	4.84119E-05	5.366E-06	0	18407.31983	2321.822115	3.681270685	367746.4174
Sacramento	2024	Industrial - Other Truck	Aggregate	75	Diesel	1.09393E-05	1.32366E-05	1.57526E-05	0.000118948	0.000125818	0.019474198	5.07579E-06	4.66973E-06	1.84475E-07	0	632.817461	450.6686006	0.71088237	11284.09789
Sacramento	2024	Industrial - Other Truck	Aggregate	750	Diesel	1.65595E-05	2.0037E-05	2.38457E-05	8.36317E-05	0.000168095	0.042925421	6.64658E-06	6.11486E-06	4.06624E-07	0	1394.869035	105.4632112	0.379137264	27651.32351
Sacramento	2024	Industrial - Other Truck	Aggregate	9999	Diesel	1.40122E-05	1.69547E-05	2.01775E-05	9.58388E-05	0.000249513	0.049090729	5.8762E-06	5.4061E-06	4.65027E-07	0	1595.211797	38.92599394	0.063189544	31622.83796
Sacramento	2024	Industrial - Railcars or Track Cars	Aggregate	100	Diesel	5.91077E-07	7.15204E-07	8.51151E-07	5.8076E-06	4.9142E-06	0.000968171	2.6902E-07	2.47498E-07	9.1713E-09	0	31.46088645	16.2064542	0.031594772	560.9954597
Sacramento	2024	Industrial - Railcars or Track Cars	Aggregate	175	Diesel	9.12092E-06	1.10363E-05	1.31341E-05	0.000154379	8.34701E-05	0.025688259	3.72751E-06	3.42931E-06	2.4334E-07	0	834.7444686	297.885318	0.505631474	16734.11507
Sacramento	2024	Industrial - Railcars or Track Cars	Aggregate	300	Diesel	7.47272E-06	9.04199E-06	1.07607E-05	5.62912E-05	4.64727E-05	0.027811774	1.94825E-06	1.79239E-06	2.63456E-07	0	903.7484599	213.3195646	0.31594772	17915.54649
Sacramento	2024	Industrial - Railcars or Track Cars	Aggregate	50	Diesel	3.02259E-07	3.65733E-07	4.35253E-07	1.45199E-06	1.16737E-06	0.000166852	5.5155E-08	5.07426E-08	1.58056E-09	0	5.421892737	8.076908487	0.015797386	96.68059459
Sacramento	2024	Industrial - Railcars or Track Cars	Aggregate	600	Diesel	2.37621E-06	2.87521E-06	3.42174E-06	2.19235E-05	8.58814E-06	0.011480305	5.0274E-07	4.6252E-07	1.08751E-07	0	373.0545161	61.68867367	0.094784316	7395.282894
Sacramento	2024	Industrial - Railcars or Track Cars	Aggregate	75	Diesel	4.30183E-07	5.20521E-07	6.19463E-07	8.34729E-06	7.04309E-06	0.001487327	5.86013E-08	5.39132E-08	1.40892E-08	0	48.33095787	41.75902253	0.079115947	821.9845995
Sacramento	2024	Industrial - Railcars or Track Cars	Aggregate	9999	Diesel	1.36083E-06	1.6466E-06	1.95959E-06	1.01873E-05	3.08236E-05	0.004925664	8.4229E-07	7.74907E-07	4.66599E-08	0	160.0603052	10.87229716	0.015797386	3172.971203
Sacramento	2024	Industrial - Sweepers/Scrubbers	Aggregate	100	Diesel	4.15068E-05	5.02233E-05	5.97699E-05	0.000528808	0.000464812	0.092648795	3.14482E-05	2.89324E-05	8.77644E-07	0	3010.638746	1397.38885	4.599044052	53162.7269
Sacramento	2024	Industrial - Sweepers/Scrubbers	Aggregate	175	Diesel	8.45301E-06	1.02281E-05	1.21723E-05	0.00012299	9.74306E-05	0.021429138	4.57653E-06	4.21041E-06	2.02994E-07	0	696.3435738	253.2468745	0.632135314	13865.6336
Sacramento	2024	Industrial - Sweepers/Scrubbers	Aggregate	300	Diesel	7.35444E-06	8.89887E-06	1.05904E-05	5.99399E-05	7.00881E-05	0.029496471	2.88652E-06	2.6556E-06	2.79414E-07	0	958.4929699	188.9424463	0.458124194	19000.77966
Sacramento	2024	Industrial - Sweepers/Scrubbers	Aggregate	50	Diesel	6.21936E-05	7.52542E-05	8.95587E-05	0.00053677	0.000506258	0.079128336	2.09926E-05	1.93132E-05	7.49567E-07	0	2571.289085	2924.461288	11.07578812	44707.76558
Sacramento	2024	Industrial - Sweepers/Scrubbers	Aggregate	600	Diesel	1.58071E-06	1.91266E-06	2.27623E-06	1.89589E-05	1.67062E-05	0.004525642	8.54123E-07	7.85794E-07	4.28705E-08	0	147.0615404	19.64800365	0.047392158	2915.288912
Sacramento	2024	Industrial - Sweepers/Scrubbers	Aggregate	75	Diesel	2.89961E-05	3.50853E-05	4.17544E-05	0.000411162	0.000414119	0.07192657	1.098E-05	1.01016E-05	6.81346E-07	0	2337.266453	1313.932681	4.281826483	41408.82024
Sacramento	2024	Industrial - Sweepers/Scrubbers	Aggregate	9999	Diesel	1.43673E-06	1.73845E-06	2.06889E-06	1.75253E-05	3.13704E-05	0.009332169	7.53364E-07	6.93095E-07	8.84018E-08	0	303.2504625	5.940232579	0.015797386	6011.51537
Sacramento	2024	Industrial - Tow Tractor	Aggregate	600	Diesel	6.21816E-07	7.52398E-07	8.95416E-07	3.79368E-06	9.79705E-06	0.002027402	2.60012E-07	2.39211E-07	1.92052E-08	0	65.88079132	8.208638258	0.015797386	1305.994347
Sacramento	2024	Industrial - Yard Goat	Aggregate	100	Diesel	6.37096E-06	7.70887E-06	9.17419E-06	6.47146E-05	6.01914E-05	0.010553183	3.52664E-06	3.24451E-06	9.99683E-08	0	342.9275298	177.4275771	0.189568632	6114.919475
Sacramento	2024	Industrial - Yard Goat	Aggregate	175	Diesel	0.000540503	0.000654008	0.000778324	0.009278409	0.004158319	1.477734497	0.00017319	0.000159335	1.39983E-05	0	48019.24028	15032.39932	11.83263214	953057.83
Sacramento	2024	Industrial - Yard Goat	Aggregate	300	Diesel	0.000320053	0.000387264	0.000460876	0.002008176	0.002119587	0.916409033	9.29512E-05	8.55151E-05	8.68097E-06	0	29778.87142	7649.550086	6.935292328	590899.2685
Sacramento	2024	Industrial - Yard Goat	Aggregate	50	Diesel	2.10479E-06	2.5468E-06	3.0309E-06	2.38652E-05	1.90783E-05	0.002571737	8.54969E-07	7.86572E-07	2.43616E-08	0	83.56903696	123.7925001	0.221163404	1490.163044
Sacramento	2024	Industrial - Yard Goat	Aggregate	600	Diesel	2.71946E-05	3.29055E-05	3.91603E-05	0.00015381	0.000204936	0.076335569	7.67287E-06	7.05904E-06	7.23112E-07	0	2480.537644	341.9097588	0.316130074	50372.4317
Sacramento	2024	Industrial - Yard Goat	Aggregate	75	Diesel	2.90976E-06	3.52081E-06	4.19006E-06	2.90492E-05	3.18915E-05	0.004542489	1.26701E-06	1.16565E-06	4.30301E-08	0	147.6089796	116.5026069	0.142176474	2632.09263
Sacramento	2024	Industrial - Yard Goat	Aggregate	9999	Diesel	5.8643E-06	7.09581E-06	8.44459E-06	2.97445E-05	8.41823E-05	0.015601195	2.21765E-06	2.04024E-06	1.47787E-07	0	506.9635663	15.26960332	0.015797386	10049.84212
Sacramento	2024	Lawn and Garden - Misc - Chainsaws	Aggregate	2	Gasoline	0.201954859	0.203982465	0.222288977	0.570435729	0.006449	3.041571032	0.002405	0.001816	4.44E-05	0.00006131	173160.2018	0	40673.10477	0
Sacramento	2024	Lawn and Garden - Misc - Chainsaws	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	24610.25487	0
Sacramento	2024	Lawn and Garden - Misc - Chainsaws	Aggregate	5	Gasoline	0.164	0.1656	0.1804	0.528851528	0.00584	2.81981648	0.002225	0.001683	0.00004032	5.561E-05	157505.4855	0	28938.47833	0
Sacramento	2024	Lawn and Garden - Misc - Chainsaws	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	17509.9327	0
Sacramento	2024	Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	2	Gasoline	0.173008103	0.174716516	0.190405794	0.307134623	0.006186	1.637769017	0.001294	0.000977	0.000026	0.00003597	101601.3165	0	21900.90257	0
Sacramento	2024	Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	13251.67569	0
Sacramento	2024	Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	5	Gasoline	0.1604	0.161988388	0.1765	0.28473544	0.005729	1.51836272	0.0012	0.000906	0.00002403	0.00003326	94195.61124	0	15582.25756	0
Sacramento	2024	Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	9428.4253	0
Sacramento	2024	Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	15	Gasoline	0.000214	0.000216	0.000235	0.012	8.81E-05	0.0264	0.000000503	0.00000038	0.000000441	6.08E-07	1715.703369	0	177.5217608	0
Sacramento	2024	Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	65.78853993	0
Sacramento	2024	Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	2	Gasoline	0.0000674	6.81E-05	0.0000742	0.000876	0.00000739	0.00205	0.000000035	2.65E-08	3.75E-08	5.18E-08	136.7371474	0	61.41065444	0
Sacramento	2024	Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	22.75843409	0
Sacramento	2024	Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	25	Diesel	0.00000619	0.00000744	0.00000889	0.0000254	0.000047	0.006212788	0.00000158	0.00000119	0.000000059	5.08E-08	202.0819445	0	0.481561324	0
Sacramento	2024	Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	5	Gasoline	0.000251	0.000254	0.000276	0.0119	0.000092	0.0279	0.000000494	3.73E-07	4.63E-07	6.39E-07	1774.526525	0	282.2852456	0
Sacramento	2024	Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	104.6132827	0
Sacramento	2024	Lawn and Garden - Misc - Lawn Mowers	Aggregate	15	Gasoline	0.0004623	0.0004667	0.0005094	0.030200541	0.0002106	0.0644	0.000005915	0.000004473	0.000001116	0.000001544	4230.632266	0	600.814495	0
Sacramento	2024	Lawn and Garden - Misc - Lawn Mowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	249.1525954	0
Sacramento	2024	Lawn and Garden - Misc - Lawn Mowers	Aggregate	2	Gasoline	0.00002828	0.0000286	0.00003116	0.0006444	0.0000137	0.001749	0.000001363	0.00000103	2.996E-08	4.132E-08	106.730389	0	39.99440262	0
Sacramento	2024	Lawn and Garden - Misc - Lawn Mowers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	16.58537964	0
Sacramento	2024	Lawn and Garden - Misc - Lawn Mowers	Aggregate	25	Gasoline	0.0003818	0.0003861	0.0004211	0.02546	0.0001328	0.05417	0.000004984	0.000003769	9.157E-07	0.000001264	3562.816552	0	163.5725888	0
Sacramento	2024	Lawn and Garden - Misc - Lawn Mowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	67.8321435	0
Sacramento	2024	Lawn and Garden - Misc - Lawn Mowers	Aggregate	5	Gasoline	0.09892	0.09991	0.10888	4.746514079	0.06039	13.14366136	0.0010722	0.0008096	0.0002097	0.00029	781299.3034	0	164261.892	0
Sacramento	2024	Lawn and Garden - Misc - Lawn Mowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	68117.99161	0
Sacramento	2024	Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	15	Gasoline	0.002278	0.002301	0.002508	0.163648548	0.001714	0.422457402	0.00000649	0.0000049	0.00000663	0.00000915	25644.03339	0	1369.19598	0
Sacramento	2024	Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	2	Gasoline	0.25657	0.25913	0.28234	1.594352179	0.011102	6.725186199	0.0036358	0.00274	9.638E-05	0.00013307	377669.0453	0	45421.72578	0
Sacramento	2024	Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	106394.1593	0
Sacramento	2024	Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	25	Gasoline	4.879E-05	0.00004916	5.368E-05	0.003555	0.00005411	0.01362	1.61E-07	1.2172E-07	1.847E-07	2.55E-07	723.3471875	0	13.8063521	0
Sacramento	2024	Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	5	Gasoline	0.351784433	0.355336758	0.38712885	1.308697515	0.0086523	8.546820182	0.00541053	0.00408795	0.00011222	0.000154885	441259.5148	0	22052.29971	0
Sacramento	2024	Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	57254.71187	0
Sacramento	2024	Lawn and Garden - Misc - Other	Aggregate	15	Gasoline	0.001196	0.001207	0.001316	0.066613571	0.000445	0.173	0.00000366	0.000002764	0.00000271	3.75E-06	10510.5757	0	1302.501373	0
Sacramento	2024	Lawn and Garden - Misc - Other	Aggregate	15	Diesel	0.00000232	0.00000279	0.00000334	0.0000165	0.0000196	0.002721463	6.91E-07	0.000000522	2.58E-08	2.22E-08	88.52041845	0	0.372227354	0
Sacramento	2024	Lawn and Garden - Misc - Other	Aggregate	25	Gasoline	0.0002139	0.0002159	0.000236	0.0195	0.0001468	0.041042087	0.000000868	6.56E-07	0.000000688	0.00000095	2700.339485	0	112.3218428	0
Sacramento	2024	Lawn and Garden - Misc - Other	Aggregate	25	Diesel	4.04E-07	0.000000486	0.000000581	0.00000166	0.00000307	0.000406156	0.000000103	7.81E-08	3.85E-09	3.32E-09	13.21093403	0	0.041766191	0
Sacramento	2024	Lawn and Garden - Misc - Other	Aggregate	5	Gasoline	0.000609	0.000615	0.000669	0.0301	0.000238	0.0682	0.000001337	0.00000101	0.000001156	0.000001596	4388.845605	0	1060.577403	0
Sacramento	2024	Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Gasoline	0.005068	0.005112	0.005571	0.260829655	0.003915	0.757086775	0.0000253	0.000019086	1.13907E-05	1.5751E-05	44187.63903	0	1183.993564	0
Sacramento	2024	Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Diesel	0.0005972	0.0007187	0.0008592	0.004235	0.005051	0.699758798	0.0001775	0.00013459	0.00000664	0.000005724	22760.89391	0	805.6092237	0
Sacramento	2024	Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	69.84274389	0
Sacramento	2024	Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Gasoline	0.165648622	0.167358448	0.1823212	9.427528399	0.085446	19.6392542	0.00069818	0.000527614	0.000333518	0.00046127	1306616.404	0	13799.83998	0
Sacramento	2024	Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Diesel	0.001801	0.002164	0.002591	0.007412	0.013729	1.811311202	0.000461	0.0003484	0.00001721	0.00001477	58916.10401	0	1641.889168	0
Sacramento	2024	Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	797.7745122	0
Sacramento	2024	Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	5	Gasoline	0.0005377	0.0005431	0.0005924	0.01904	0.0002259	0.044757337	1.5006E-06	1.1309E-06	7.56121E-07	1.04417E-06	2857.070723	0	192.7197354	0
Sacramento	2024	Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	11.36836849	0
Sacramento	2024	Lawn and Garden - Misc - Snowblowers	Aggregate	15	Gasoline	0.000778	0.000787	0.000856	0.057584074	0.0003858	0.100962315	0.000002253	0.000001704	0.000001985	0.00000274	7246.427674	0	1777.160484	0
Sacramento	2024	Lawn and Garden - Misc - Snowblowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	169.2863881	0
Sacramento	2024	Lawn and Garden - Misc - Snowblowers	Aggregate	25	Gasoline	0.000002489	0.000002512	0.000002736	0.0002464	0.000001791	0.0004323	9.66E-09	7.29E-09	8.15E-09	1.124E-08	30.91450777	0	3.660474357	0
Sacramento	2024	Lawn and Garden - Misc - Snowblowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0.348684594	0
Sacramento	2024	Lawn and Garden - Misc - Snowblowers	Aggregate	5	Gasoline	0.0003466	0.0003501	0.0003822	0.01816	0.0001513	0.04159	0.000000819	6.195E-07	0.000000693	0.000000958	2659.972173	0	1336.073278	0
Sacramento	2024	Lawn and Garden - Misc - Snowblowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	127.26989	0
Sacramento	2024	Lawn and Garden - Misc - Tillers	Aggregate	15	Gasoline	0.0008765	0.0008849	0.0009641	0.05544	0.0005409	0.140837929	2.7823E-06	2.0997E-06	2.2428E-06	3.0982E-06	8619.19487	0	1429.038152	0
Sacramento	2024	Lawn and Garden - Misc - Tillers	Aggregate	2	Gasoline	0.00361418	0.00364624	0.003976	0.0106699	0.000065286	0.062074	6.16393E-06	4.65517E-06	9.8694E-07	1.36392E-06	3411.619213	0	1933.754054	0
Sacramento	2024	Lawn and Garden - Misc - Tillers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	594.1263458	0
Sacramento	2024	Lawn and Garden - Misc - Tillers	Aggregate	5	Gasoline	0.0005416	0.0005468	0.0005957	0.027261	0.00017979	0.0642	1.0874E-06	8.202E-07	1.0743E-06	1.4812E-06	4062.432385	0	960.5883336	0
Sacramento	2024	Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	15	Gasoline	0.00005093	0.0000515	0.00005607	0.002823	0.00001971	0.007282	1.118E-07	8.44E-08	1.168E-07	1.613E-07	443.676016	0	54.13231051	0
Sacramento	2024	Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	2	Gasoline	0.374930027	0.378566228	0.412483124	2.089289444	0.022347183	10.98205144	0.0032652	0.0024605	0.00014872	0.0002051	580845.1186	0	121047.5793	0
Sacramento	2024	Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	179463.159	0
Sacramento	2024	Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	25	Gasoline	0.00005692	5.739E-05	6.252E-05	0.002847	0.00002388	0.01123	1.267E-07	9.58E-08	1.525E-07	2.105E-07	593.5024066	0	24.9180473	0
Sacramento	2024	Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	5	Gasoline	0.013804	0.013939	0.015193	0.249773155	0.0015586	0.848396424	0.00016714	0.00012632	0.000012241	0.000016895	48078.97938	0	3903.111441	0
Sacramento	2024	Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	2893.55964	0
Sacramento	2024	Lawn and Garden - Misc - Wood Splitters	Aggregate	15	Gasoline	0.0180766	0.0182773	0.0199843	0.872433418	0.0089886	2.201033293	0.000084784	0.000064039	3.5079E-05	0.000048447	135585.871	0	4636.587161	0
Sacramento	2024	Lawn and Garden - Misc - Wood Splitters	Aggregate	2	Gasoline	0.00032905	0.00033207	0.00036125	0.0086663	0.00017516	0.02022451	7.5071E-07	5.6729E-07	3.4678E-07	4.7846E-07	1305.206944	0	124.1807784	0
Sacramento	2024	Lawn and Garden - Misc - Wood Splitters	Aggregate	25	Gasoline	1.075E-05	1.08505E-05	0.000011855	0.00059809	4.6412E-06	0.00142746	5.3007E-08	3.99811E-08	2.2918E-08	3.1663E-08	89.71748825	0	1.009596183	0
Sacramento	2024	Lawn and Garden - Misc - Wood Splitters	Aggregate	5	Gasoline	0.00118481	0.00119486	0.0013053	0.048666	0.00039871	0.116412108	4.31982E-06	3.26742E-06	1.91997E-06	2.6438E-06	7345.655198	0	446.7479215	0
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	100	Gasoline	0.002133952	0.001962809	0.002348284	0.096207756	0.00540427	1.853228543	0.000129212	9.76265E-05	1.79048E-05	2.66746E-05	76142.65	20210.05	41.82	1414703.5
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	15	Gasoline	0.115488619	0.116643506	0.127088181	7.459332729	0.071236379	14.7294117	0.000215036	0.000284606	0.00025612	0.000353539	1001600.141	0	9342.476427	0
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	15	Diesel	1.98074E-05	2.38239E-05	2.84735E-05	0.000121548	0.000149192	0.019990923	4.36102E-06	5.77193E-06	1.89728E-07	1.63433E-07	650.2401646	0	2.457271249	0
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	114148.0518	0
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	175	Gasoline	0.000197627	0.000181777	0.000217477	0.008575226	0.000751425	0.232104524	1.66394E-05	1.2572E-05	2.30572E-06	3.26319E-06	9314.8	1365.1	2.81	182923.4
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	25	Gasoline	0.001656928	0.001673497	0.001823347	0.234751064	0.002384589	0.35842488	5.03978E-06	6.67028E-06	6.95541E-06	9.60104E-06	27342.99676	0	96.69393355	0
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	25	Diesel	8.28353E-05	9.96327E-05	0.000119077	0.000332363	0.000615957	0.079824488	1.70592E-05	2.25784E-05	7.57589E-07	6.52594E-07	2596.432812	0	4.919859598	0
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	604.7764661	0
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	5	Gasoline	0.024484971	0.024729819	0.026944216	0.98915564	0.007387266	2.349391574	3.06844E-05	4.06118E-05	3.81058E-05	5.26002E-05	148788.5577	0	3521.27099	0
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	43023.52019	0
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	50	Gasoline	0.000672486	0.000618553	0.00074003	0.050626994	0.00090827	0.289005415	1.99238E-05	1.50535E-05	3.51378E-06	4.91653E-06	14034.25	6230.55	12.9	218069.25
Sacramento	2024	Light Commercial - Misc - Air Compressors	Aggregate	50	Diesel	0.000664444	0.000790743	0.000956799	0.006294069	0.005097841	0.743426093	0.000202131	0.00018596	9.32791E-06	6.08324E-06	24181.25	23677.55	29.09	876069.35
Sacramento	2024	Light Commercial - Misc - Gas Compressors	Aggregate	100	Nat Gas	0	0	0.000234672	0.12182261	0.009246916	2.9133531	0	0	0	0	161213.2	16651.3	1.96	1465314.4
Sacramento	2024	Light Commercial - Misc - Gas Compressors	Aggregate	175	Nat Gas	0	0	6.54528E-05	0.024779872	0.002474432	0.75820975	0	0	0	0	41401.95	2682.75	0.32	391681.5
Sacramento	2024	Light Commercial - Misc - Gas Compressors	Aggregate	300	Nat Gas	0	0	5.03463E-05	0.028513833	0.002391691	0.78143271	0	0	0	0	42876.55	2149.85	0.25	451468.5
Sacramento	2024	Light Commercial - Misc - Gas Compressors	Aggregate	50	Nat Gas	0	0	4.30375E-05	0.00761791	0.001562558	0.51843785	0	0	0	0	27546.55	8055.55	0.95	257777.6
Sacramento	2024	Light Commercial - Misc - Gas Compressors	Aggregate	600	Nat Gas	0	0	7.09043E-05	0.040156973	0.003368298	1.1005178	0	0	0	0	60385.6	1879.75	0.22	635355.5
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	100	Gasoline	0.000739108	0.000679831	0.000813343	0.030242481	0.00429755	1.24258197	8.66358E-05	6.54582E-05	1.20051E-05	1.71318E-05	48902.7	9402.4	81.93	780399.2
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	100	Nat Gas	0	0	3.52166E-06	0.002535173	0.000263898	0.080564433	0	0	0	0	4383.65	704.45	6.09	58469.35
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	15	Gasoline	0.105466412	0.106521076	0.116059353	5.853921167	0.05524446	14.88575373	0.00021277	0.000281607	0.000233017	0.00032165	912032.7299	0	20992.05352	0
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	15	Diesel	0.001033777	0.001243407	0.001486072	0.007100185	0.008735816	1.164862631	0.000254955	0.00033744	1.10554E-05	9.52318E-06	37889.21962	0	244.4163518	0
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	175	Gasoline	7.38749E-05	6.79501E-05	8.12948E-05	0.00653209	0.000747772	0.200854273	1.43991E-05	1.08793E-05	1.99528E-06	2.80031E-06	7993.5	886.95	7.73	129494.7
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	175	Nat Gas	0	0	3.91255E-06	0.003037215	0.000361843	0.117484551	0	0	0	0	6332.75	576.7	5.08	84198.2
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	2	Gasoline	0.321238575	0.324450961	0.353503458	5.503597873	0.09392808	12.00184028	0.000452539	0.000598948	0.000212342	0.000293111	812016.9275	0	50680.13786	0
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	15688.37029	0
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	25	Gasoline	0.003723636	0.003760872	0.004097634	0.345888271	0.002133526	0.535667793	7.50165E-06	9.92865E-06	1.0363E-05	1.43048E-05	40736.54716	0	402.5344691	0
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	25	Diesel	0.001487032	0.001788572	0.002137632	0.006128457	0.011345582	1.467929173	0.000316268	0.00041859	1.39317E-05	1.20009E-05	47746.9955	0	178.7603986	0
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	5	Gasoline	0.030484003	0.030788843	0.033545786	1.39870458	0.007029947	2.970956271	5.78386E-05	7.6551E-05	5.10274E-05	7.04368E-05	196756.1803	0	11604.45917	0
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	50	Gasoline	0.003368582	0.003098422	0.003706919	0.220633573	0.007135185	2.508694225	0.000172947	0.000130671	3.05011E-05	3.80216E-05	108532.75	48734.8	424.29	1559513.6
Sacramento	2024	Light Commercial - Misc - Generator Sets	Aggregate	50	Diesel	0.001261561	0.001501362	0.001816648	0.013529492	0.013067541	2.04703076	0.000444168	0.000408634	2.58174E-05	1.67503E-05	66583.3	47650.75	141.17	1572474.75
Sacramento	2024	Light Commercial - Misc - Pressure Washers	Aggregate	15	Gasoline	0.039116375	0.039507539	0.043045184	2.866237754	0.019958221	5.600590411	7.25116E-05	9.59712E-05	9.72863E-05	0.000134291	381972.1665	0	12670.57532	0
Sacramento	2024	Light Commercial - Misc - Pressure Washers	Aggregate	15	Diesel	9.81772E-06	1.18086E-05	1.41131E-05	6.75139E-05	8.29822E-05	0.011081704	2.41786E-06	3.20011E-06	1.05173E-07	9.0597E-08	360.4520401	0	11.31294383	0
Sacramento	2024	Light Commercial - Misc - Pressure Washers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	23941.50365	0
Sacramento	2024	Light Commercial - Misc - Pressure Washers	Aggregate	2	Gasoline	2.29331E-05	2.31624E-05	2.52365E-05	0.000478926	7.8103E-06	0.001081023	1.38046E-08	1.82708E-08	1.83935E-08	2.53899E-08	71.37443247	0	9.257546903	0
Sacramento	2024	Light Commercial - Misc - Pressure Washers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	17.49246482	0
Sacramento	2024	Light Commercial - Misc - Pressure Washers	Aggregate	25	Gasoline	0.000614816	0.000620963	0.000676567	0.050285032	0.000302639	0.098250135	1.27206E-06	1.6836E-06	1.69965E-06	2.34614E-06	6691.761022	0	84.06852289	0
Sacramento	2024	Light Commercial - Misc - Pressure Washers	Aggregate	25	Diesel	3.75262E-06	4.51358E-06	5.39446E-06	0.000015452	2.86556E-05	0.003717718	7.93674E-07	1.05045E-06	3.52837E-08	3.03937E-08	120.9253647	0	2.603285655	0
Sacramento	2024	Light Commercial - Misc - Pressure Washers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	158.8504703	0
Sacramento	2024	Light Commercial - Misc - Pressure Washers	Aggregate	5	Gasoline	0.072634049	0.073360389	0.07992934	3.655000414	0.029560577	8.252184831	0.00010538	0.000139474	0.000135816	0.000187476	531462.5334	0	33110.7321	0

Sacramento	2024 Light Commercial - Misc - Pressure Washers	Aggregate		5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	62563.90841	0
Sacramento	2024 Light Commercial - Misc - Pressure Washers	Aggregate		50	Gasoline	2.99263E-05	2.75262E-05	3.29321E-05	0.002043815	5.06622E-05	0.02540039	1.75108E-06	1.32304E-06	3.08822E-07	3.77211E-07	1076.75	434.35	3.78	12596.15
Sacramento	2024 Light Commercial - Misc - Pressure Washers	Aggregate		50	Diesel	4.24505E-06	5.05196E-06	6.11287E-06	5.52192E-05	6.02207E-05	0.009650512	1.73148E-06	1.59296E-06	1.24053E-07	7.89674E-08	313.9	489.1	3.37	18585.8
Sacramento	2024 Light Commercial - Misc - Pumps	Aggregate		100	Gasoline	0.0008161	0.000750648	0.000898068	0.039494112	0.002237736	1.423970101	9.92826E-05	7.50135E-05	1.37575E-05	1.97339E-05	56330.45	9490	42.97	882570
Sacramento	2024 Light Commercial - Misc - Pumps	Aggregate		15	Gasoline	0.012284269	0.012407112	0.013518089	0.779778732	0.006994852	1.779819831	2.68223E-05	3.55002E-05	2.90247E-05	4.00648E-05	113685.3048	0	2920.316166	0
Sacramento	2024 Light Commercial - Misc - Pumps	Aggregate		15	Diesel	0.000758421	0.000912214	0.001090242	0.00462404	0.005704168	0.75901251	0.000169057	0.000223752	7.20355E-06	6.20521E-06	24688.22582	0	183.5682004	0
Sacramento	2024 Light Commercial - Misc - Pumps	Aggregate		175	Gasoline	2.91468E-05	2.68092E-05	3.20743E-05	0.002156178	0.000111713	0.064646214	4.63444E-06	3.50158E-06	6.42193E-07	9.00192E-07	2569.6	288.35	1.3	41522.4
Sacramento	2024 Light Commercial - Misc - Pumps	Aggregate		2	Gasoline	0.005594594	0.00565054	0.00615651	0.052266099	0.000331526	0.15448189	1.6011E-06	2.1191E-06	2.52786E-06	3.48937E-06	9553.252523	0	1058.529514	0
Sacramento	2024 Light Commercial - Misc - Pumps	Aggregate		2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	84086.10587	0
Sacramento	2024 Light Commercial - Misc - Pumps	Aggregate		25	Gasoline	9.17347E-05	9.2652E-05	0.000100948	0.006428544	6.54893E-05	0.014656936	2.34446E-07	3.10297E-07	2.3784E-07	3.28307E-07	935.3904288	0	9.724662535	0
Sacramento	2024 Light Commercial - Misc - Pumps	Aggregate		25	Diesel	0.000618682	0.000744139	0.000889366	0.002476485	0.004585202	0.593375556	0.000127665	0.000168968	5.63154E-06	4.85106E-06	19300.59061	0	54.82562958	0
Sacramento	2024 Light Commercial - Misc - Pumps	Aggregate		5	Gasoline	0.009419893	0.009514091	0.010366018	0.409811225	0.003177864	0.963551631	1.32959E-05	1.75974E-05	1.58081E-05	2.18209E-05	61183.51976	0	3206.221244	0
Sacramento	2024 Light Commercial - Misc - Pumps	Aggregate		50	Gasoline	0.00051465	0.000473375	0.000566341	0.03888903	0.000815594	0.378745229	2.61104E-05	1.97278E-05	4.60485E-06	5.85764E-06	16720.65	7482.5	33.9	231957.5
Sacramento	2024 Light Commercial - Misc - Pumps	Aggregate		50	Diesel	0.000812644	0.000967113	0.001170207	0.008319551	0.007753504	1.199132261	0.00027643	0.000254316	1.51106E-05	9.81216E-06	39003.9	24878.4	61.78	920500.8
Sacramento	2024 Light Commercial - Misc - Welders	Aggregate		100	Gasoline	0.000944994	0.000869205	0.001039908	0.037315342	0.002779965	1.192966141	8.31765E-05	6.28444E-05	1.15257E-05	1.66382E-05	47493.8	14289.75	68.78	1000282.5
Sacramento	2024 Light Commercial - Misc - Welders	Aggregate		15	Gasoline	0.063979758	0.064619555	0.07040582	3.620688791	0.028536151	6.51450069	0.000156984	0.000207773	0.000118425	0.00016347	463513.5633	0	9568.187208	0
Sacramento	2024 Light Commercial - Misc - Welders	Aggregate		15	Diesel	0.000457434	0.000550192	0.000657568	0.002789044	0.003440423	0.457811631	0.00010196	0.000134947	4.34495E-06	3.74278E-06	14891.1339	0	82.9938717	0
Sacramento	2024 Light Commercial - Misc - Welders	Aggregate		15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	40675.31313	0
Sacramento	2024 Light Commercial - Misc - Welders	Aggregate		175	Gasoline	8.22294E-05	7.56346E-05	9.04884E-05	0.004995099	0.000386985	0.148533193	1.06482E-05	8.04534E-06	1.47552E-06	2.07658E-06	5927.6	981.85	4.73	127640.5
Sacramento	2024 Light Commercial - Misc - Welders	Aggregate		25	Diesel	0.000761713	0.000916173	0.001094975	0.003048694	0.005644215	0.730393041	0.000157179	0.000208031	6.93193E-06	5.97123E-06	23757.32692	0	73.03185889	0
Sacramento	2024 Light Commercial - Misc - Welders	Aggregate		50	Gasoline	0.001256853	0.001156054	0.00138309	0.08289832	0.001997513	0.759936941	5.23894E-05	3.95831E-05	9.23945E-06	1.18662E-05	33872	14001.4	67.39	630063
Sacramento	2024 Light Commercial - Misc - Welders	Aggregate		50	Diesel	0.002831455	0.003369665	0.004077295	0.027094233	0.02294336	3.411007237	0.000896228	0.00082453	4.28696E-05	2.79113E-05	110949.05	93348.75	145.35	4294042.5
Sacramento	2024 Locomotive - Line Haul	Aggregate		0	Diesel	0.031406	0.038	0.045	0.209	0.881	0	0.021	0.019	0.001	0.001	0	0	0	0
Sacramento	2024 Locomotive - Passenger	Aggregate		0	Diesel	0.003919232	0.00000387	0.00000461	0.015254983	0.07944523	0	0.001701135	0.001565045	0.0000602	0.0000532	0	0	0	0
Sacramento	2024 Locomotive - Short Line	Aggregate		0	Diesel	0.000242451	4.87E-09	5.8E-09	0.000646535	0.006566368	0	0.000111387	0.000102476	0.00000313	0.00000277	0	0	0	0
Sacramento	2024 Locomotive - Switcher	Aggregate		0	Diesel	0.001614325	9.77E-08	0.000000116	0.004324939	0.025268161	0	0.000541678	0.000498344	1.45E-05	0.000013	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - A/C Unit	Aggregate		100	Diesel	3.26103E-06	3.8809E-06	4.69589E-06	6.20231E-05	4.36423E-05	0.01088488	1.89865E-06	1.74676E-06	1.24641E-07	8.90679E-08	354.05	98.55	0.33	9953.55
Sacramento	2024 Military Tactical Support - Misc - A/C Unit	Aggregate		300	Diesel	1.69738E-06	2.02002E-06	2.44422E-06	1.60317E-05	1.92626E-05	0.009201651	5.54785E-07	5.10402E-07	1.02787E-07	7.52945E-08	299.3	54.75	0.16	11388
Sacramento	2024 Military Tactical Support - Misc - A/C Unit	Aggregate		600	Diesel	9.86124E-07	1.17357E-06	1.42002E-06	9.42465E-06	1.0704E-05	0.005498548	3.23132E-07	2.97282E-07	5.36846E-08	4.4993E-08	178.85	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Aircraft Support	Aggregate		100	Diesel	5.96848E-07	7.10299E-07	8.59461E-07	1.13517E-05	7.98759E-06	0.001795444	3.47499E-07	3.19699E-07	2.28123E-08	1.46916E-08	58.4	0	0.09	0
Sacramento	2024 Military Tactical Support - Misc - Aircraft Support	Aggregate		175	Diesel	1.33726E-06	1.59145E-06	1.92565E-06	2.92654E-05	1.49235E-05	0.005835193	6.30576E-07	5.8013E-07	6.43565E-08	4.77477E-08	189.8	51.1	0.16	7154
Sacramento	2024 Military Tactical Support - Misc - Cart	Aggregate		100	Diesel	3.04693E-07	3.6261E-07	4.38759E-07	5.7951E-06	4.0777E-06	0.000897722	1.774E-07	1.63208E-07	1.16458E-08	7.3458E-09	29.2	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Cart	Aggregate		175	Diesel	1.09607E-07	1.30442E-07	1.57835E-07	2.39871E-06	1.22319E-06	0	5.16847E-08	4.75499E-08	5.27493E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Cart	Aggregate		300	Diesel	3.73863E-07	4.44928E-07	5.38363E-07	3.53113E-06	4.24276E-06	0.001795444	1.22196E-07	1.12421E-07	2.26397E-08	1.46916E-08	58.4	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Communications	Aggregate		100	Diesel	1.50466E-07	1.79067E-07	2.16671E-07	2.86178E-06	2.01368E-06	0	8.76048E-08	8.05964E-08	5.75101E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Communications	Aggregate		50	Diesel	8.92565E-08	1.06223E-07	1.28529E-07	1.06165E-06	1.03471E-06	0	3.0817E-08	2.83517E-08	2.11261E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Compressor	Aggregate		100	Diesel	3.36072E-06	3.99953E-06	4.83943E-06	6.3919E-05	4.49764E-05	0.011109311	1.95669E-06	1.80015E-06	1.28451E-07	9.09043E-08	361.35	138.7	0.49	9847.7
Sacramento	2024 Military Tactical Support - Misc - Compressor	Aggregate		175	Diesel	1.59516E-07	1.89837E-07	2.29703E-07	3.49094E-06	1.78015E-06	0	7.52187E-08	6.92012E-08	7.67681E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Compressor	Aggregate		300	Diesel	3.38564E-07	4.02919E-07	4.87532E-07	3.19774E-06	3.84218E-06	0.001795444	1.10659E-07	1.01806E-07	2.05021E-08	1.46916E-08	58.4	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Compressor	Aggregate		50	Diesel	1.09339E-07	1.30123E-07	1.57448E-07	1.30053E-06	1.26751E-06	0	3.77509E-08	3.47308E-08	2.58795E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Compressor	Aggregate		600	Diesel	1.92326E-06	2.28884E-06	2.7695E-06	1.83811E-05	2.08764E-05	0.01088488	6.30213E-07	5.79796E-07	1.04703E-07	8.90679E-08	354.05	0	0.09	0
Sacramento	2024 Military Tactical Support - Misc - Crane	Aggregate		100	Diesel	2.62655E-07	3.12581E-07	3.78223E-07	9.62515E-06	4.45199E-06	0.001683229	5.05787E-08	4.65324E-08	2.01285E-08	1.37734E-08	54.75	0	0.06	0
Sacramento	2024 Military Tactical Support - Misc - Crane	Aggregate		175	Diesel	4.94704E-08	5.88739E-08	7.12374E-08	2.14494E-06	3.4229E-07	0	1.03531E-08	9.52488E-09	4.86121E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Crane	Aggregate		300	Diesel	4.76802E-08	5.67434E-08	6.86596E-08	7.39471E-07	2.73428E-07	0	8.39665E-09	7.72492E-09	4.91867E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Deicer	Aggregate		100	Diesel	1.37927E-07	1.64145E-07	1.98615E-07	2.6233E-06	1.84587E-06	0	8.03044E-08	7.38801E-08	5.27176E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Generator	Aggregate		100	Diesel	1.74841E-05	2.08076E-05	2.51772E-05	0.000332539	0.000233989	0.058015289	1.01797E-05	9.3653E-06	6.68267E-07	4.74722E-07	1887.05	660.65	2.22	54833.95
Sacramento	2024 Military Tactical Support - Misc - Generator	Aggregate		175	Diesel	1.89907E-05	2.26006E-05	2.73467E-05	0.000415605	0.000211932	0.082814861	8.95496E-06	8.23857E-06	9.13943E-07	6.7765E-07	2693.7	532.9	1.79	78336.3
Sacramento	2024 Military Tactical Support - Misc - Generator	Aggregate		300	Diesel	6.05184E-06	7.20218E-06	8.71464E-06	5.71596E-05	6.86789E-05	0.033103501	1.97803E-06	1.81979E-06	3.66476E-07	2.70876E-07	1076.75	127.75	0.47	28488.25
Sacramento	2024 Military Tactical Support - Misc - Generator	Aggregate		50	Diesel	5.72357E-07	6.81152E-07	8.24194E-07	6.80786E-06	6.63505E-06	0.001234368	1.97614E-07	1.81805E-07	1.35471E-08	1.01005E-08	40.15	0	0.07	0
Sacramento	2024 Military Tactical Support - Misc - Generator	Aggregate		600	Diesel	3.71689E-06	4.4234E-06	5.35231E-06	3.55233E-05	4.03456E-05	0.020647608	1.21795E-06	1.12051E-06	2.02347E-07	1.68953E-07	671.6	58.4	0.16	20323.2
Sacramento	2024 Military Tactical Support - Misc - Generator	Aggregate		750	Diesel	1.9834E-07	2.36041E-07	2.8561E-07	1.87941E-06	2.17546E-06	0.001346583	6.51377E-08	5.99266E-08	1.09666E-08	1.10187E-08	43.8	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Hydraulic Unit	Aggregate		100	Diesel	1.99524E-06	2.3745E-06	2.87315E-06	3.79484E-05	2.67022E-05	0.006508485	1.16168E-06	1.06874E-06	7.62607E-08	5.32571E-08	211.7	58.4	0.17	5548
Sacramento	2024 Military Tactical Support - Misc - Lift	Aggregate		100	Diesel	5.95594E-08	7.08806E-08	8.57656E-08	1.13279E-06	7.97081E-07	0	3.46769E-08	3.19028E-08	2.27644E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Light	Aggregate		50	Diesel	1.39463E-07	1.65973E-07	2.00827E-07	1.65883E-06	1.61673E-06	0	4.81516E-08	4.42995E-08	3.30096E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate		100	Diesel	3.96227E-07	4.71543E-07	5.70567E-07	7.53602E-06	5.30269E-06	0.001683229	2.30693E-07	2.12237E-07	1.51443E-08	1.37734E-08	54.75	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate		175	Diesel	5.65469E-07	6.72955E-07	8.14276E-07	1.23751E-05	6.31049E-06	0.001907659	2.66643E-07	2.45312E-07	2.72136E-08	1.56098E-08	62.05	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate		300	Diesel	2.4823E-07	2.95414E-07	3.57451E-07	2.34453E-06	2.81702E-06	0.001683229	8.11335E-08	7.46428E-08	1.50318E-08	1.37734E-08	54.75	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate		50	Diesel	2.78927E-08	3.31946E-08	4.01654E-08	3.31767E-07	3.23345E-07	0	9.63032E-09	8.8599E-09	6.60192E-10	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate		600	Diesel	9.9441E-08	1.18343E-07	1.43195E-07	9.50385E-07	1.0794E-06	0	3.25848E-08	2.9978E-08	5.41357E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate		750	Diesel	1.16271E-07	1.38372E-07	1.6743E-07	1.10174E-06	1.27529E-06	0	3.81849E-08	3.51301E-08	6.4288E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Pressure Washers	Aggregate		175	Diesel	1.08891E-07	1.29589E-07	1.56803E-07	2.38304E-06	1.2152E-06	0	5.13469E-08	4.72391E-08	5.24046E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Pump	Aggregate		100	Diesel	1.41062E-06	1.67875E-06	2.03129E-06	2.68292E-05	1.88782E-05	0.00448861	8.21295E-07	7.55591E-07	5.39157E-08	3.6729E-08	146	54.75	0.16	5475
Sacramento	2024 Military Tactical Support - Misc - Pump	Aggregate		50	Diesel	1.26186E-06	1.50172E-06	1.81708E-06	1.50091E-05	1.46281E-05	0.001907659	4.35676E-07	4.00822E-07	2.98671E-08	1.56098E-08	62.05	58.4	0.16	2277.6
Sacramento	2024 Military Tactical Support - Misc - Start Cart	Aggregate		100	Diesel	3.13471E-08	3.73056E-08	4.51398E-08	5.96204E-07	4.19516E-07	0	1.8251E-08	1.67909E-08	1.19813E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Start Cart	Aggregate		600	Diesel	5.21145E-08	6.20205E-08	7.50448E-08	4.98072E-07	5.65685E-07	0	1.70768E-08	1.57107E-08	2.83711E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Test Stand	Aggregate		100	Diesel	9.51697E-07	1.1326E-06	1.37044E-06	1.81007E-05	1.27365E-05	0.003029812	5.541E-07	5.09772E-07	3.63751E-08	2.47921E-08	98.55	29.2	0.14	2686.4
Sacramento	2024 Military Tactical Support - Misc - Test Stand	Aggregate		175	Diesel	6.78181E-08	8.07092E-08	9.76581E-08	1.48417E-06	7.56832E-07	0	3.19792E-08	2.94209E-08	3.26379E-09	0	0	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Test Stand	Aggregate		300	Diesel	1.15898E-06	1.37928E-06	1.66892E-06	1.09465E-05	1.31526E-05	0.005947409	3.78809E-07	3.48504E-07	7.01831E-08	4.86659E-08	193.45	14.6	0.13	2876.2
Sacramento	2024 Military Tactical Support - Misc - Test Stand	Aggregate		600	Diesel	7.57962E-07	9.02037E-07	1.09146E-06	7.24405E-06	8.22743E-06	0.003927534	2.48368E-07	2.28499E-07	4.12635E-08	3.21379E-08	127.75	0	0	0
Sacramento	2024 Military Tactical Support - Misc - Welder	Aggregate		100	Diesel	1.12724E-06	1.34151E-06	1.62323E-06	2.14395E-05	1.50858E-05	0.003703104	6.56306E-07	6.03802E-07	4.30846E-08	3.03014E-08	120.45	58.4	0.16	3620.8
Sacramento	2024 Military Tactical Support - Misc - Welder	Aggregate		50	Diesel	4.10022E-07	4.8796E-07	5.90432E-07	4.87697E-06	4.75318E-06	0	1.41566E-07	1.3024E-07	9.70482E-09	0	0	0	0	0
Sacramento	2024 Ocean Going Vessels - Bulk Cargo	Aggregate		0	Diesel	0.001062445	0.001316369	0.001572896	0.002493527	0.024082626	1.101498546	0.00033704	0.000310077	0.000700253	3.12167E-05	35828.19056	839.1381548	0	595461.4251
Sacramento	2024 Ocean Going Vessels - General Cargo	Aggregate		0	Diesel	0.001325156	0.001706004	0.002038246	0.00315113	0.031334553	1.48380957	0.000443996	0.000408477	0.000916145	3.9038E-05	48263.53354	863.8969903	0	791762.2835
Sacramento	2024 Ocean Going Vessels - Tanker	Aggregate	Handysize		Diesel	0.000951836	0.00123855	0.001479937	0.002252052	0.02245877	1.026049836	0.000310384	0.000285553	0.000628658	2.94293E-05	33374.08767	415.0237283	0	556802.8767
Sacramento	2024 Oil Drilling - Drill Rig	Aggregate		100	Diesel	1.65858E-05	2.00688E-05	2.38835E-05	0.000276089	0.000198552	0.045974781	1.58479E-05	1.45801E-05	4.3551E-07	0	1493.958513	592.2673956	1.119387066	26639.55272
Sacramento	2024 Oil Drilling - Drill Rig	Aggregate		175	Diesel	0.000186614	0.000225803	0.000268724	0.003205557	0.001765256	0.539747072	7.48406E-05	6.88534E-05	5.11292E-06	0	17539.17528	4940.314922	7.295946189	344218.4367
Sacramento	2024 Oil Drilling - Drill Rig	Aggregate		300	Diesel	0.000346103	0.000418784	0.000498388	0.002260589	0.00325731	0.902686511	0.000154102	0.000141773	8.55097E-06	0	29332.95567	5010.933209	7.681311246	581484.732
Sacramento	2024 Oil Drilling - Drill Rig	Aggregate		50	Diesel	1.72699E-05	2.08966E-05	2.48687E-05	0.000215515	0.000181967	0.028674027	7.02249E-06	6.46069E-06	2.71624E-07	0	931.767522	726.0589169	1.698380376	16614.8322
Sacramento	2024 Oil Drilling - Drill Rig	Aggregate		600	Diesel	0.000697113	0.000843506	0.001003842	0.005735657	0.005811378	2.163278059	0.000275292	0.000253268	2.04923E-05	0	70296.09794	6473.0919	10.81169666	1385876.963
Sacramento	2024 Oil Drilling - Drill Rig	Aggregate		75	Diesel	2.4362E-05	2.9478E-05	3.50812E-05	0.00037982	0.000327904	0.065611538	5.09803E-06	4.69019E-06	6.21525E-07	0	2132.058366	1146.111093	2.239038315	36209.41902
Sacramento	2024 Oil Drilling - Drill Rig	Aggregate		750	Diesel	9.12234E-05	0.00011038	0.000131362	0.00064459	0.000915937	0.338957237	3.81793E-05	3.51249E-05	3.21088E-06	0	11014.47454	651.9826418	1.119387066	218346.5194
Sacramento	2024 Oil Drilling - Drill Rig	Aggregate		9999	Diesel	6.9435E-05	8.40164E-05	9.99864E-05	0.000609678	0.001386902	0.313818377	3.43588E-05	3.16101E-05	2.97274E-06	0	10197.58291	467.7211592	0.77199108	202152.7879
Sacramento	2024 Oil Drilling - Drill Rig (Mobile)	Aggregate		100	Diesel	1.4759E-05	1.78584E-05	2.1253E-05	0.000200739	0.000173378	0.031909494	1.21374E-05	1.11664E-05	3.02272E-07	0	1036.904568	418.4002994	0.77199108	18489.58565
Sacramento	2024 Oil Drilling - Drill Rig (Mobile)	Aggregate		175	Diesel	0.000241374	0.000292062	0.000347578	0.003711547	0.002362731	0.624453621	0.000109339	0.000100592	5.91533E-06	0	20291.72935	5584.678373	8.609129837	394135.3573
Sacramento	2024 Oil Drilling - Drill Rig (Mobile)	Aggregate		300	Diesel	0.000247323	0.00029926	0.000356144	0.00171019	0.00224234	0.724946427	0.000103086	9.48395E-05	6.86728E-06	0	23557.26061	3924.302463	6.256518925	449270.0999
Sacramento	2024 Oil Drilling - Drill Rig (Mobile)	Aggregate		50	Diesel	1.67511E-05	2.02689E-05	2.41216E-05	0.000173486	0.000148328	0.023237627	6.43861E-06	5.92352E-06	2.20126E-07	0	755.1107388	677.258106	1.54398216	13464.77305
Sacramento	2024 Oil Drilling - Drill Rig (Mobile)	Aggregate		600	Diesel	0.000823926	0.000996951	0.001186454	0.0065678	0.008038415	2.360127686	0.00034434	0.000316793	2.2357E-05	0	76692.76093	7172.412475	12.35733946	1505251.851
Sacramento	2024 Oil Drilling - Drill Rig (Mobile)	Aggregate		75	Diesel	2.60858E-05	3.15639E-05	3.75636E-05	0.000347915	0.000339092	0.057640438	9.5831E-06	8.81645E-06	5.46017E-07	0	1873.036104	1016.853962	1.968577254	33399.08275
Sacramento	2024 Oil Drilling - Drill Rig (Mobile)	Aggregate		750	Diesel	0.000154883	0.000187409	0.000223032	0.001272258	0.00169848	0.435855476	7.45393E-05	6.85762E-05	4.12877E-06	0	14163.19974	854.4682589	1.544940149	280562.9588
Sacramento	2024 Oil Drilling - Drill Rig (Mobile)	Aggregate		9999	Diesel	0.000120839	0.000146215	0.000174008	0.000685077	0.00211584	0.366067067	5.23343E-05	4.81475E-05	3.46768E-06	0	11895.41321	616.6229797	1.15798662	235809.8939
Sacramento	2024 Oil Drilling - Misc - Compressors (Workover)	Aggregate		25	Diesel	4.24713E-06	5.05443E-06	6.11587E-06	2.09284E-05	3.8764E-05	0.003815319	1.56515E-06	1.43994E-06	6.31901E-08	3.12197E-08	124.1	240.9	0.32	5781.6
Sacramento	2024 Oil Drilling - Misc - Generator (Drilling)	Aggregate		50	Diesel	3.09819E-06	3.6871E-06	4.46139E-06	3.05356E-05	2.2821E-05	0.003590888	8.13867E-07	7.48758E-07	4.17432E-08	2.93832E-08	116.8	116.8	0	3854.4
Sacramento	2024 Oil Drilling - Workover Rig (Mobile)	Aggregate		100	Diesel	1.22133E-05	1.47781E-05	1.75871E-05	9.89402E-05	0.000114571	0.015740918	1.14183E-05	1.05048E-05	1.49111E-07	0	511.5038911	226.6060227	0.231597324	9120.892413
Sacramento	2024 Oil Drilling - Workover Rig (Mobile)	Aggregate		175	Diesel	4.06597E-06	4.91983E-06	5.855E-06	5.90636E-05	4.08411E-05	0.009691528	2.25047E-06	2.07043E-06	9.1806E-08	0	314.9279087	81.30718387	0.154398216	6243.004375
Sacramento	2024 Oil Drilling - Workover Rig (Mobile)	Aggregate		300	Diesel	0.000116859	0.000141399	0.000168277	0.000758995	0.001154706	0.235841277	6.32613E-05	5.82004E-05	2.23408E-06	0	7663.703446	1177.770155	1.816573935	139783.8023
Sacramento	2024 Oil Drilling - Workover Rig (Mobile)	Aggregate		50	Diesel	4.39521E-07	5.3182E-07	6.3291E-07	6.34997E-06	4.85144E-06	0.000933837	1.18394E-07	1.08923E-07	8.84606E-09	0	30.34520302	22.08576029	0.038599554	541.101127
Sacramento	2024 Oil Drilling - Workover Rig (Mobile)	Aggregate		600	Diesel	0.001828918	0.002212991	0.002633643	0.01766919	0.015317104	5.479994548	0.000724755	0.000666775	5.19109E-05	0	178073.3789	16626.42884	21.71122408	3466000.056
Sacramento	2024 Oil Drilling - Workover Rig (Mobile)	Aggregate		750	Diesel	8.6433E-05	0.000104584	0.000124463	0.000709058	0.000962325	0.186994997	4.34643E-05	3.99872E-05	1.77137E-06	0	6076.435048	371.4920561	0.656749842	121237.625
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		120	Gasoline	0.410376784	0.414480551	0.451594618	1.308194738	0.025827859	4.244868281	0.021206817	0.016022926	7.37713E-05	0.000101832	288404.1682	0	1481.060893	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		15	Gasoline	2.14212E-06	2.16354E-06	2.35727E-06	5.36602E-05	1.03654E-06	0.000131718	1.0592E-08	8.00286E-09	2.34653E-09	3.23908E-09	8.336605484	0	0.368523422	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		175	Gasoline	0.135516169	0.13687133	0.149127276	1.254879649	0.074930965	6.628708616	0.012646064	0.009554804	8.62708E-05	0.000119086	338421.1356	0	1406.834846	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		250	Gasoline	0.145142353	0.146593776	0.159720306	1.88076879	0.045814231	9.834049661	0.000981613	0.000741663	0.000126038	0.000173979	495909.6513	0	1661.4891	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		50	Gasoline	0.190146904	0.192048373	0.209245069	0.408789882	0.001735356	0.968751682	0.009457848	0.007145929	0.000022077	3.04745E-05	84837.21083	0	790.6541452	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		500	Gasoline	0.009172176	0.009263898	0.01009342	0.11832599	0.00266848	0.611260567	6.37943E-05	4.82001E-05	7.85291E-06	1.08399E-05	30927.46266	0	72.90545515	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		750	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Personal Water Craft	Aggregate		750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		120	Gasoline	0.000679095	0.000685886	0.000747303	0.012944134	0.000512693	0.063766766	0.000218175	0.000164843	8.32014E-07	1.14849E-06	3225.397619	0	13.50143421	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		15	Gasoline	6.83722E-05	6.90559E-05	7.52394E-05	0.001328179	4.73651E-05	0.006951719	1.363E-05	1.02982E-05	1.01376E-07	1.39936E-07	346.0267955	0	12.91188614	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		175	Gasoline	0.000763625	0.000771261	0.000840323	0.005398653	0.000538349	0.066723065	6.71248E-06	5.07165E-06	7.45495E-07	1.02906E-06	2904.415357	0	8.739699153	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		25	Gasoline	0.000128129	0.000129411	0.000140999	0.002421967	0.000100192	0.01316489	4.79438E-05	3.62242E-05	1.80329E-07	2.48921E-07	649.6483933	0	14.7258804	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		250	Gasoline	0.001289907	0.001302806	0.001419464	0.009119345	0.000909374	0.113593381	1.13386E-05	8.56698E-06	1.26427E-06	1.74516E-06	4939.134228	0	8.739699153	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		50	Gasoline	0.0004254	0.000429655	0.000468127	0.007686208	0.000393164	0.042815064	0.000277781	0.000209879	5.61087E-07	7.74509E-07	2102.760221	0	26.24474361	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		500	Gasoline	0.001555824	0.001571383	0.00171209	0.017413232	0.001761132	0.17383036	1.81419E-05	1.37071E-05	1.96599E-06	2.71379E-06	7706.553949	0	8.739699153	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		750	Gasoline	0.006462355	0.006526979	0.007111427	0.029662044	0.003042308	0.325931926	3.40159E-05	2.57009E-05	3.74839E-06	5.17417E-06	14736.03963	0	8.739699153	0
Sacramento	2024 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate		750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		120	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		15	Gasoline	0.000902564	0.000911589	0.000993217	0.011270464	0.000422201	0.084419328	6.78855E-06	5.12912E-06	1.27259E-06	1.75665E-06	3926.678322	0	314.9211311	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		175	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		250	Gasoline	0.012449806	0.012574303	0.013700251	0.106109119	0.010844846	1.18382287	0.000118167	8.92814E-05	1.34958E-05	1.86292E-05	51993.24655	0	246.6790655	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		50	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		500	Gasoline	0.110858079	0.11196666	0.121992554	1.201220333	0.043520503	12.97467667	0.001354103	0.0010231	0.000145831	0.000201301	568757.3796	0	1884.509081	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		750	Gasoline	0.000304335	0.000307378	0.000334902	0.005048467	0.000103809	0.078507701	8.19346E-06	6.19062E-06	8.3069E-07	1.14666E-06	3263.659461	0	6.841718495	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Engines	Aggregate		750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		120	Gasoline	0.029668309	0.029964992	0.032648165	0.081319202	0.000964652	0.249919624	0.001460178	0.001103245	4.63405E-06	6.39671E-06	17948.61244	0	167.2618152	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		175	Gasoline	0.004969225	0.005018917	0.005468329	0.04556591	0.001904087	0.234920455	0.000114575	0.000086568	3.09702E-06	4.27504E-06	12079.34088	0	95.18441849	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		250	Gasoline	0.01422277	0.014364998	0.015651291	0.137165925	0.006161901	0.884478877	0.001710395	0.001292298	1.09324E-05	1.50908E-05	42879.38724	0	284.2195503	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		50	Gasoline	0.032340285	0.032663689	0.035588512	0.072167273	0.000507692	0.192018533	0.001592014	0.001202855	4.16172E-06	5.74472E-06	15600.35954	0	293.8729436	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		500	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		750	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate		750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		120	Gasoline	0.435572066	0.439927787	0.479320488	1.45098298	0.052936975	7.239505076	0.033853089	0.025577892	0.000106329	0.000146773	411745.1429	0	2457.796573	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		15	Gasoline	0.065539507	0.066194902	0.072122229	0.230376952	0.005801039	0.788649518	0.003543762	0.00267751	1.52836E-05	2.1097E-05	51446.63554	0	2657.428511	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		175	Gasoline	0.199215621	0.201207776	0.219224638	0.855248965	0.030023936	4.018060245	0.020435593	0.015440226	5.78297E-05	7.98263E-05	225916.9944	0	729.6074489	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		25	Gasoline	0.080510484	0.081315588	0.088596877	0.200123388	0.006693578	0.791685347	0.004887545	0.003692811	1.4085E-05	1.94425E-05	51734.98725	0	1139.620113	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		250	Gasoline	0.186572841	0.188438569	0.20531203	0.896892078	0.055997994	5.358894068	0.038677442	0.029222951	7.06969E-05	9.75878E-05	276722.4746	0	678.673345	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		50	Gasoline	0.189468029	0.191362709	0.208498008	0.512296965	0.019727943	2.269911936	0.013252607	0.010013082	3.68863E-05	5.09168E-05	139345.8176	0	1652.026431	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		500	Gasoline	0.063048073	0.063678553	0.069380559	0.842409192	0.030645437	3.500657929	0.008625701	0.006517197	4.78896E-05	6.61053E-05	188145.826	0	375.1565205	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		750	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Outboard Engines	Aggregate		750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		120	Gasoline	3.1523E-06	3.18382E-06	3.46891E-06	2.67596E-05	1.55255E-06	0.000517172	4.72604E-08	3.57079E-08	5.57965E-09	7.70199E-09	21.26797639	0	0.294613568	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		15	Gasoline	0.002209355	0.002231449	0.002431261	0.036293369	0.002310107	0.280157175	3.98169E-05	3.00839E-05	4.236E-06	5.84725E-06	12863.9315	0	1336.095896	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		175	Gasoline	0.016796061	0.016964022	0.018483041	0.18786982	0.049355848	3.269805611	0.000328949	0.000248539	0.00003514	4.85063E-05	135153.3473	0	1184.644178	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		250	Gasoline	0.074695787	0.075442746	0.082198158	0.807996984	0.065844229	7.59706428	0.000758322	0.000572955	8.81998E-05	0.000121748	340431.3972	0	2184.756448	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		50	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		500	Gasoline	0.090139848	0.091041246	0.099193404	0.607147673	0.035568492	12.33556925	0.001287403	0.000972705	0.000130172	0.000179686	507404.8448	0	2504.292025	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		750	Gasoline	0.007061704	0.007132322	0.007770975	0.01316548	0.002158486	0.369857791	3.86002E-05	2.91646E-05	3.94139E-06	5.44057E-06	15485.49793	0	41.1472774	0
Sacramento	2024 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate		750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate		100	Diesel	0.000444489	0.000537832	0.000640064	0.011172252	0.006044827	1.631166116	0.000428166	0.000393912	1.51061E-05	1.33474E-05	53056.56611	41302.79524	100.4479183	3354227.184
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate		175	Diesel	0.000120838	0.000146214	0.000174007	0.003119358	0.001691677	0.53477714	7.04107E-05	6.47779E-05	4.95328E-06	4.37593E-06	17394.57338	8746.474285	21.27132387	1099682.003
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate		300	Diesel	0.000143285	0.000173375	0.000206331	0.001877283	0.001678116	0.995279678	6.11577E-05	5.6265E-05	9.22106E-06	8.14409E-06	32373.23379	7288.728571	17.72610323	2046630.394
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate		50	Diesel	2.94322E-06	3.5613E-06	4.23824E-06	7.34566E-05	6.01689E-05	0.013051752	5.61117E-07	5.16228E-07	1.2089E-07	1.06799E-07	424.5313535	485.9152381	1.181740215	24141.7644
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate		600	Diesel	0.000247715	0.000299735	0.000356709	0.002046531	0.003559964	1.074585786	0.000150148	0.000138136	9.95302E-06	8.79303E-06	34952.80538	4859.152381	11.81740215	2209710.476
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate		75	Diesel	0.000114686	0.00013877	0.000165147	0.002480416	0.001845664	0.379519261	1.32747E-05	1.22128E-05	3.51437E-06	3.1055E-06	12344.53595	12633.79619	30.7252456	780419.4859
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate		750	Diesel	0.000134006	0.000162148	0.000192969	0.001520849	0.002666254	0.827083642	9.40807E-05	8.65542E-05	7.66231E-06	6.76779E-06	26902.3599	2429.57619	5.908701076	1700762.667
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate		100	Diesel	0.000919858	0.001113028	0.001324596	0.018371864	0.008867223	2.395659717	0.00071668	0.000659345	2.2178E-05	1.9603E-05	77923.07411	53497.58795	38.9974271	4926283.636
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate		175	Diesel	0.001142231	0.0013821	0.001644813	0.025759624	0.008018329	3.974381085	0.000412296	0.000379312	3.68047E-05	3.25212E-05	129273.7819	55118.72698	40.17916732	8172666.747
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate		300	Diesel	0.000933994	0.001130133	0.001344951	0.00718739	0.004765452	3.205403892	0.000227188	0.000209013	2.96832E-05	2.62289E-05	104261.4372	27559.36349	20.08958366	6591390.518
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate		50	Diesel	0.00012169	0.000147245	0.000175234	0.001757745	0.001129145	0.170621484	3.95664E-05	3.64011E-05	1.57786E-06	1.39615E-06	5549.765873	6484.556116	4.726960861	315597.7505
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate		600	Diesel	0.002759837	0.003339402	0.003974165	0.016346391	0.023112162	7.697765456	0.000998446	0.000918571	7.12687E-05	6.29886E-05	250383.4513	30801.64155	22.45306409	15829199.67

Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate	75 Diesel	0.000832036	0.001006764	0.001198132	0.012264666	0.009000553	1.651462454	0.000230669	0.000212216	1.52826E-05	1.35134E-05	53716.74044	53876.44893	37.81568689	3395963.294
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate	750 Diesel	0.000692502	0.000729028	0.000867603	0.009687081	0.004842825	1.70581843	0.000245349	0.000225721	1.57933E-05	1.39582E-05	55484.76481	4863.417087	3.545220646	3507737.498
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate	9999 Diesel	0.003531561	0.004273189	0.005085448	0.023191953	0.049838178	10.89757388	0.001153559	0.001061274	0.000100905	8.91717E-05	354462.886	17832.52932	12.99914237	22409084.02
Sacramento	2024 Portable Equipment - Non-Rental Other	Aggregate	100 Diesel	0.000150346	0.000181919	0.000216499	0.005750161	0.002853635	0.901450952	0.000195433	0.000179798	8.35114E-06	7.37631E-06	29321.28834	20439.51587	63.81397162	1853686.916
Sacramento	2024 Portable Equipment - Non-Rental Other	Aggregate	175 Diesel	0.000662215	0.00080128	0.00095359	0.021638941	0.010236167	3.890796686	0.00043735	0.000383962	3.60444E-05	3.18373E-05	126555.0514	59425.99985	185.5332138	8000788.057
Sacramento	2024 Portable Equipment - Non-Rental Other	Aggregate	300 Diesel	0.000339839	0.000411205	0.000489369	0.002670346	0.005136034	1.275469111	0.000177858	0.000163629	1.18123E-05	1.04368E-05	41486.89121	10976.77704	34.27046624	2622794.283
Sacramento	2024 Portable Equipment - Non-Rental Other	Aggregate	600 Diesel	0.000327992	0.000396871	0.000472309	0.003092072	0.003981677	1.492713191	0.000140327	0.000129101	1.38263E-05	1.22144E-05	48553.13958	7191.681511	22.45306409	3069521.316
Sacramento	2024 Portable Equipment - Non-Rental Other	Aggregate	75 Diesel	0.000167123	0.000202219	0.000240657	0.003990076	0.003138236	0.625603228	6.63886E-05	6.10775E-05	5.79377E-06	5.11913E-06	20348.8527	19303.98721	60.26875098	1286451.044
Sacramento	2024 Portable Equipment - Non-Rental Other	Aggregate	750 Diesel	6.4974E-05	7.86185E-05	9.35625E-05	0.00967092	0.000389068	0.516981188	2.30657E-05	2.12205E-05	4.79001E-06	4.23031E-06	16815.72851	1514.038213	4.726960861	1063087.528
Sacramento	2024 Portable Equipment - Non-Rental Other	Aggregate	9999 Diesel	0.003004495	0.003635439	0.004326472	0.027917174	0.06243511	14.27483976	0.001217362	0.001119973	0.000332225	0.000116807	464314.4387	9462.73883	29.54350538	29353880.7
Sacramento	2024 Portable Equipment - Non-Rental Pump	Aggregate	100 Diesel	0.000110177	0.000133314	0.000158655	0.003468261	0.002042128	0.546328641	0.000129555	0.000119186	5.06068E-06	4.47045E-06	17770.3064	12896.83677	40.17916732	1123435.781
Sacramento	2024 Portable Equipment - Non-Rental Pump	Aggregate	175 Diesel	0.000242481	0.000293402	0.000349172	0.007520658	0.003493874	1.345341293	0.00012672	0.000116582	1.24628E-05	1.10085E-05	43759.60764	21621.16753	67.35919227	2766475.034
Sacramento	2024 Portable Equipment - Non-Rental Pump	Aggregate	300 Diesel	5.79094E-05	7.00704E-05	8.33896E-05	0.000623328	0.0008483	0.325066477	2.51237E-05	2.31138E-05	3.01134E-06	2.65993E-06	10573.36273	3034.549829	9.453921722	668446.2128
Sacramento	2024 Portable Equipment - Non-Rental Pump	Aggregate	50 Diesel	1.59294E-05	1.92745E-05	2.29383E-05	9.4731E-05	8.35976E-05	0.010396485	5.37122E-06	4.94153E-06	9.58833E-08	8.50715E-08	338.1640703	376.3187286	1.181740215	192303.3833
Sacramento	2024 Portable Equipment - Non-Rental Pump	Aggregate	600 Diesel	0.000271684	0.000328738	0.000391226	0.003267382	0.001616832	1.712677633	7.42794E-05	6.83376E-05	1.58668E-05	1.40144E-05	55707.87254	7965.6933	24.81654452	3521842.331
Sacramento	2024 Portable Equipment - Non-Rental Pump	Aggregate	75 Diesel	0.000152635	0.000184688	0.000219794	0.003570648	0.002926855	0.564471016	6.92362E-05	6.36973E-05	5.22757E-06	4.6189E-06	18360.41928	17827.98024	55.54179012	1160742.618
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate	100 Diesel	2.41692E-05	2.92448E-05	3.48037E-05	0.000923862	0.000319009	0.134689395	2.50813E-05	2.30748E-05	1.24773E-06	1.10212E-06	4381.011051	3183.669581	9.908701076	276966.7816
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate	175 Diesel	0.000137021	0.000165795	0.00019731	0.00713453	0.001068377	1.313614051	2.25957E-05	2.07888E-05	1.21719E-05	1.07489E-05	42727.62293	19738.7514	36.63394667	2701233.134
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate	300 Diesel	0.000104172	0.000126048	0.000150007	0.001751792	0.000210791	0.939546538	1.55232E-05	1.42814E-05	8.67783E-06	7.66349E-06	30462.83442	7640.806995	14.18088258	1925855.267
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate	600 Diesel	0.000433836	0.000524942	0.000624724	0.003583163	0.004098852	1.844522598	0.000181006	0.000166526	1.70841E-05	1.50932E-05	59996.36346	7004.078079	12.99914237	3792960.005
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate	75 Diesel	2.29415E-05	2.77592E-05	3.30357E-05	0.000540365	0.000409871	0.084455588	3.53185E-06	3.2493E-06	7.8214E-07	6.91076E-07	2747.067535	2546.935665	4.726960861	173669.1475
Sacramento	2024 Portable Equipment - Non-Rental Compressor	Aggregate	750 Diesel	0.000155121	0.000187697	0.000223375	0.002052192	0.000317815	1.073747623	2.65678E-05	2.44423E-05	9.94803E-06	8.78617E-06	34925.54264	3183.669581	5.908701076	2207986.931
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate	100 Diesel	0.00067796	0.000820132	0.000976262	0.019530822	0.008662569	2.667729833	0.000663233	0.000610174	2.47071E-05	2.18293E-05	86772.63963	57298.10078	38.9974271	5485751.68
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate	175 Diesel	0.000862664	0.001043824	0.001242236	0.027725142	0.004970428	4.540962633	0.000162485	0.000149484	4.20648E-05	3.71574E-05	147702.85	65979.6312	44.90612818	9337749.329
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate	300 Diesel	0.000623493	0.000754426	0.00089783	0.005533144	0.001441911	2.457119675	6.48282E-05	5.96419E-05	2.27566E-05	2.01059E-05	79922.16808	24308.28518	16.54436301	5052666.021
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate	600 Diesel	0.001391808	0.001684088	0.002004204	0.010561139	0.006936349	5.034954986	0.000320388	0.000294757	4.66278E-05	4.11996E-05	163770.8259	24308.28518	16.54436301	10353564.07
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate	75 Diesel	0.000454944	0.000550483	0.00065512	0.007909779	0.00570916	1.13267224	4.79407E-05	4.41054E-05	1.04852E-05	9.26833E-06	36842.17016	34726.12168	23.63480431	2329155.8
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate	750 Diesel	0.000486959	0.00058922	0.00070122	0.002564824	0.003734464	1.186609014	0.000187186	0.000172211	1.09842E-05	9.70968E-06	38596.55922	3472.612168	2.363480431	2440067.981
Sacramento	2024 Portable Equipment - Non-Rental Generator	Aggregate	9999 Diesel	0.00056271	0.000680879	0.000810303	0.003114429	0.007327034	1.440882374	0.000252579	0.000232372	1.33888E-05	1.17903E-05	46867.25048	3472.612168	2.363480431	2962939.691
Sacramento	2024 Portable Equipment - Rental Other	Aggregate	100 Diesel	6.29685E-05	7.61919E-05	9.06746E-05	0.001894107	0.000583948	0.251012222	5.16228E-05	4.74929E-05	2.32477E-06	2.05396E-06	8164.616969	6006.715124	4.726960861	516165.7113
Sacramento	2024 Portable Equipment - Rental Other	Aggregate	175 Diesel	0.000273079	0.000330426	0.000393234	0.005917031	0.002101642	0.909271412	9.74063E-05	8.96138E-05	8.41995E-06	7.44031E-06	29575.66265	12013.43025	9.453921722	1869768.417
Sacramento	2024 Portable Equipment - Rental Other	Aggregate	75 Diesel	0.000146071	0.000176746	0.000210342	0.002289941	0.001697969	0.315431288	4.3472E-05	3.99942E-05	2.93939E-06	2.58108E-06	10259.96115	10511.75147	8.272181507	648633.0177
Sacramento	2024 Portable Equipment - Rental Pump	Aggregate	100 Diesel	0.000324755	0.000392953	0.000467647	0.007710454	0.003888147	1.052464356	0.00031558	0.000290334	9.74567E-06	8.61201E-06	34233.26671	25772.91723	25.99828474	2164221.363
Sacramento	2024 Portable Equipment - Rental Pump	Aggregate	175 Diesel	0.000235404	0.000284839	0.000338981	0.005763877	0.002152136	0.921339544	7.42619E-05	6.8321E-05	8.53294E-06	7.53906E-06	29968.20001	15229.45109	15.3626228	1894584.563
Sacramento	2024 Portable Equipment - Rental Pump	Aggregate	300 Diesel	0.000412319	0.000498906	0.000593739	0.002426922	0.003561466	1.091744036	0.000157921	0.000145288	1.01071E-05	8.9334E-06	35510.90784	10543.46614	10.63566194	2244093.62
Sacramento	2024 Portable Equipment - Rental Pump	Aggregate	600 Diesel	8.88497E-05	0.000107508	0.000127943	0.000810852	0.00014146	0.38702037	1.29957E-05	1.1956E-05	3.58467E-06	3.16688E-06	12588.52289	2342.992476	2.363480431	795844.2991
Sacramento	2024 Portable Equipment - Rental Pump	Aggregate	75 Diesel	0.000159891	0.000193469	0.000230244	0.003736203	0.00300095	0.582841128	7.76234E-05	7.14135E-05	5.39762E-06	4.76922E-06	18957.93969	16400.94733	16.54436301	1198517.758
Sacramento	2024 Portable Equipment - All Terrain Vehicles (Atvs) Active	Aggregate	120 Gasoline	0.003292802	0.00332573	0.003623528	0.071916895	0.003728318	1.341987392	0.000171104	0.000139279	1.65635E-05	1.93753E-05	54696.71205	0	1650.099386	0
Sacramento	2024 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	15 Gasoline	0.002303282	0.002326336	0.002534621	0.025977738	0.00052028	0.368849615	6.18758E-05	6.47506E-05	5.24726E-06	1.60738E-06	15579.57549	0	730.1327193	0
Sacramento	2024 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	25 Gasoline	0.00156331	0.001578943	0.001720327	0.012098301	0.000219167	0.158830251	3.19078E-05	2.41082E-05	2.45573E-06	2.48022E-06	6836.546091	0	414.790645	0
Sacramento	2024 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	50 Gasoline	0.009586872	0.009682741	0.010549768	0.173301554	0.003739193	2.978101931	0.000381412	0.000288178	3.69046E-05	4.39601E-05	122481.4088	0	4962.383377	0
Sacramento	2024 Recreational - Golf Carts	Aggregate	120 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Recreational - Golf Carts	Aggregate	15 Gasoline	0.001853446	0.001871981	0.002039604	0.050469625	0.001411945	0.611886962	0.000136793	0.000103355	5.21476E-06	9.16261E-06	26021.264	0	692.1503858	0
Sacramento	2024 Recreational - Golf Carts	Aggregate	25 Gasoline	0.000549168	0.000554661	0.000604328	0.014953963	0.000418353	0.18129984	4.05313E-05	3.06237E-05	1.54511E-06	2.70773E-06	7710.00415	0	115.3583976	0
Sacramento	2024 Recreational - Golf Carts	Aggregate	5 Gasoline	4.22654E-05	4.2688E-05	4.65105E-05	0.001173658	3.26742E-05	0.006474994	3.14897E-06	2.37923E-06	1.65548E-07	1.11838E-07	315.7919752	0	16.47977109	0
Sacramento	2024 Recreational - Golf Carts	Aggregate	50 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Recreational - Minibikes	Aggregate	120 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Recreational - Minibikes	Aggregate	15 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Recreational - Minibikes	Aggregate	25 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Recreational - Minibikes	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Recreational - Minibikes	Aggregate	50 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Recreational - Off-Road Motorcycles Active	Aggregate	120 Gasoline	0.006453212	0.006517743	0.007103366	0.032544657	0.002223269	0.246232491	9.26042E-05	6.99677E-05	4.50144E-06	4.64718E-06	11931.19344	0	401.9507475	0
Sacramento	2024 Recreational - Off-Road Motorcycles Active	Aggregate	15 Gasoline	0.000719937	0.000727136	0.000792247	0.007494732	8.92302E-05	0.051825531	1.66305E-05	1.25653E-05	1.72363E-06	1.0971E-06	2465.938354	0	121.0655096	0
Sacramento	2024 Recreational - Off-Road Motorcycles Active	Aggregate	25 Gasoline	0.001827421	0.001845695	0.002010966	0.004597161	2.49076E-05	0.021925889	2.23456E-05	1.68833E-05	9.61241E-07	5.83782E-07	1325.051133	0	57.33750595	0
Sacramento	2024 Recreational - Off-Road Motorcycles Active	Aggregate	5 Gasoline	0.002019225	0.002039419	0.002222035	0.013891208	6.51854E-05	0.076215674	5.65057E-05	4.26931E-05	2.33923E-06	1.75658E-06	3919.625418	0	188.43212	0
Sacramento	2024 Recreational - Off-Road Motorcycles Active	Aggregate	50 Gasoline	0.009486608	0.009581474	0.010439434	0.032073795	0.000265041	0.234395594	0.000120546	9.1079E-05	6.637E-06	4.9793E-06	11856.88405	0	417.5826266	0
Sacramento	2024 Recreational - Snowmobiles Active	Aggregate	120 Gasoline	0	0	0	0	0	0	0	0	0	1.25227E-08	0	0	0	0
Sacramento	2024 Recreational - Snowmobiles Active	Aggregate	15 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Recreational - Snowmobiles Active	Aggregate	25 Gasoline	0	0	0	0	0	0	0	0	0	1.04356E-08	0	0	0	0
Sacramento	2024 Recreational - Snowmobiles Active	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2024 Recreational - Snowmobiles Active	Aggregate	50 Gasoline	0	0	0	0	0	0	0	0	0	8.13973E-08	0	0	0	0
Sacramento	2024 Transport Refrigeration Unit - Instate Genset	Aggregate	25 Diesel	0.000171173	0.001749877	0.000246548	0.000190291	0.002961531	0.473228965	0.000109039	0.000100336	742.83	1.06052E-08	15392.61	32700.64	41.80201	0
Sacramento	2024 Transport Refrigeration Unit - Instate Genset	Aggregate	50 Diesel	0.0002118	0.0021634	0.00030494	0.00023565	0.0022208	0.375998901	5.9201E-05	0.000054421	590.22	8.4293E-09	12230.03	22946.09	29.33	0
Sacramento	2024 Transport Refrigeration Unit - Instate Trailer	Aggregate	25 Diesel	0.0036761	0.0375385	0.00529298	0.00408566	0.0406861	6.498532621	0.001483371	0.001364604	10201.81	1.45766E-07	211376.28	322147.95	179.69	0
Sacramento	2024 Transport Refrigeration Unit - Instate Trailer	Aggregate	50 Diesel	0.007518453	0.07617588	0.010816292	0.008350166	0.06790212	12.00256412	0.001264675	0.001163853	18842.47	2.69062E-07	390404.65	513304.82	286.42	0
Sacramento	2024 Transport Refrigeration Unit - Instate Truck	Aggregate	23 Diesel	0.0009489	0.0096904	0.00136717	0.00105386	0.0123732	1.976577716	0.00063853	0.000587239	3102.9	4.42976E-08	64291.69	116050.54	100.28	0
Sacramento	2024 Transport Refrigeration Unit - Out-Of-State Genset	Aggregate	25 Diesel	0.000155703	0.001591437	0.000224439	0.000173175	0.002635493	0.421233025	0.000103774	9.55441E-05	661.22407	9.44033E-09	13701.35	29107.64	234.69808	0
Sacramento	2024 Transport Refrigeration Unit - Out-Of-State Genset	Aggregate	50 Diesel	0.00017413	0.0017784	0.00025072	0.00019336	0.0016655	0.257421805	5.5726E-05	0.000051265	404.04	5.769E-09	8373.1	15492.94	124.89	0
Sacramento	2024 Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	25 Diesel	0.003973831	0.04055169	0.005723979	0.004414143	0.04270443	6.830676876	0.001682792	0.001547552	10723.26	1.53007E-07	222179.86	338613.12	1244.81	0
Sacramento	2024 Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	50 Diesel	0.0024243	0.024759	0.0034928	0.0026935	0.020383	3.346169875	0.00054173	0.00049843	5253.01	7.5007E-08	108840.1	143485.02	527.42	0
Sacramento	2024 Transport Refrigeration Unit - Railcar TRU	Aggregate	25 Diesel	0.000196564	0.002007653	0.00028298	0.000218443	0.002028686	0.324318701	8.42832E-05	7.76862E-05	509.1	7.2729E-09	10549.04	16077.3	49.0746	0
Sacramento	2024 Transport Refrigeration Unit - Railcar TRU	Aggregate	50 Diesel	3.69991E-05	0.000378574	5.34216E-05	4.11768E-05	0.000384647	0.069006543	7.6769E-06	7.06TE-06	108.26	1.54634E-09	2244.56	2965.23	8.98889	0

OFFROAD 2025

	Equipment Type	Horsepower	Gas				Diesel				Natural Gas			
		HP	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr
Air Compressors25	Air Compressors	25	27883.78654	98.54468339	0	0	2605.269635	4.937038868	0	0	0	0	0	0
Air Compressors50	Air Compressors	50	13804.3	12.62	6110.1	2.259259259	23648.35	28.48	23162.9	1.020958084	0	0	0	0
Air Compressors75	Air Compressors	75	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors100	Air Compressors	100	74627.9	40.95	19790.3	3.770933235	0	0	0	0	0	0	0	0
Air Compressors175	Air Compressors	175	9143.25	2.74	1324.95	6.900826446	0	0	0	0	0	0	0	0
Air Compressors300	Air Compressors	300	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors600	Air Compressors	600	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors750	Air Compressors	750	0	0	0	0	0	0	0	0	0	0	0	0
Air Compressors9999	Air Compressors	9999	0	0	0	0	0	0	0	0	0	0	0	0
Aerial Lifts25	Aerial Lifts	25	2478.918532	14.68958914	0	0	19.42308716	9.055437565	0	0	0	0	0	0
Aerial Lifts50	Aerial Lifts	50	6971.5	12.14	4376.35	1.592994162	9577.469106	50.01638429	11759.00217	0.814479746	0	0	0	0
Aerial Lifts75	Aerial Lifts	75	0	0	0	0	19040.43157	54.53499051	16043.91659	1.186769544	0	0	0	0
Aerial Lifts100	Aerial Lifts	100	12493.95	12.14	4376.35	2.854879066	3739.189893	9.415346346	2674.121287	1.398287322	0	0	0	0
Aerial Lifts175	Aerial Lifts	175	0	0	0	0	5564.073838	6.666976775	2992.82911	1.859135164	0	0	0	0
Aerial Lifts300	Aerial Lifts	300	0	0	0	0	118.681446	0.07898693	32.41080763	3.661786135	0	0	0	0
Aerial Lifts600	Aerial Lifts	600	0	0	0	0	69.92412696	0.031594772	11.88709438	5.882356506	0	0	0	0
Bore/Drill rigs25	Bore/Drill rigs	25	427.5468722	4.806957962	0	0	23.87138918	3.75576229	0	0	0	0	0	0
Bore/Drill rigs50	Bore/Drill rigs	50	237.25	0.88	87.6	2.708333333	1417.012604	2.689915946	1272.356142	1.113691802	0	0	0	0
Bore/Drill rigs75	Bore/Drill rigs	75	0	0	0	0	5469.817334	6.265823785	3051.463009	1.792522904	0	0	0	0
Bore/Drill rigs100	Bore/Drill rigs	100	2733.85	3.99	427.05	6.401709402	4181.81124	3.3133831	1693.883216	2.468771873	0	0	0	0
Bore/Drill rigs175	Bore/Drill rigs	175	949	0.97	102.2	9.285714286	30025.41397	13.127827	8536.743393	3.51719767	0	0	0	0
Bore/Drill rigs300	Bore/Drill rigs	300	0	0	0	0	35708.34015	10.27144717	6291.824268	5.675355609	0	0	0	0
Bore/Drill rigs600	Bore/Drill rigs	600	0	0	0	0	51361.47696	8.827523752	5077.072009	10.11635779	0	0	0	0
Bore/Drill rigs750	Bore/Drill rigs	750	0	0	0	0	21339.99239	2.29626971	1294.807052	16.48121421	0	0	0	0
Bore/Drill rigs9999	Bore/Drill rigs	9999	0	0	0	0	7010.13032	0.557665501	325.9331238	21.5078794	0	0	0	0
Cement and Mortar Mixers25	Cement and Mortar Mixers	25	195.2408112	2.825857014	0	0	6.942369383	2.683739901	0	0	0	0	0	0
Cement and Mortar Mixers50	Cement and Mortar Mixers	50	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers75	Cement and Mortar Mixers	75	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers100	Cement and Mortar Mixers	100	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers175	Cement and Mortar Mixers	175	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers300	Cement and Mortar Mixers	300	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers600	Cement and Mortar Mixers	600	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers750	Cement and Mortar Mixers	750	0	0	0	0	0	0	0	0	0	0	0	0
Cement and Mortar Mixers9999	Cement and Mortar Mixers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws25	Concrete/Industrial Saws	25	6464.028348	30.98450728	0	0	4.762085968	0.995936402	0	0	0	0	0	0
Concrete/Industrial Saws50	Concrete/Industrial Saws	50	5482.3	3.24	1981.95	2.76611418	1657.1	2.07	1197.2	1.384146341	0	0	0	0
Concrete/Industrial Saws75	Concrete/Industrial Saws	75	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws100	Concrete/Industrial Saws	100	5347.25	1.86	1135.15	4.710610932	0	0	0	0	0	0	0	0
Concrete/Industrial Saws175	Concrete/Industrial Saws	175	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws300	Concrete/Industrial Saws	300	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws600	Concrete/Industrial Saws	600	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws750	Concrete/Industrial Saws	750	0	0	0	0	0	0	0	0	0	0	0	0
Concrete/Industrial Saws9999	Concrete/Industrial Saws	9999	0	0	0	0	0	0	0	0	0	0	0	0
Cranes25	Cranes	25	0	0	0	0	3.899640987	0.065607706	11.0244202	0.353727535	0	0	0	0
Cranes50	Cranes	50	810.3	0.97	405.15	2	164.9295447	0.853398284	166.5568417	0.99022978	0	0	0	0
Cranes75	Cranes	75	0	0	0	0	641.0229774	2.52756397	459.2425115	1.395826739	0	0	0	0
Cranes100	Cranes	100	2719.25	1.97	824.9	3.296460177	1938.629383	4.95910582	956.5619679	2.026663664	0	0	0	0
Cranes175	Cranes	175	182.5	0.07	32.85	5.555555556	14522.60282	22.29793567	5841.537933	2.486092359	0	0	0	0
Cranes300	Cranes	300	0	0	0	0	46984.11872	50.15456856	12755.00091	3.683584114	0	0	0	0
Cranes600	Cranes	600	0	0	0	0	65473.26374	40.08003548	10494.95246	6.23854791	0	0	0	0
Cranes750	Cranes	750	0	0	0	0	10209.68312	4.625343273	1086.647465	9.395579936	0	0	0	0
Cranes9999	Cranes	9999	0	0	0	0	3477.982663	1.082527149	262.6027591	13.24427312	0	0	0	0
Crawler Tractors25	Crawler Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0
Crawler Tractors50	Crawler Tractors	50	0	0	0	0	827.8194738	2.822070986	771.0750174	1.073591356	0	0	0	0
Crawler Tractors75	Crawler Tractors	75	0	0	0	0	5644.820598	11.1899888	3287.398248	1.717108842	0	0	0	0
Crawler Tractors100	Crawler Tractors	100	0	0	0	0	21743.85399	28.15526114	9876.120921	2.201659352	0	0	0	0
Crawler Tractors175	Crawler Tractors	175	0	0	0	0	78567.30596	57.81180342	26593.31829	2.954400241	0	0	0	0
Crawler Tractors300	Crawler Tractors	300	0	0	0	0	97263.48369	46.83035913	20321.82327	4.786159312	0	0	0	0
Crawler Tractors600	Crawler Tractors	600	0	0	0	0	170517.443	46.78821676	20508.39819	8.314517859	0	0	0	0
Crawler Tractors750	Crawler Tractors	750	0	0	0	0	10822.94102	2.1388119	832.7465081	12.99668136	0	0	0	0
Crawler Tractors9999	Crawler Tractors	9999	0	0	0	0	17867.00168	2.529821729	1014.522783	17.6112375	0	0	0	0
Crushing/Proc. Equipment25	Crushing/Proc. Equipment	25	77.8554933	0.391894298	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment50	Crushing/Proc. Equipment	50	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment75	Crushing/Proc. Equipment	75	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment100	Crushing/Proc. Equipment	100	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment175	Crushing/Proc. Equipment	175	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment300	Crushing/Proc. Equipment	300	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment600	Crushing/Proc. Equipment	600	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment750	Crushing/Proc. Equipment	750	0	0	0	0	0	0	0	0	0	0	0	0
Crushing/Proc. Equipment9999	Crushing/Proc. Equipment	9999	0	0	0	0	0	0	0	0	0	0	0	0
Dumpers/Tenders25	Dumpers/Tenders	25	479.5739174	8.051980262	0	0	3.426887552	1.38512744	0	0	0	0	0	0
Dumpers/Tenders100	Dumpers/Tenders	100	229.95	0.74	87.6	2.625	0	0	0	0	0	0	0	0
Excavators25	Excavators	25	0	0	0	0	26.81160089	2.208659202	13.69110071	1.958323254	0	0	0	0
Excavators50	Excavators	50	0	0	0	0	87643.76775	245.1434516	115823.5849	0.756700527	0	0	0	0
Excavators75	Excavators	75	0	0	0	0	69580.56324	101.3986198	52792.47043	1.318001652	0	0	0	0
Excavators100	Excavators	100	0	0	0	0	54101.40697	53.3751394	28204.96907	1.918151615	0	0	0	0
Excavators175	Excavators	175	0	0	0	0	305270.4008	151.6617364	108626.5927	2.810273186	0	0	0	0
Excavators300	Excavators	300	0	0	0	0	326611.2342	112.993498	72516.89928	4.503932703	0	0	0	0
Excavators600	Excavators	600	0	0	0	0	377062.4474	78.77122173	52376.7287	7.199045392	0	0	0	0
Excavators750	Excavators	750	0	0	0	0	11054.81521	1.64067348	869.0428684	12.72067882	0	0	0	0
Excavators9999	Excavators	9999	0	0	0	0	53292.48442	3.052514412	1763.569755	30.21852936	0	0	0	0
Forklifts25	Forklifts	25	47.14137708	0.113082522	0	0	0.073530717	0.015797386	5.463185577	0.013459312	0	0	0	0
Forklifts50	Forklifts	50	118873.2	41.25	73178.85	1.624420171	12415.52565	36.45823645	18726.60341	0.662988657	178463.1	74.15	133597.3	1.335828643
Forklifts75	Forklifts	75	0	0	0	0	126080.4372	247.5352615	98683.24559	1.277627589	0	0	0	0
Forklifts100	Forklifts	100	562972.35	153.12	260307.05	2.162724175	72293.58422	126.8939851	54346.95173	1.330223351	1117713.95	260.28	468911.85	2.383633406
Forklifts175	Forklifts	175	38982	5.49	9468.1	4.117193524	280556.1231	274.9633097	147057.569	1.907797912	83840.5	9.53	17151.35	4.888274101
Forklifts300	Forklifts	300	0	0	0	0	9093.826519	7.702441897	3825.453094	2.377189393	0	0	0	0
Forklifts600	Forklifts	600	0	0	0	0	2733.6013	1.428283415	705.720232	3.873491472	0	0	0	0
Forklifts750	Forklifts	750	0	0	0	0	327.1773776	0.080218627	35.56627878	9.199089385	0	0	0	0
Forklifts9999	Forklifts	9999	0	0	0	0	3197.639069	0.31594772	156.3576851	20.45079567	0	0	0	0
Generator Sets25	Generator Sets	25	41775.814	412.2849084	0	0	47931.59409	179.462253	0	0	0	0	0	0
Generator Sets50	Generator Sets	50	106317.2	415.61	47731.05	2.227422192	65159.8	138.16	46643.35	1.396979419	0	0	0	0
Generator Sets75	Generator Sets	75	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets100	Generator Sets	100	47888	80.29	9230.85	5.187821273	0	0	0	0	4299.7	5.95	682.55	6.299465241
Generator Sets175	Generator Sets	175	7829.25	7.59	872.35	8.974895397	0	0	0	0	6201.35	4.95	565.75	10.96129032
Generator Sets300	Generator Sets	300	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets600	Generator Sets	600	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets750	Generator Sets	750	0	0	0	0	0	0	0	0	0	0	0	0
Generator Sets9999	Generator Sets	9999	0	0	0	0	0	0	0	0	0	0	0	0
Graders25	Graders	25	0	0	0	0	0	0	0	0	0	0	0	0
Graders50	Graders	50	0	0	0	0	274.6928605	1.213915532	307.5930355	0.893039922	0	0	0	0
Graders75	Graders	75	0	0	0	0	1051.444434	2.331627499	572.3321618	1.837122748	0	0	0	0
Graders100	Graders	100	0	0	0	0	2239.285835	4.03658556	1065.075677	2.10246641	0	0	0	0
Graders175	Graders	175	0	0	0	0	35785.99233	34.38998308	11218.16185	3.190004994	0	0	0	0
Graders300	Graders	300	0	0	0	0	118190.2515	64.32142278	24979.50753	4.731488455	0	0	0	0
Graders600	Graders	600	0	0	0	0	28575.36786	9.516647944	4021.377586	7.105865403	0	0	0	0
Graders750	Graders	750	0	0	0	0	1088.91727	0.196823118	74.5702596	14.60256778	0	0	0	0
Graders9999	Graders	9999	0	0	0	0	782.8129636	0.131215412	50.39839493	15.5324979	0	0	0	0
Off-Highway Tractors25	Off-Highway Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0
Off-Highway Tractors50	Off-Highway Tractors	50	0	0	0	0	14760.39183	26.37809918	16018.2685	0.92147237	0	0	0	0
Off-Highway Tractors75	Off-Highway Tractors	75	0	0	0	0	12936.60399	14.24331584	8707.002816	1.485770048	0	0	0	0
Off-Highway Tractors100	Off-Highway Tractors	100	0	0	0	0	12345.19076	9.415334402	5951.667039	2.074240827	0	0	0	0
Off-Highway Tractors175	Off-Highway Tractors	175	0	0	0	0	67107.18484	20.83227654	21121.13347	3.177253008	0	0	0	0
Off-Highway Tractors300	Off-Highway Tractors	300	0	0	0	0	30096.25184	8.137701602	6420.408021	4.687591776	0	0	0	0
Off-Highway Tractors600	Off-Highway Tractors	600	0	0	0	0	79404.43442	10.5695656	9715.703118	8.17279341	0	0	0	0
Off-Highway Tractors750	Off-Highway Tractors	750	0	0	0	0	6489.016733	0.688958964	507.764008	12.77959176	0	0	0	0
Off-Highway Tractors9999	Off-Highway Tractors	9999	0	0	0	0	5773.837278	0.230305544	182.6857674	31.6052934	0	0	0	0
Off-Highway Trucks25	Off-Highway Trucks	25	0	0	0	0	0	0	0	0	0	0	0	0
Off-Highway Trucks50	Off-Highway Trucks	50	0	0	0	0	631.6244388	1.705800356	1054.204318	0.599148029	0	0	0	0
Off-Highway Trucks75	Off-Highway Trucks	75	0	0	0	0	706.1647749	0.853475903	455.6765463	1.549706213	0	0	0	0
Off-Highway Trucks100	Off-Highway Trucks	100	0	0	0	0	335.2931844	0.295234677	184.2682082	1.819593231	0	0	0	0
Off-Highway Trucks175	Off-Highway Trucks	175	0	0	0	0	17289.61415	6.364415187	5719.636391	3.022851973	0	0	0	0
Off-Highway Trucks300	Off-Highway Trucks	300	0	0	0	0	40484.09601	12.63405941	9230.267932	4.386015261	0	0	0	0
Off-Highway Trucks600	Off-Highway Trucks	600	0	0	0	0	297776.3916	43.34354977	36007.55822	8.269830178	0	0	0	0
Off-Highway Trucks750	Off-Highway Trucks	750	0	0	0	0	36751.98565	5.629847799	3236.321346	11.35609902	0	0	0	0
Off-Highway Trucks9999	Off-Highway Trucks	9999	0	0	0	0	141052.6788	9.82222133	6572.35228	21.46152135	0	0	0	0
Pavers25	Pavers	25	1401.490717	4.808546076	0	0	6.433766965	0.856782691	0	0	0	0	0	0
Pavers50	Pavers	50	2573.25	2.8	1098.65	2.342192691	1367.066644	4.363106396	1545.612107	0.88448236	0	0	0	0
Pavers75	Pavers	75	0	0	0	0	6960.143687	11.31833258	4407.427422	1.579185094	0	0	0	0
Pavers100	Pavers	100	2303.15	1.54	594.95	3.871165644	7524.082553	8.693777602	3783.038619	1.988899219	0	0	0	0
Pavers175	Pavers	175	0	0	0	0	25313.17334	15.38586655	8533.351503	2.966381185	0	0	0	0
Pavers300	Pavers	300	0	0	0	0	30737.17319	11.38345771	6368.006701	4.826812319	0	0	0	0
Pavers600	Pavers	600	0	0	0	0	5443.646569	1.181376401	684.9936251	7.947003256	0	0	0	0
Pavers750	Pavers	750	0	0	0	0	223.8804781	0.032803853	16.77292774	13.34772805	0	0	0	0
Pavers9999	Pavers	9999	0	0	0	0	5129.770573	0.229626971	124.6052859	41.16816182	0	0	0	0
Paving Equipment25	Paving Equipment	25	1397.039207	10.56823043	0	0	10.93467477	2.130950253	0	0	0	0	0	0
Paving Equipment50	Paving Equipment	50	2996.65	7.65	1339.55	2.237057221	3529.855693	12.07232309	4671.046161	0.755688463	0	0	0	0
Paving Equipment75	Paving Equipment	75	0	0	0	0	2564.683422	4.756558685	1940.044791	1.321971242	0	0	0	0
Paving Equipment100	Paving Equipment	100	1233.7	1.95	346.75	3.557894737	4280.17136	5.415527557	2311.533623	1.851658707	0	0	0	0
Paving Equipment175	Paving Equipment	175	0	0	0	0	28102.95124	17.48643469	11423.81999	2.460030994	0	0	0	0
Paving Equipment300	Paving Equipment	300	0	0	0	0	12658.56482	5.545429063	2975.551624	4.25419096	0	0	0	0
Paving Equipment600	Paving Equipment	600	0	0	0	0	30002.13016	8.007369944	4662.694758	6.434504448	0	0	0	0
Paving Equipment750	Paving Equipment	750	0	0	0	0	6511.924956	1.082527149	563.5660026	11.55485768	0	0	0	0
Paving Equipment9999	Paving Equipment	9999	0	0	0	0	4081.728443	0.426450089	225.019072	18.13947772	0	0	0	0
Rollers25	Rollers	25	4281.99836	23.1126826	0	0	76.74756998	16.88455609	0	0	0	0	0	0
Rollers50	Rollers	50	3376.25	1.97	1219.1	2.769461078	34112.7385	122.6961344	44397.46613	0.76834877	0	0	0	0
Rollers75	Rollers	75	0	0	0	0	13559.74689	24.93196003	9360.136821	1.448669731	0	0	0	0
Rollers100	Rollers	100	10471.85	3.7	2314.1	4.525236593	21136.03256	29.59738009	11175.22773	1.891329024	0	0	0	0
Rollers175	Rollers	175	0	0	0	0	121507.7275	80.18106035	47618.76545	2.551677398	0	0	0	0
Rollers300	Rollers	300	0	0	0	0	10457.7437	5.321197783	2390.324457	4.375031042	0	0	0	0
Rollers600	Rollers	600	0	0	0	0	8459.551114	2.299394534	1135.743082	7.448472501	0	0	0	0
Rollers750	Rollers	750	0	0	0	0	204.4700364	0.032803853	14.87679614	13.7442252	0	0	0	0
Rollers9999	Rollers	9999	0	0	0	0	9192.882796	0.426450089	205.3607941	44.7645464	0	0	0	0
Rough Terrain Forklifts25	Rough Terrain Forklifts	25	0	0	0	0	0	0	0	0	0	0	0	0
Rough Terrain Forklifts50	Rough Terrain Forklifts	50	1116.9	0.8	328.5	3.4	1087.325463	4.067677772	1097.608367	0.990631536	0	0	0	0
Rough Terrain Forklifts75	Rough Terrain Forklifts	75	0	0	0	0	43196.69267	83.09469664	27212.26008	1.5873982	0	0	0	0
Rough Terrain Forklifts100	Rough Terrain Forklifts	100	23644.7	11.2	4642.8	5.092767296	30238.31262	47.57571415	15166.59565	1.993744234	0	0	0	0
Rough Terrain Forklifts175	Rough Terrain Forklifts	175	1335.9	0.3	116.8	11.4375	194378.309	166.9081798	79562.51515	2.443089043	0	0	0	0
Rough Terrain Forklifts300	Rough Terrain Forklifts	300	0	0	0	0	1659.633898	1.017343001	387.0735444	4.287644873	0	0	0	0
Rough Terrain Forklifts600	Rough Terrain Forklifts	600	0	0	0	0	472.9152522	0.164041881	69.38339743	6.815971395	0	0	0	0
Rough Terrain Forklifts750	Rough Terrain Forklifts	750	0	0	0	0	154.8506958	0.032826469	12.27444973	12.61569351	0	0	0	0
Rough Terrain Forklifts9999	Rough Terrain Forklifts	9999	0	0	0	0	0	0	0	0	0	0	0	0
Rubber Tired Dozers25	Rubber Tired Dozers	25	0	0	0	0	0	0	0	0	0	0	0	0
Rubber Tired Dozers50	Rubber Tired Dozers	50	0	0	0	0	321.0634018	0.59171062	223.797357	1.434616593	0	0	0	0
Rubber Tired Dozers75	Rubber Tired Dozers	75	0	0	0	0	706.0056842	0.985006124	454.3882216	1.553749967	0	0	0	0
Rubber Tired Dozers100	Rubber Tired Dozers	100	0	0	0	0	1476.130467	1.641212998	720.4028175	2.049034833	0	0	0	0
Rubber Tired Dozers175	Rubber Tired Dozers	175	0	0	0	0	4594.042123	2.723773885	1591.775139	2.886112498	0	0	0	0
Rubber Tired Dozers300	Rubber Tired Dozers	300	0	0	0	0	5750.983865	2.199871728	1250.685285	4.598266194	0	0	0	0
Rubber Tired Dozers600	Rubber Tired Dozers	600	0	0	0	0	30441.25975	8.035381647	4305.292144	7.07066065	0	0	0	0
Rubber Tired Dozers750	Rubber Tired Dozers	750	0	0	0	0	1069.703062	0.164277716	84.0219232	12.73123753	0	0	0	0
Rubber Tired Dozers9999	Rubber Tired Dozers	9999	0	0	0	0	2587.369974	0.164019265	97.95997995	26.41252045	0	0	0	0
Scrapers25	Scrapers	25	0	0	0	0	0	0	0	0	0	0	0	0
Scrapers50	Scrapers	50	0	0	0	0	91.238006	0.164454026	39.21714123	2.326482837	0	0	0	0
Scrapers75	Scrapers	75	0	0	0	0	650.9627412	1.280021344	335.5249775	1.940131987	0	0	0	0
Scrapers100	Scrapers	100	0	0	0	0	790.3398317	1.017915655	315.6570041	2.503793109	0	0	0	0
Scrapers175	Scrapers	175	0	0	0	0	6391.823598	6.169959894	1727.12593	3.700843978	0	0	0	0
Scrapers300	Scrapers	300	0	0	0	0	93463.58938	48.72147692	15544.6403	6.012592609	0	0	0	0
Scrapers600	Scrapers	600	0	0	0	0	329187.6508	101.7627979	32989.33346	9.978608728	0	0	0	0
Scrapers750	Scrapers	750	0	0	0	0	53625.07689	15.35503555	4167.445163	12.86761428	0	0	0	0
Scrapers9999	Scrapers	9999	0	0	0	0	0	0	0	0	0	0	0	0
Skid Steer Loaders25	Skid Steer Loaders	25	10692.82153	59.61810418	0	0	1261.280215	223.6033796	0	0	0	0	0	0
Skid Steer Loaders50	Skid Steer Loaders	50	15983.35	26.94	8358.5	1.912227074	33222.11498	96.51573503	37324.33774	0.890092551	0	0	0	0
Skid Steer Loaders75	Skid Steer Loaders	75	0	0	0	0	236154.0783	376.0045244	169356.8311	1.3944172	0	0	0	0
Skid Steer Loaders100	Skid Steer Loaders	100	21352.5	16.12	4996.85	4.273192111	119906.4376	146.7335286	68882.81978	1.740730678	0	0	0	0
Skid Steer Loaders175	Skid Steer Loaders	175	0	0	0	0	35228.826	25.42394067	16831.90329	2.09297935	0	0	0	0
Skid Steer Loaders300	Skid Steer Loaders	300	0	0	0	0	2881.812563	1.377761826	742.2674318	3.882445113	0	0	0	0
Skid Steer Loaders600	Skid Steer Loaders	600	0	0	0	0	2001.783802	0.393646236	226.9841086	8.819048234	0	0	0	0
Skid Steer Loaders750	Skid Steer Loaders	750	0	0	0	0	192.5989571	0.032803853	16.07310083	11.98268829	0	0	0	0
Skid Steer Loaders9999	Skid Steer Loaders	9999	0	0	0	0	14742.65757	0.721684766	347.152146	42.46742456	0	0	0	0
Surfacing Equipment25	Surfacing Equipment	25	503.2834488	2.087429352	0	0	0	0	0	0	0	0	0	0
Surfacing Equipment50	Surfacing Equipment	50	0	0	0	0	380.6665733	1.115829108	527.0232636	0.722295579	0	0	0	0
Surfacing Equipment75	Surfacing Equipment	75	0	0	0	0	649.8703571	1.08332402	534.7556905	1.215265903	0	0	0	0
Surfacing Equipment100	Surfacing Equipment	100	0	0	0	0	866.4082986	1.018800771	487.2785258	1.778055573	0	0	0	0
Surfacing Equipment175	Surfacing Equipment	175	0	0	0	0	3202.666509	2.460726668	1583.206807	2.022898395	0	0	0	0
Surfacing Equipment300	Surfacing Equipment	300	0	0	0	0	3749.017181	1.87264881	1024.897978	3.657941826	0	0	0	0
Surfacing Equipment600	Surfacing Equipment	600	0	0	0	0	21503.3626	5.610997012	3642.045512	5.90419931	0	0	0	0
Surfacing Equipment750	Surfacing Equipment	750	0	0	0	0	9051.973574	1.672996503	941.6850684	9.612527455	0	0	0	0
Surfacing Equipment9999	Surfacing Equipment	9999	0	0	0	0	4021.76782	0.658567591	330.9040199	12.15388021	0	0	0	0
Sweepers/Scrubbers25	Sweepers/Scrubbers	25	1558.487249	6.750048346	0	0	3.438794003	0.550310124	0	0	0	0	0	0
Sweepers/Scrubbers50	Sweepers/Scrubbers	50	15359.2	11.28	5821.75	2.638244514	2568.314743	11.07563434	2925.996022	0.877757428	0	0	0	0
Sweepers/Scrubbers75	Sweepers/Scrubbers	75	0	0	0	0	2328.463059	4.281759307	1309.440568	1.778212098	0	0	0	0
Sweepers/Scrubbers100	Sweepers/Scrubbers	100	21808.75	9.42	4865.45	4.482370593	3016.44038	4.598928083	1400.181969	2.154320257	0	0	0	0

Sweepers/Scrubbers175	Sweepers/Scrubbers		175	251.85	0.06	29.2	8.625	693.823068	0.632135314	252.1832092	2.751265916	0	0	0	0
Sweepers/Scrubbers300	Sweepers/Scrubbers		300	0	0	0	0	954.3283606	0.458124194	188.1322727	5.072645681	0	0	0	0
Sweepers/Scrubbers600	Sweepers/Scrubbers		600	0	0	0	0	149.8534856	0.047392158	20.04436435	7.476090685	0	0	0	0
Sweepers/Scrubbers750	Sweepers/Scrubbers		750	0	0	0	0	0	0	0	0	0	0	0	0
Sweepers/Scrubbers9999	Sweepers/Scrubbers		9999	0	0	0	0	300.9157894	0.015797386	5.894499752	51.05026755	0	0	0	0
Tractors/Loaders/Backhoes25	Tractors/Loaders/Backhoes		25	0	0.162889838	0	0	125.0033635	16.05670614	16.49746378	7.57712611	0	0	0	0
Tractors/Loaders/Backhoes50	Tractors/Loaders/Backhoes		50	0	0	0	0	34265.59565	105.9729816	41921.85606	0.817368286	0	0	0	0
Tractors/Loaders/Backhoes75	Tractors/Loaders/Backhoes		75	0	0	0	0	155653.1884	250.2955839	111131.6784	1.400619433	0	0	0	0
Tractors/Loaders/Backhoes100	Tractors/Loaders/Backhoes		100	8862.2	3.48	3033.15	2.921780987	364084.791	415.5263466	199080.2611	1.828834205	0	0	0	0
Tractors/Loaders/Backhoes175	Tractors/Loaders/Backhoes		175	0	0	0	0	385786.6514	246.525457	162866.2975	2.36873225	0	0	0	0
Tractors/Loaders/Backhoes300	Tractors/Loaders/Backhoes		300	0	0	0	0	180603.6985	67.85341805	42035.91508	4.296414106	0	0	0	0
Tractors/Loaders/Backhoes600	Tractors/Loaders/Backhoes		600	0	0	0	0	124532.7555	28.90738673	17177.12294	7.249919322	0	0	0	0
Tractors/Loaders/Backhoes750	Tractors/Loaders/Backhoes		750	0	0	0	0	5727.787535	0.853398284	446.8376825	12.81849709	0	0	0	0
Tractors/Loaders/Backhoes9999	Tractors/Loaders/Backhoes		9999	0	0	0	0	23102.97164	1.148134855	633.2891744	36.48091989	0	0	0	0
Trenchers25	Trenchers		25	8683.006372	28.43642314	0	0	113.7757815	11.40994351	0	0	0	0	0	0
Trenchers50	Trenchers		50	16045.4	17.97	7230.65	2.219081272	10515.67783	28.47541849	8852.863601	1.187827838	0	0	0	0
Trenchers75	Trenchers		75	0	0	0	0	3379.616903	6.23446474	1858.523783	1.818441568	0	0	0	0
Trenchers100	Trenchers		100	9942.6	5.98	2401.7	4.139817629	4075.296934	5.118262937	1631.978026	2.497151842	0	0	0	0
Trenchers175	Trenchers		175	0	0	0	0	6652.784809	5.118834449	2097.914547	3.171141941	0	0	0	0
Trenchers300	Trenchers		300	0	0	0	0	3997.656201	1.968920624	706.2806138	5.66015281	0	0	0	0
Trenchers600	Trenchers		600	0	0	0	0	6489.621981	1.740288784	594.7261224	10.91195045	0	0	0	0
Trenchers750	Trenchers		750	0	0	0	0	244.6468419	0.098885245	19.06071049	12.8351376	0	0	0	0
Trenchers9999	Trenchers		9999	0	0	0	0	8356.5195	0.885704031	386.8063766	21.60388247	0	0	0	0
Welders25	Welders		25	0	0	0	0	23853.78267	73.33533326	0	0	0	0	0	0
Welders50	Welders		50	33215	66	13709.4	2.422790202	108561.95	142.26	91370.45	1.18815164	0	0	0	0
Welders75	Welders		75	0	0	0	0	0	0	0	0	0	0	0	0
Welders100	Welders		100	46504.65	67.35	13994.1	3.323161189	0	0	0	0	0	0	0	0
Welders175	Welders		175	5803.5	4.64	963.6	6.022727273	0	0	0	0	0	0	0	0
Welders300	Welders		300	0	0	0	0	0	0	0	0	0	0	0	0
Welders600	Welders		600	0	0	0	0	0	0	0	0	0	0	0	0
Welders750	Welders		750	0	0	0	0	0	0	0	0	0	0	0	0
Welders9999	Welders		9999	0	0	0	0	0	0	0	0	0	0	0	0

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2025
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bi	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consumptior	Total_Activity_	Total_Population	Horsepower_Hours_hhpy
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	100	Gasoline	2.45E-07	2.97E-07	3.53E-07	3.66E-06	9.20E-07	0.000119382	8.98E-09	8.26E-09	1.08E-09	9.73E-10	3.869062992	20.68301492	0.011687114	103.2549551
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	100	Diesel	0.011385749	0.013776756	0.016395478	0.099701582	0.100674668	16.10402582	0.007295965	0.006712287	0.000146961	0.000131775	523811.9541	30811.27875	271.7392294	18722854.13
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	175	Gasoline	7.04E-07	8.52E-07	1.01E-06	1.11E-05	5.22E-06	0.000636289	4.79E-08	4.40E-08	5.78E-09	5.19E-09	20.62146654	57.18007428	0.047915605	550.3318458
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	175	Diesel	0.007986359	0.009663494	0.011500357	0.089579665	0.078685702	15.05341511	0.003699246	0.003403306	0.000137453	0.000123178	489638.9805	39964.09987	175.6693343	19456589.14
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	25	Gasoline	6.01E-06	7.27E-06	8.65E-06	7.02E-05	1.14E-06	0.000186921	1.26E-07	1.16E-07	1.52E-09	1.52E-09	6.057913547	211.6055773	0.084884257	161.6695254
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	25	Diesel	0.000604904	0.000731934	0.000871062	0.002336135	0.001705209	0.215672339	0.000102478	9.43E-05	1.95E-06	1.76E-06	7015.124699	4868.434015	18.1604594	250744.862
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	300	Diesel	0.004288271	0.005188808	0.00617511	0.028198853	0.036026768	12.63660517	0.001640243	0.001509024	0.000115457	0.000103402	411027.958	26338.60461	59.1795333	16332854.24
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	50	Gasoline	5.39E-06	6.52E-06	7.76E-06	0.000172727	1.46E-05	0.003734896	2.81E-07	2.58E-07	3.39E-08	3.05E-08	121.0441495	404.3420411	0.426328832	3230.344908
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	50	Diesel	0.01249472	0.015118612	0.017992397	0.051032493	0.039535346	4.873050951	0.003236897	0.002977945	4.42E-05	3.99E-05	158504.6105	26283.53987	209.9116892	5665503.942
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	600	Diesel	0.005659127	0.006847544	0.008149143	0.044721428	0.048247168	16.85412704	0.002133312	0.001962647	0.000153993	0.000137912	548210.3243	22028.89022	45.71494859	21784015.3
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	75	Gasoline	1.89E-07	2.28E-07	2.72E-07	2.96E-06	7.21E-07	9.49E-05	7.14E-09	6.57E-09	8.59E-10	7.74E-10	3.075942276	63.22524652	0.01358277	82.08868072
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	75	Diesel	0.008301651	0.010044997	0.011954377	0.045217654	0.069439343	6.455230394	0.004348017	0.004000176	5.88E-05	5.28E-05	209967.7984	30593.9767	184.9069711	7504976.584
Sacramento	2025	Agricultural - Agricultural Tractors	Aggregate	750	Diesel	0.000176176	0.000213173	0.000253694	0.001556648	0.001791036	0.379515228	8.18E-05	7.52E-05	3.47E-06	3.11E-06	12344.40477	284.2430115	0.785386185	490524.6965
Sacramento	2025	Agricultural - ATVs	Aggregate	100	Gasoline	6.91E-05	8.36E-05	9.94E-05	0.002677912	0.000267728	0.175464392	1.32E-05	1.21E-05	1.60E-06	1.43E-06	5686.621552	299.3247208	7.044949142	182112.8817
Sacramento	2025	Agricultural - ATVs	Aggregate	175	Gasoline	6.98E-05	8.44E-05	0.000100447	0.003163913	0.000375895	0.244560938	1.84E-05	1.69E-05	2.23E-06	1.99E-06	7925.969955	478.0463063	5.979816323	253827.5544
Sacramento	2025	Agricultural - ATVs	Aggregate	175	Diesel	7.67E-06	9.28E-06	1.10E-05	0.000154215	7.58E-05	0.02804831	3.01E-06	2.77E-06	2.56E-07	2.30E-07	912.3209475	787.2723675	0.43922857	43503.04059
Sacramento	2025	Agricultural - ATVs	Aggregate	25	Gasoline	0.009594396	0.01160922	0.013815931	0.118674316	0.004647515	0.44377429	0.000386278	0.000355376	3.76E-06	3.62E-06	14382.27111	3375.033061	80.89478556	460589.2621
Sacramento	2025	Agricultural - ATVs	Aggregate	25	Diesel	0.000255128	0.000308705	0.000367385	0.001583673	0.001358812	0.198870592	6.31E-05	5.80E-05	1.81E-06	1.63E-06	6468.618147	8504.871289	18.01538788	277452.9897
Sacramento	2025	Agricultural - ATVs	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	506.8441211	10.39330339	61004.98996
Sacramento	2025	Agricultural - ATVs	Aggregate	50	Gasoline	0.000208435	0.000252206	0.000300146	0.010830058	0.000535528	0.338586709	2.55E-05	2.34E-05	3.08E-06	2.76E-06	10973.24907	2808.680858	37.73732095	351416.0365
Sacramento	2025	Agricultural - ATVs	Aggregate	50	Diesel	0.000390139	0.000472069	0.000561801	0.003118554	0.002654463	0.443111177	0.000110105	0.000101297	4.04E-06	3.63E-06	14412.97561	8037.206195	26.50376032	618203.6205
Sacramento	2025	Agricultural - ATVs	Aggregate	75	Gasoline	6.78E-05	8.21E-05	9.77E-05	0.003398542	0.00018432	0.123654905	9.30E-06	8.56E-06	1.12E-06	1.01E-06	4007.529049	1105.927152	7.449802083	128340.2908
Sacramento	2025	Agricultural - Bale Wagons (Self Propelled)	Aggregate	175	Diesel	0.000236946	0.000286705	0.000341202	0.002178452	0.002386436	0.356776321	0.000115456	0.00010622	3.26E-06	2.92E-06	11604.78155	5900.059299	3.351181442	442689.1983
Sacramento	2025	Agricultural - Bale Wagons (Self Propelled)	Aggregate	300	Diesel	2.78E-05	3.36E-05	4.00E-05	0.000152778	0.000289107	0.056897519	1.29E-05	1.18E-05	5.20E-07	4.66E-07	1850.692554	2302.167388	0.465732282	70598.62319
Sacramento	2025	Agricultural - Balers (Self Propelled)	Aggregate	75	Diesel	1.04E-05	1.26E-05	1.50E-05	7.73E-05	9.55E-05	0.012471281	4.80E-06	4.41E-06	1.14E-07	1.02E-07	405.6505072	397.3880839	0.232412197	13919.38032
Sacramento	2025	Agricultural - Combine Harvesters	Aggregate	175	Diesel	0.000112924	0.000136638	0.000162611	0.001106091	0.00111264	0.187588898	5.11E-05	4.70E-05	1.71E-06	1.53E-06	6101.661068	655.1140824	2.2707238	262277.4746
Sacramento	2025	Agricultural - Combine Harvesters	Aggregate	300	Diesel	0.000170397	0.00020618	0.000245371	0.000929146	0.001647251	0.340045228	7.74E-05	7.12E-05	3.11E-06	2.78E-06	11060.57312	3278.497539	2.060745512	475434.3434
Sacramento	2025	Agricultural - Combine Harvesters	Aggregate	600	Diesel	0.000468216	0.000566542	0.000674231	0.003809411	0.004871824	1.033038919	0.000203012	0.000186771	9.44E-06	8.45E-06	33601.41997	8613.24679	4.092698898	1444343.683
Sacramento	2025	Agricultural - Combine Harvesters	Aggregate	750	Diesel	0.000627931	0.000759797	0.000904221	0.00490789	0.006951967	1.395523516	0.000288171	0.000265117	1.27E-05	1.14E-05	45391.8733	2214.384824	3.800816297	1951151.635
Sacramento	2025	Agricultural - Combine Harvesters	Aggregate	9999	Diesel	1.48E-05	1.79E-05	2.13E-05	0.000114807	0.00020985	0.027630833	6.64E-06	6.11E-06	2.52E-07	2.26E-07	898.7417748	1644.855051	0.05229165	38632.05817
Sacramento	2025	Agricultural - Construction Equipment	Aggregate	100	Diesel	0.000263757	0.000319146	0.00037981	0.002064995	0.002302419	0.323844222	0.000169576	0.00015601	2.95E-06	2.65E-06	10533.60671	5418.293679	6.963511311	451809.1193
Sacramento	2025	Agricultural - Construction Equipment	Aggregate	175	Diesel	0.000698059	0.000844651	0.001005205	0.007615857	0.007859596	1.3244243	0.000335776	0.000308913	1.21E-05	1.08E-05	43079.24543	7878.60742	27.69185704	2054187.369
Sacramento	2025	Agricultural - Construction Equipment	Aggregate	300	Diesel	0.000185161	0.000224045	0.000266632	0.000931996	0.001894536	0.31080588	8.98E-05	8.26E-05	2.84E-06	2.54E-06	10109.51157	4434.705037	2.44933884	482061.1622
Sacramento	2025	Agricultural - Construction Equipment	Aggregate	50	Diesel	4.06E-05	4.91E-05	5.85E-05	0.000192195	0.000151449	0.022183884	9.58E-06	8.81E-06	2.02E-07	1.82E-07	721.5701139	1177.257784	0.723474968	30949.69921
Sacramento	2025	Agricultural - Construction Equipment	Aggregate	600	Diesel	0.000128014	0.000154897	0.000184341	0.001053982	0.001304093	0.220120501	6.00E-05	5.52E-05	2.01E-06	1.80E-06	7159.809046	3638.130249	1.141927918	341407.7752
Sacramento	2025	Agricultural - Construction Equipment	Aggregate	75	Diesel	8.22E-05	9.95E-05	0.000118414	0.000608192	0.000751696	0.098156281	3.77E-05	3.47E-05	8.95E-07	8.03E-07	3192.706829	2983.043946	2.657327336	136942.0839
Sacramento	2025	Agricultural - Cotton Pickers	Aggregate	600	Diesel	5.38E-05	6.51E-05	7.75E-05	0.000422801	0.000575117	0.119487665	2.35E-05	2.16E-05	1.09E-06	9.78E-07	3886.547888	2794.547082	0.526947556	167061.7182
Sacramento	2025	Agricultural - Forage & Silage Harvesters	Aggregate	600	Diesel	0.000108335	0.000131085	0.000156002	0.00096037	0.001047791	0.23414096	4.63E-05	4.26E-05	2.14E-06	1.92E-06	7615.849288	285.7339651	0.618993382	327364.258
Sacramento	2025	Agricultural - Forage & Silage Harvesters	Aggregate	750	Diesel	0.000303998	0.000367837	0.000437757	0.002483613	0.003251169	0.53816694	0.000150218	0.0001382	4.91E-06	4.40E-06	17504.83261	4658.661348	1.337574505	752438.2738
Sacramento	2025	Agricultural - Forage & Silage Harvesters	Aggregate	9999	Diesel	0.000178057	0.000215449	0.000256402	0.001442682	0.002430696	0.283802329	8.41E-05	7.74E-05	2.59E-06	2.32E-06	9231.173249	2267.324175	0.52644232	396798.3152
Sacramento	2025	Agricultural - Forklifts	Aggregate	100	Diesel	0.000334969	0.000405313	0.000482356	0.002723004	0.002678393	0.43803286	0.000194759	0.000179178	4.00E-06	3.58E-06	14247.79438	10395.174	8.872220393	611118.6395
Sacramento	2025	Agricultural - Forklifts	Aggregate	175	Diesel	7.48E-05	9.05E-05	0.00010768	0.000735602	0.000733361	0.124299448	3.39E-05	3.12E-05	1.13E-06	1.02E-06	4043.05964	3114.625965	1.959568096	192788.9408
Sacramento	2025	Agricultural - Forklifts	Aggregate	50	Diesel	0.000379042	0.00045864	0.00054582	0.00185139	0.001496274	0.213672697	9.45E-05	8.70E-05	1.94E-06	1.75E-06	6950.082814	9156.906867	9.095951605	298104.0484
Sacramento	2025	Agricultural - Forklifts	Aggregate	75	Diesel	0.001036536	0.001254208	0.001492611	0.007711411	0.009504244	1.24449016	0.000479675	0.000441301	1.14E-05	1.02E-05	40479.24599	15344.18678	31.73956529	1736242.209
Sacramento	2025	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	175	Diesel	5.01E-05	6.07E-05	7.22E-05	0.000503782	0.00047997	0.083587629	2.30E-05	2.11E-05	7.63E-07	6.84E-07	2718.835631	2587.901323	1.111051	123471.1865
Sacramento	2025	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	300	Diesel	0.000121551	0.000147076	0.000175033	0.000669079	0.00126612	0.249178109	5.63E-05	5.18E-05	2.28E-06	2.04E-06	8104.959195	1924.247996	2.085236569	368072.6108
Sacramento	2025	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	600	Diesel	7.04E-06	8.52E-06	1.01E-05	5.52E-05	7.53E-05	0.015705255	3.07E-06	2.82E-06	1.43E-07	1.29E-07	510.841242	397.3880612	0.077470733	23198.96579
Sacramento	2025	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	75	Diesel	4.15E-06	5.02E-06	5.97E-06	3.07E-05	3.79E-05	0.004949508	1.90E-06	1.75E-06	4.51E-08	4.05E-08	160.9915041	1503.557199	0.109807143	6576.45044
Sacramento	2025	Agricultural - Nut Harvester	Aggregate	100	Diesel	0.001310972	0.001586276	0.0018878	0.009996527	0.010721804	1.562901379	0.000808674	0.00074398	1.43E-05	1.28E-05	50836.13468	17600.16051	26.24514922	1965582.888
Sacramento	2025	Agricultural - Nut Harvester	Aggregate	175	Diesel	0.000771625	0.000933666	0.001111139	0.007288053	0.007707155	1.21180995	0.00036499	0.000335791	1.11E-05	9.92E-06	39416.2643	13319.46591	16.21570555	1694292.454
Sacramento	2025	Agricultural - Nut Harvester	Aggregate	25	Diesel	8.61E-05	0.000104241	0.000124056	0.000407697	0.000344353	0.047057896	1.76E-05	1.62E-05	4.28E-07	3.85E-07	1530.641402	311.3930177	3.773009837	59182.36282
Sacramento	2025	Agricultural - Nut Harvester	Aggregate	300	Diesel	0.000430148	0.00052048	0.000619414	0.002135201	0.004248557	0.674886602	0.00020956	0.000192795	6.16E-06	5.52E-06	21951.88169	3536.991027	4.376110498	943592.9141
Sacramento	2025	Agricultural - Nut Harvester	Aggregate	50	Diesel	0.000503605	0.000609362	0.000725191	0.002340113	0.001821152	0.253457306	0.000125536	0.000115493	2.30E-06	2.07E-06	8244.147651	5525.411886	9.502560944	318760.5786
Sacramento	2025	Agricultural - Nut Harvester	Aggregate	75	Diesel	0.000139205	0.000168438	0.000200455	0.0010533	0.001281566	0.168600364	6.49E-05	5.97E-05	1.54E-06	1.38E-06	5484.025358	3743.606774	3.369257979	212040.2449
Sacramento	2025	Agricultural - Other Harvesters	Aggregate	100	Diesel	0.000649377	0.000785747	0.000935103	0.005046878	0.00520977	0.800386505	0.000386689	0.000355753	7.30E-06	6.55E-06	26033.98826	11007.50902	12.83872619	1006606.076
Sacramento	2025	Agricultural - Other Harvesters	Aggregate	175	Diesel	0.000764088	0.000924547	0.001100287	0.007285612	0.00761077	1.217639993	0.000357615	0.000329005	1.11E-05	9.96E-06	39605.89676	12967.36853	15.92101922	1702443.742
Sacramento	2025	Agricultural - Other Harvesters	Aggregate	300	Diesel	0.000205627	0.000248809	0.000296103	0.00112678	0.002067979	0.416168956	9.44E-05	8.68E-05	3.80E-06	3.41E-06	13536.63216	2582.576414	2.485892885	581866.7541
Sacramento	2025	Agricultural - Other Harvesters	Aggregate	600	Diesel	0.000217044	0.000262624	0.000312544	0.001703244	0.002321764	0.484305407	9.45E-05	8.70E-05	4.42E-06	3.96E-06	15752.89089	2298.333338	1.949794949	677131.7534
Sacramento	2025	Agricultural - Other Harvesters	Aggregate	75	Diesel	0.000103292	0.000124984	0.000148741	0.000763954	0.000944211	0.123294873	4.74E-05	4.36E-05	1.12E-06	1.01E-06	4010.384038	3406.783975	2.581148189	155061.7946
Sacramento	2025	Agricultural - Other Harvesters	Aggregate	750	Diesel	1.86E-05	2.25E-05	2.68E-05	0.000145336	0.000205866	0.04132518	8.53E-06	7.85E-06	3.77E-07	3.38E-07	1344.174667	1503.557156	0.109807144	57778.81411
Sacramento	2025	Agricultural - Sprayers/Spray Rigs	Aggregate	100	Diesel	9.95E-05	0.000120384	0.000143267	0.000771202	0.000799711	0.122123201	5.95E-05	5.47E-05	1.11E-06	9.99E-07	3972.273345	1628.734895	2.188739408	162266.0702
Sacramento	2025	Agricultural - Sprayers/Spray Rigs	Aggregate	175	Diesel	0.000410515	0.000496723	0.000591142	0.003913284	0.004083982	0.654088345	0.000191913	0.00017656	5.97E-06	5.35E-06	21275.38155	11276.00933	8.224076043	966184.4075
Sacramento	2025	Agricultural - Sprayers/Spray Rigs	Aggregate	25	Diesel	3.50E-06	4.24E-06	5.04E-06	1.66E-05	1.40E-05	0.001912345	7.15E-07	6.58E-07	1.74E-08	1.56E-08	62.20242157	994.3161605	0.184655983	2540.948604
Sacramento	2025	Agricultural - Sprayers/Spray Rigs	Aggregate	300	Diesel	0.000489457	0.000592243	0.000704818	0.002471176	0.004875827	0.80492848	0.000236616	0.000217686	7.35E-06	6.59E-06	26181.72403	9019.553058	5.743163597	1188997.42
Sacramento	2025	Agricultural - Sprayers/Spray Rigs	Aggregate	50	Diesel	0.000162692	0.000196857	0.000234276	0.000776069	0.00061335	0.089447932	3.88E-05	3.57E-05	8.13E-07	7.32E-07	2909.452354	6400.761305	3.825696238	118850.18
Sacramento	2025	Agricultural - Sprayers/Spray Rigs	Aggregate	600	Diesel	0.000616479	0.00074594	0.00088773	0.005123088	0.006241198	1.092256923	0.000285748	0.000262888	9.97E-06	8.94E-06	35527.5904	3821.234035	5.161496655	1613423.663
Sacramento	2025	Agricultural - Sprayers/Spray Rigs	Aggregate	75	Diesel	0.001664852	0.00201447	0.002397386	0.011207994	0.014593648	1.698019373	0.000889211	0.000818074	1.55E-05	1.39E-05	55231.08668	5964.077249	49.52631724	2256171.876
Sacramento	2025	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	100	Diesel	0.000239303	0.000289556	0.000344596	0.0019486	0.001892419	0.312523222	0.000138976	0.000127858	2.85E-06	2.56E-06	10165.37114	3266.874298	4.504439267	363345.5857
Sacramento	2025	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	175	Diesel	5.89E-05	7.13E-05	8.49E-05	0.000555329	0.000588635	0.092230412	2.79E-05	2.57E-05	8.42E-07	7.55E-07	2999.957458	2637.596521	0.992447822	119208.1141
Sacramento	2025	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	300	Diesel	0.00011189	0.000135387	0.000161121	0.000612278	0.001119199	0.225636731	5.13E-05	4.72E-05	2.06E-06	1.85E-06	7339.234195	2703.349948	1.466624309	291636.2265
Sacramento	2025	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	50	Diesel	0.000137665	0.000166575	0.000198238	0.00065149	0.00051337	0.075197284	3.25E-05	2.99E-05	6.84E-07	6.15E-07	2445.924797	655.1140824	2.270723811	87425.82639
Sacramento	2025	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	75	Diesel	8.92E-05	0.000107927	0.000128443	0.000661808	0.000815975	0.106616678	4.10E-05	3.78E-05	9.73E-07	8.72E-07	3467.896229	1965.272744	2.404048685	123954.6265
Sacramento	2025	Airport Ground Support - A/C Tug Narrow Body	Aggregate	100	Diesel	3.78E-05	4.57E-05	5.44E-05	0.000497791	0.000359363	0.084096398	2.61E-05	2.40E-05	7.97E-07	0	2732.727112	1049.85294	2.081538578	47994.50225
Sacramento	2025	Airport Ground Support - A/C Tug Narrow Body	Aggregate	175	Diesel	9.67E-05	0.000117058	0.000139309	0.001533959	0.000816452	0.265362217	3.84E-05	3.53E-05	2.51E-06	0	8622.991523	2577.736958	3.515262304	176984.8148
Sacramento	2025	Airport Ground Support - A/C Tug Narrow Body	Aggregate	300	Diesel	3.03E-05	3.66E-05	4.36E-05	0.000239734	0.000279925	0.114737796	1.03E-05	9.46E-06	1.09E-06	0	3728.424686	636.6577313	1.057263006	77143.41957
Sacramento	2025	Airport Ground Support - A/C Tug Narrow Body	Aggregate	50	Diesel	1.65E-05	1.99E-05	2.37E-05	0.000140442	0.0001131	0.019731449	4.82E-06	4.43E-06	1.87E-07	0	641.1768761	551.309655	1.305155121	9791.455887
Sacramento	2025	Airport Ground Support - A/C Tug Narrow Body	Aggregate	600	Diesel	2.47E-05	2.99E-05	3.56E-05	0.00020871	0.000140316	0.102268959	6.57E-06	6.04E-06	9.69E-07	0	3323.247675	369.9579281	0.559680677	69724.16113
Sacramento	2025	Airport Ground Support - A/C Tug Narrow Body	Aggregate	75	Diesel	7.53E-05	9.11E-05	0.000108448	0.001181119	0.001031946	0.19840555	1.51E-05	1.38E-05	1.88E-06	0	6447.222978	3092.64783	5.990913	114963.7924
Sacramento	2025	Airport Ground Support - A/C Tug Wide Body	Aggregate	100	Diesel	2.97E-06	3.60E-06	4.28E-06	4.37E-05	3.60E-05	0.007289752	3.05E-06	2.81E-06	6.91E-08	0	236.8817626	96.95070654	0.217287	4223.962142
Sacramento	2025	Airport Ground Support - A/C Tug Wide Body	Aggregate	175	Diesel	4.22E-05	5.11E-05	6.08E-05	0.000840598	0.000337013	0.140420752	1.45E-05	1.34E-05	1.33E-06	0	4562.996824	1170.908482	1.490910677	91582.79333
Sacramento	2025	Airport Ground Support - A/C Tug Wide Body	Aggregate	300	Diesel	9.62E-05	0.000116418	0.000138547	0.000713685	0.000790972	0.336939607	3.25E-05	2.99E-05	3.19E-06	0	10948.9113	1695.552078	2.796377977	222318.5705
Sacramento	2025	Airport Ground Support - A/C Tug Wide Body	Aggregate	50	Diesel	1.12E-06	1.35E-06	1.61E-06	1.25E-05	1.19E-05	0.001644982	5.56E-07	5.12E-07	1.56E-08	0	53.45396596	53.50766871	0.155205	953.1655205
Sacramento	2025	Airport Ground Support - A/C Tug Wide Body	Aggregate	600	Diesel	9.12E-05	0.000110385	0.000131367	0.000676462	0.000664396	0.308674196	3.08E-05	2.83E-05	2.92E-06	0	10030.42186	976.0656143	1.489968	198839.0543
Sacramento	2025	Airport Ground Support - A/C Tug Wide Body	Aggregate	75	Diesel	3.22E-06	3.90E-06	4.64E-06	4.73E-05	4.25E-05	0.007951465	8.43E-07	7.76E-07	7.53E-08	0	258.3842429	126.350264	0.248328	4607.384072
Sacramento	2025	Airport Ground Support - A/C Tug Wide Body	Aggregate	750	Diesel	2.69E-06	3.25E-06	3.87E-06	2.21E-05	1.58E-05	0.010924653	1.01E-06	9.25E-07	1.03E-07	0	354.9984936	18.69745352	0.031041	7037.347556
Sacramento	2025	Airport Ground Support - AirCraft Tractor	Aggregate	75	Diesel	1.68E-06	2.04E-06	2.43E-06	2.70E-05	2.31E-05	0.004521711	4.41E-07	4.06E-07	4.28E-08	0	146.933784	113.8842183	0.217287	2620.052866
Sacramento	2025	Airport Ground Support - Baggage Tug	Aggregate	100	Diesel	0.000101341	0.000122622	0.000145931	0.001145112	0.000785274	0.194795952	5.03E-05	4.63E-05	1.85E-06	0	6329.928451	3235.412031	6.678838651	109587.9289
Sacramento	2025	Airport Ground Support - Baggage Tug	Aggregate	300	Diesel	4.30E-06	5.20E-06	6.19E-06	2.65E-05	5.65E-05	0.011751928	2.06E-06	1.89E-06	1.11E-07	0	381.8809515	109.788488	0.186246	7570.254604
Sacramento	2025	Airport Ground Support - Baggage Tug	Aggregate	50	Diesel	3.61E-05	4.36E-05	5.19E-05	0.00042522	0.000371354	0.063590868	1.25E-05	1.15E-05	6.02E-07	0	2066.396342	2111.404451	5.00140741	32342.30235
Sacramento	2025	Airport Ground Support - Baggage Tug	Aggregate	75	Diesel	6.44E-05	7.79E-05	9.27E-05	0.000789952	0.000795173	0.134612184	2.39E-05	2.20E-05	1.28E-06	0	4374.246395	3250.638553	6.552141681	75807.98794
Sacramento	2025	Airport Ground Support - Belt Loader	Aggregate	100	Diesel	4.10E-05	4.96E-05	5.91E-05	0.000462677	0.000314577	0.078196312	1.95E-05	1.80E-05	7.41E-07	0	2541.002812	1519.592221	3.136352742	44393.7117
Sacramento	2025	Airport Ground Support - Belt Loader	Aggregate	175	Diesel	2.43E-06	2.94E-06	3.50E-06	2.81E-05	2.34E-05	0.004878724	1.02E-06	9.39E-07	4.62E-08	0	158.5349776	78.80100204	0.124164	3142.733723
Sacramento	2025	Airport Ground Support - Belt Loader	Aggregate	300	Diesel	4.44E-07	5.37E-07	6.39E-07	4.36E-06	5.40E-07	0.002162782	4.61E-08	4.24E-08	2.05E-08	0	70.27998031	20.48826621	0.031041	1393.202102
Sacramento	2025	Airport Ground Support - Belt Loader	Aggregate	50	Diesel	3.79E-05	4.58E-05	5.45E-05	0.000473329	0.000399819	0.070220366	1.20E-05	1.10E-05	6.65E-07	0	2281.823056	2802.487291	6.643314281	40056.82275
Sacramento	2025	Airport Ground Support - Belt Loader	Aggregate	75	Diesel	3.95E-05	4.78E-05	5.69E-05	0.000449174	0.000465111	0.076903619	1.50E-05	1.38E-05	7.28E-07	0	2498.996531	2084.956872	4.254657886	42634.14355
Sacramento	2025	Airport Ground Support - Belt Loader	Aggregate	750	Diesel	2.76E-06	3.34E-06	3.97E-06	4.04E-05	3.93E-05	0.001744095	2.01E-06	1.85E-06	1.65E-08	0	56.67468575	5.287040977	0.031041	1123.496208
Sacramento	2025	Airport Ground Support - Bobtail	Aggregate	100	Diesel	5.85E-07	7.08E-07	8.43E-07	5.34E-06	3.96E-06	0.000883506	2.29E-07	2.11E-07	8.37E-09	0	28.70968965	17.29518365	0.031041	511.937436
Sacramento	2025	Airport Ground Support - Bobtail	Aggregate	175	Diesel	1.88E-06	2.27E-06	2.70E-06	1.84E-05	2.13E-05	0.003187129	1.13E-06	1.04E-06	3.02E-08	0	103.5663073	40.78044341	0.093123	2053.05688
Sacramento	2025	Airport Ground Support - Bobtail	Aggregate	50	Diesel	7.48E-08	9.05E-08	1.08E-07	1.17E-06	1.26E-06	0.00016205	4.86E-08	4.47E-08	1.54E-09	0	5.265834998	5.287040977	0.031041	93.89784774
Sacramento	2025	Airport Ground Support - Bobtail	Aggregate	600	Diesel	1.83E-05	2.21E-05	2.63E-05	0.000152891	0.0001414	0.059251689	6.82E-06	6.27E-06	5.61E-07	0	1925.393982	260.4969797	0.434574	38168.23698
Sacramento	2025	Airport Ground Support - Bobtail	Aggregate	75	Diesel	1.38E-06	1.67E-06	1.98E-06	1.30E-05	1.44E-05	0.002116419	4.67E-07	4.29E-07	2.00E-08	0	68.77340007	55.47141615	0.124164	1226.334333
Sacramento	2025	Airport Ground Support - Cargo Loader	Aggregate	100	Diesel	2.14E-05	2.59E-05	3.08E-05	0.000330323	0.000209869	0.057454231	1.58E-05	1.45E-05	5.44E-07	0	1866.985258	1060.303322	2.207041033	30887.62708
Sacramento	2025	Airport Ground Support - Cargo Loader	Aggregate	175	Diesel	0.000145152	0.000175634	0.000209019	0.002465202	0.00111902	0.420260888	4.82E-05	4.43E-05	3.98E-06	0	13656.45088	6303.001222	7.923183769	271529.2885
Sacramento	2025	Airport Ground Support - Cargo Loader	Aggregate	300	Diesel	1.76E-05	2.12E-05	2.53E-05	0.000101954	0.000200774	0.035316077	9.69E-06	8.92E-06	3.35E-07	0	1147.602089	343.7904087	0.589779	22749.60288
Sacramento	2025	Airport Ground Support - Cargo Loader	Aggregate	50	Diesel	3.42E-06	4.14E-06	4.93E-06	1.75E-05	1.45E-05	0.001717365	1.23E-06	1.13E-06	1.63E-08	0	55.80608403	97.11489084	0.217287	995.1073634
Sacramento	2025	Airport Ground Support - Cargo Loader	Aggregate	600	Diesel	1.83E-05	2.21E-05	2.63E-05	0.000130243	0.000142217	0.065951078	5.38E-06	4.95E-06	6.25E-07	0	2143.091787	355.4182594	0.496656	42483.79084
Sacramento	2025	Airport Ground Support - Cargo Loader	Aggregate	75	Diesel	2.63E-05	3.18E-05	3.79E-05	0.000393515	0.000346605	0.066437441	4.86E-06	4.47E-06	6.29E-07	0	2158.896243	1536.375654	2.981103503	37498.85785
Sacramento	2025	Airport Ground Support - Cargo Tractor	Aggregate	100	Diesel	2.22E-05	2.69E-05	3.20E-05	0.000326979	0.00020173	0.055317521	1.42E-05	1.31E-05	5.24E-07	0	1797.552493	1022.92183	2.049684659	31375.82613
Sacramento	2025	Airport Ground Support - Cargo Tractor	Aggregate	175	Diesel	6.53E-06	7.90E-06	9.40E-06	0.000103755	6.32E-05	0.017954428	2.92E-06	2.69E-06	1.70E-07	0	583.43227	227.9576243	0.31041	11565.72699
Sacramento	2025	Airport Ground Support - Cargo Tractor	Aggregate	300	Diesel	1.33E-05	1.61E-05	1.92E-05	7.89E-05	0.000131404	0.033026299	6.17E-06	5.67E-06	3.13E-07	0	1073.195351	277.3712224	0.496656	21274.5936
Sacramento	2025	Airport Ground Support - Cargo Tractor	Aggregate	50	Diesel	2.44E-05	2.95E-05	3.51E-05	0.000381478	0.000328121	0.059873409	7.25E-06	6.67E-06	5.67E-07	0	1945.596861	2415.540024	5.990913	34692.95142
Sacramento	2025	Airport Ground Support - Cargo Tractor	Aggregate	600	Diesel	2.93E-06	3.54E-06	4.21E-06	1.78E-05	3.98E-05	0.009460318	1.13E-06	1.04E-06	8.96E-08	0	307.4146936	38.88358697	0.062082	6094.065416
Sacramento	2025	Airport Ground Support - Cargo Tractor	Aggregate	75	Diesel	5.06E-05	6.12E-05	7.29E-05	0.000686001	0.000636103	0.120881119	1.93E-05	1.78E-05	1.15E-06	0	3928.053036	3121.459751	6.246790946	62571.34366
Sacramento	2025	Airport Ground Support - Forklift	Aggregate	100	Diesel	2.57E-05	3.11E-05	3.71E-05	0.000359071	0.000285894	0.059700773	1.92E-05	1.77E-05	5.66E-07	0	1939.987029	1993.722512	3.446022338	34076.66117
Sacramento	2025	Airport Ground Support - Forklift	Aggregate	175	Diesel	5.55E-05	6.71E-05	7.99E-05	0.000855412	0.000497049	0.145420576	1.93E-05	1.77E-05	1.38E-06	0	4725.466989	3777.788723	5.494257	93675.75965
Sacramento	2025	Airport Ground Support - Forklift	Aggregate	300	Diesel	1.01E-05	1.22E-05	1.45E-05	6.76E-05	0.000106052	0.020741699	5.66E-06	5.20E-06	1.96E-07	0	674.0051424	295.4666611	0.528451048	13132.93885
Sacramento	2025	Airport Ground Support - Forklift	Aggregate	50	Diesel	5.06E-06	6.12E-06	7.28E-06	4.18E-05	3.33E-05	0.005968384	1.53E-06	1.41E-06	5.65E-08	0	193.9436736	359.0443837	0.776622696	2669.08778
Sacramento	2025	Airport Ground Support - Forklift	Aggregate	600	Diesel	4.81E-06	5.82E-06	6.92E-06	4.71E-05	5.40E-05	0.011740338	2.38E-06	2.19E-06	1.11E-07	0	381.5043259	111.80769	0.217287	7562.78853
Sacramento	2025	Airport Ground Support - Forklift	Aggregate	75	Diesel	1.57E-05	1.89E-05	2.25E-05	0.000215516	0.000199887	0.035975398	4.73E-06	4.35E-06	3.41E-07	0	1169.026838	1554.847066	3.104399058	20504.54805
Sacramento	2025	Airport Ground Support - Forklift	Aggregate	750	Diesel	8.29E-07	1.00E-06	1.19E-06	6.61E-06	6.60E-06	0.003579968	3.99E-07	3.67E-07	3.39E-08	0	116.3316955	17.73932929	0.031041	2306.112808
Sacramento	2025	Airport Ground Support - Fuel Truck	Aggregate	300	Diesel	3.27E-06	3.96E-06	4.71E-06	1.78E-05	3.43E-05	0.008635818	1.27E-06	1.17E-06	8.18E-08	0	280.622405	62.73999077	0.093123	5562.945848
Sacramento	2025	Airport Ground Support - Fuel Truck	Aggregate	600	Diesel	8.64E-07	1.05E-06	1.24E-06	5.15E-06	6.58E-06	0.002801534	2.65E-07	2.44E-07	2.65E-08	0	91.036329	15.83041774	0.031041	1804.667622
Sacramento	2025	Airport Ground Support - Generator	Aggregate	100	Diesel	8.53E-08	1.03E-07	1.23E-07	1.48E-06	1.18E-06	0.000260046	5.30E-08	4.88E-08	2.46E-09	0	8.450241974	5.287040977	0.031041	150.6806678
Sacramento	2025	Airport Ground Support - Generator	Aggregate	175	Diesel	7.89E-07	9.55E-07	1.14E-06	1.09E-05	9.48E-06	0.001865923	4.52E-07	4.16E-07	1.77E-08	0	60.63350276	21.08726677	0.031041	1201.974206
Sacramento	2025	Airport Ground Support - Lift	Aggregate	100	Diesel	2.08E-05	2.51E-05	2.99E-05	0.000299829	0.000185567	0.053780706	1.19E-05	1.09E-05	5.09E-07	0	1747.613409	933.6147085	2.054219042	26723.67383
Sacramento	2025	Airport Ground Support - Lift	Aggregate	175	Diesel	1.83E-05	2.22E-05	2.64E-05	0.000311005	0.000157701	0.052824744	6.54E-06	6.01E-06	5.00E-07	0	1716.549269	877.1236991	1.242111338	33933.0965
Sacramento	2025	Airport Ground Support - Lift	Aggregate	300	Diesel	4.02E-06	4.86E-06	5.78E-06	2.62E-05	4.28E-05	0.013430743	1.55E-06	1.43E-06	1.27E-07	0	436.4343245	115.6644219	0.186246	8651.698759
Sacramento	2025	Airport Ground Support - Lift	Aggregate	50	Diesel	1.46E-05	1.76E-05	2.10E-05	0.000218479	0.000189949	0.034710934	5.31E-06	4.88E-06	3.29E-07	0	1127.937845	1132.59702	2.85754302	18009.78232
Sacramento	2025	Airport Ground Support - Lift	Aggregate	75	Diesel	1.93E-05	2.33E-05	2.77E-05	0.000245182	0.000239746	0.041685774	7.19E-06	6.62E-06	3.95E-07	0	1354.58649	1109.044997	2.297034	24154.33754
Sacramento	2025	Airport Ground Support - Misc - A/C Tug Narrow Body	Aggregate	175	Gasoline	0.000345404	0.000317702	0.000380096	0.022273591	0.002251182	0.569462878	4.08E-05	3.08E-05	5.66E-06	8.03E-06	22914.7	2401.7	3.29	312221
Sacramento	2025	Airport Ground Support - Misc - A/C Tug Wide Body	Aggregate	600	Gasoline	0.000164089	0.000150929	0.00018057	0.017395257	0.001566251	0.496821229	3.67E-05	2.77E-05	5.08E-06	6.95E-06	19852.35	565.75	1.09	282875
Sacramento	2025	Airport Ground Support - Misc - Air Conditioner	Aggregate	175	Gasoline	1.38E-07	1.27E-07	1.52E-07	1.60E-05	1.65E-06	0.000510125	3.66E-08	2.76E-08	5.07E-09	1.28E-09	3.65	0	0.09	0
Sacramento	2025	Airport Ground Support - Misc - Air Conditioner	Aggregate	175	Nat Gas	0	0	6.56E-08	6.76E-05	7.30E-06	0.002741409	0	0	0	0	135.05	0	0.65	0
Sacramento	2025	Airport Ground Support - Misc - Air Start Unit	Aggregate	175	Gasoline	1.43E-05	1.31E-05	1.57E-05	0.001544637	0.000158714	0.048254138	3.46E-06	2.61E-06	4.79E-07	6.74E-07	1923.55	178.85	2.41	23250.5
Sacramento	2025	Airport Ground Support - Misc - Baggage Tug	Aggregate	100	Gasoline	0.002778499	0.002555663	0.003057569	0.207029824	0.016508163	5.027548895	0.000350533	0.000264847	4.86E-05	7.11E-05	202896.2	39084.2	44.52	3908420
Sacramento	2025	Airport Ground Support - Misc - Baggage Tug	Aggregate	100	Nat Gas	0	0	8.76E-05	0.036219718	0.003940712	0.825825714	0	0	0	0	45880.5	7365.7	8.89	736570
Sacramento	2025	Airport Ground Support - Misc - Belt Loader	Aggregate	100	Gasoline	0.000673727	0.000619694	0.000741395	0.050870965	0.003974138	1.198857672	8.36E-05	6.32E-05	1.16E-05	1.70E-05	48468.35	17085.65	21.07	1025139
Sacramento	2025	Airport Ground Support - Misc - Belt Loader	Aggregate	100	Nat Gas	0	0	6.30E-06	0.003100876	0.000322998	0.07961282	0	0	0	0	4387.3	1306.7	2.35	78402
Sacramento	2025	Airport Ground Support - Misc - Bobtail	Aggregate	100	Gasoline	0.000446556	0.000410742	0.000491407	0.033273478	0.002653166	0.808020067	5.63E-05	4.26E-05	7.81E-06	1.14E-05	32605.45	6278	7.15	627800
Sacramento	2025	Airport Ground Support - Misc - Bobtail	Aggregate	100	Nat Gas	0	0	1.06E-06	0.000717903	6.53E-05	0.01992054	0	0	0	0	1091.35	178.85	0.2	17885
Sacramento	2025	Airport Ground Support - Misc - Cargo Loader	Aggregate	100	Gasoline	0.000185395	0.000170526	0.000204016	0.013976001	0.001094799	0.330756378	2.31E-05	1.74E-05	3.20E-06	4.68E-06	13366.3	4033.25	5.62	282327.5
Sacramento	2025	Airport Ground Support - Misc - Cargo Loader	Aggregate	100	Nat Gas	0	0	8.82E-06	0.003329729	0.000371496	0.070204169	0	0	0	0	3923.75	978.2	0.94	68474
Sacramento	2025	Airport Ground Support - Misc - Cargo Tractor	Aggregate	100	Gasoline	0.004999593	0.004598626	0.005501748	0.47895351	0.024781231	5.619681218	0.000391818	0.00029604	4.64E-05	8.47E-05	241801.55	46844.1	34.66	4450189.5
Sacramento	2025	Airport Ground Support - Misc - Cargo Tractor	Aggregate	175	Nat Gas	0	0	3.06E-06	0.002624684	0.000279187	0.100262902	0	0	0	0	5416.6	580.35	3.74	90302.46
Sacramento	2025	Airport Ground Support - Misc - Cart	Aggregate	15	Gasoline	2.38E-05	2.41E-05	2.62E-05	0.001343586	1.46E-05	5.17E-07	5.20E-08	3.93E-08	2.09E-08	2.88E-08	81.86971684	0	1.903462008	0
Sacramento	2025	Airport Ground Support - Misc - Catering Truck	Aggregate	300	Gasoline	0.000694833	0.000639108	0.000764622	0.039449866	0.003958131	0.904901718	6.68E-05	5.04E-05	7.90E-06	1.29E-05	36686.15	3869	3.78	788889.1
Sacramento	2025	Airport Ground Support - Misc - Catering Truck	Aggregate	300	Nat Gas	0	0	3.11E-06	0.002046901	0.00021186	0.069299594	0	0	0	0	3759.5	321.2	0.71	65846
Sacramento	2025	Airport Ground Support - Misc - Deicer	Aggregate	100	Gasoline	5.24E-06	4.82E-06	5.76E-06	0.000196325	3.62E-05	0.012375482	8.63E-07	6.52E-07	1.20E-07	1.68E-07	478.15	62.05	2.69	5770.65
Sacramento	2025	Airport Ground Support - Misc - Forklift	Aggregate	50	Gasoline	0.000194789	0.000179167	0.000214354	0.01822448	0.000436528	0.136841928	9.43E-06	7.13E-06	1.66E-06	2.20E-06	6292.6	3854.4	5.31	192720
Sacramento	2025	Airport Ground Support - Misc - Forklift	Aggregate	50	Nat Gas	0	0	1.28E-05	0.003421423	0.000924908	0.275798481	2.45E-05	0	0	0	14581.75	9026.45	12.41	451322.5
Sacramento	2025	Airport Ground Support - Misc - Fuel Truck	Aggregate	175	Gasoline	1.45E-06	1.33E-06	1.59E-06	0.000167849	1.73E-05	0.005340322	3.83E-07	2.89E-07	5.31E-08	7.42E-08	211.7	62.05	3.29	8066.5
Sacramento	2025	Airport Ground Support - Misc - Fuel Truck	Aggregate	175	Nat Gas	0	0	8.46E-07	0.000517022	5.30E-05	0.016777789	0	0	0	0	912.5	240.9	0.4	33726
Sacramento	2025	Airport Ground Support - Misc - Generator	Aggregate	100	Gasoline	5.27E-05	4.85E-05	5.80E-05	0.00370596	0.000220074	0.047185009	3.29E-06	2.49E-06	3.90E-07	7.06E-07	2014.8	240.9	0.26	25776.3
Sacramento	2025	Airport Ground Support - Misc - Ground Power Unit	Aggregate	175	Gasoline	0.000290035	0.000266775	0.000319166	0.029447055	0.002639657	0.85153492	6.10E-05	4.61E-05	8.46E-06	1.19E-05	34007.05	3328.8	4.16	499320
Sacramento	2025	Airport Ground Support - Misc - Hydrant Truck	Aggregate	175	Gasoline	0.000938699	0.000863415	0.001032981	0.045487781	0.004506873	0.941594369	6.75E-05	5.10E-05	7.99E-06	1.35E-05	38463.7	4869.1	3.17	591595.65
Sacramento	2025	Airport Ground Support - Misc - Lav Cart	Aggregate	15	Gasoline	2.06E-06	2.08E-06	2.27E-06	0.000115888	1.26E-06	4.46E-08	4.49E-09	3.39E-09	1.80E-09	2.48E-09	7.061852088	0	0.164178924	0
Sacramento	2025	Airport Ground Support - Misc - Lav Truck	Aggregate	175	Gasoline	0.000240379	0.000221101	0.000264523	0.018120699	0.001572742	0.458051917	3.28E-05	2.48E-05	4.55E-06	6.46E-06	18432.5	6194.05	5.1	805226.5
Sacramento	2025	Airport Ground Support - Misc - Lav Truck	Aggregate	175	Nat Gas	0	0	3.99E-07	0.000275519	2.87E-05	0.009567974	0	0	0	0	514.65	135.05	0.34	17556.5
Sacramento	2025	Airport Ground Support - Misc - Lift	Aggregate	100	Gasoline	0.000287777	0.000264697	0.000316681	0.016817643	0.00148556	0.409913575	2.86E-05	2.16E-05	3.96E-06	5.80E-06	16556.4	3500.35	9.31	350035
Sacramento	2025	Airport Ground Support - Misc - Lift	Aggregate	100	Nat Gas	0	0	7.14E-07	0.000427566	4.27E-05	0.01213309	0	0	0	0	657	105.85	0.31	10585
Sacramento	2025	Airport Ground Support - Misc - Maint. Truck	Aggregate	175	Gasoline	0.000171939	0.00015815	0.000189209	0.01536625	0.001420981	0.434656083	3.12E-05	2.35E-05	4.32E-06	6.09E-06	17384.95	2945.55	6.54	382921.5
Sacramento	2025	Airport Ground Support - Misc - Other	Aggregate	50	Gasoline	0.000139989	0.000128762	0.00015405	0.010527148	0.000299748	0.104636559	7.21E-06	5.45E-06	1.27E-06	1.61E-06	4609.95	1762.95	9.68	88147.5
Sacramento	2025	Airport Ground Support - Misc - Other	Aggregate	50	Nat Gas	0	0	1.17E-05	0.001586249	0.000470702	0.094614846	0	0	0	0	5047.95	1865.15	1.8	93257.5

Sacramento	2025 Airport Ground Support - Misc - Passenger Stand	Aggregate	175	Gasoline	4.91E-05	4.51E-05	5.40E-05	0.004663012	0.000478321	0.140352295	1.01E-05	7.60E-06	1.24E-06	1.96E-06	5595.45	835.85	4.45	104564.835
Sacramento	2025 Airport Ground Support - Misc - Passenger Stand	Aggregate	175	Nat Gas	0	0	9.00E-09	9.42E-06	1.02E-06	0.000383544	0	0	0	0	3.65	0	0.17	0
Sacramento	2025 Airport Ground Support - Misc - Service Truck	Aggregate	300	Gasoline	0.000858368	0.000789527	0.000944582	0.052431812	0.005281966	1.261005637	9.30E-05	7.03E-05	1.29E-05	1.78E-05	50950.35	15844.65	18.8	2852037
Sacramento	2025 Airport Ground Support - Misc - Service Truck	Aggregate	300	Nat Gas	0	0	1.07E-05	0.006181352	0.000532303	0.176062487	0	0	0	0	9636	2401.7	1.85	432306
Sacramento	2025 Airport Ground Support - Misc - Sweeper	Aggregate	100	Gasoline	6.83E-06	6.28E-06	7.51E-06	0.000395349	3.55E-05	0.009882095	6.89E-07	5.21E-07	8.16E-08	1.36E-07	386.9	149.65	0.42	7976.345
Sacramento	2025 Airport Ground Support - Misc - Sweeper	Aggregate	50	Nat Gas	0	0	9.15E-08	2.51E-05	7.20E-06	0.002094717	0	0	0	0	102.2	51.1	0.15	2299.5
Sacramento	2025 Airport Ground Support - Misc - Water Truck	Aggregate	175	Gasoline	1.43E-05	1.32E-05	1.57E-05	0.001211173	0.000123803	0.035055122	2.51E-06	1.90E-06	3.48E-07	4.87E-07	1390.65	507.35	1.66	76102.5
Sacramento	2025 Airport Ground Support - Other	Aggregate	100	Diesel	7.72E-06	9.34E-06	1.11E-05	0.000106625	8.18E-05	0.017982983	5.79E-06	5.33E-06	1.70E-07	0	584.3601826	349.4980342	0.713943	10420.03091
Sacramento	2025 Airport Ground Support - Other	Aggregate	175	Diesel	2.75E-05	3.32E-05	3.95E-05	0.000432211	0.000234545	0.073289482	9.59E-06	8.82E-06	6.94E-07	0	2381.55452	1075.401498	1.521009	47210.98028
Sacramento	2025 Airport Ground Support - Other	Aggregate	300	Diesel	4.58E-05	5.54E-05	6.60E-05	0.000303674	0.000452863	0.134136927	1.90E-05	1.75E-05	1.27E-06	0	4358.802852	1108.852554	1.831890338	86686.33761
Sacramento	2025 Airport Ground Support - Other	Aggregate	50	Diesel	3.06E-05	3.70E-05	4.41E-05	0.000253336	0.000222411	0.031425144	1.08E-05	9.91E-06	2.98E-07	0	1021.16554	1583.53829	3.600929233	17993.56106
Sacramento	2025 Airport Ground Support - Other	Aggregate	600	Diesel	3.07E-05	3.71E-05	4.42E-05	0.000220122	0.000211007	0.113526242	9.29E-06	8.55E-06	1.08E-06	0	3689.055049	622.3971475	0.93123	73130.34561
Sacramento	2025 Airport Ground Support - Other	Aggregate	75	Diesel	2.63E-05	3.18E-05	3.79E-05	0.000294739	0.000302933	0.050226955	1.18E-05	1.09E-05	4.76E-07	0	1632.133667	1288.520898	2.795403073	27362.87048
Sacramento	2025 Airport Ground Support - Other	Aggregate	750	Diesel	3.39E-06	4.10E-06	4.89E-06	2.17E-05	3.36E-05	0.011541093	1.32E-06	1.21E-06	1.09E-07	0	375.0298165	34.70793863	0.062082	7434.440455
Sacramento	2025 Airport Ground Support - Other	Aggregate	9999	Diesel	1.63E-05	1.97E-05	2.35E-05	0.000154583	0.000356041	0.078851258	8.24E-06	7.58E-06	7.47E-07	0	2562.285381	54.65607921	0.093123	50793.71627
Sacramento	2025 Airport Ground Support - Passenger Stand	Aggregate	175	Diesel	8.39E-07	1.01E-06	1.21E-06	1.47E-05	6.93E-06	0.002342111	3.41E-07	3.13E-07	2.22E-08	0	76.10731033	32.94150114	0.062082	1508.720752
Sacramento	2025 Airport Ground Support - Passenger Stand	Aggregate	300	Diesel	9.60E-07	1.16E-06	1.38E-06	6.34E-06	1.34E-05	0.003265655	4.35E-07	4.00E-07	3.09E-08	0	106.118025	19.12401006	0.031041	2103.641107
Sacramento	2025 Airport Ground Support - Passenger Stand	Aggregate	50	Diesel	5.28E-06	6.39E-06	7.61E-06	3.91E-05	3.37E-05	0.004987809	1.42E-06	1.31E-06	4.72E-08	0	162.0797279	186.248013	0.465615	2890.128083
Sacramento	2025 Airport Ground Support - Passenger Stand	Aggregate	75	Diesel	8.49E-06	1.03E-05	1.22E-05	7.20E-05	8.08E-05	0.011920183	3.00E-06	2.76E-06	1.13E-07	0	387.3484415	319.7438473	0.62082	6907.011898
Sacramento	2025 Cargo Handling Equipment - Port Forklift	Aggregate	175	Diesel	0.0001748	0.0002116	0.000252	0.001727988	0.001486095	0.25587386	0.0001186	0.0001091	0.000002428	5.72E-09	8322.75034	3623.151698	0	0
Sacramento	2025 Cargo Handling Equipment - Port Tractors/Loaders/Backhoes	Aggregate	300	Diesel	0.0001718	0.000207908	0.000247428	0.001214888	0.0001332	0.528107521	0.00001214	0.00001118	0.000005	1.18E-08	17177.63221	2121.452842	0	0
Sacramento	2025 Commercial Harbor Craft - AE - Commercial Fishing	Aggregate	75	Diesel	0.000153014	0.000185147	0.000220341	0.000505323	0.001330027	0.085521195	6.00E-05	5.73E-05	0	0	2895.576035	1880.540816	1.583453988	49420.61304
Sacramento	2025 Commercial Harbor Craft - AE - Excursion	Aggregate	75	Diesel	8.08E-06	9.78E-06	1.16E-05	4.66E-05	0.000202967	0.034862017	4.66E-06	4.45E-06	0	0	1180.357916	963.4008189	5.102426052	20965.52788
Sacramento	2025 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	100	Diesel	6.74E-06	8.15E-06	9.70E-06	2.58E-05	0.000132785	0.0125824	5.51E-06	5.27E-06	0	0	426.0148095	235.4687796	1.541667	7579.740468
Sacramento	2025 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	175	Diesel	6.38E-06	7.72E-06	9.19E-06	2.88E-05	0.000133793	0.014472345	4.14E-06	3.95E-06	0	0	489.6715839	235.4687809	1.54166701	8712.345112
Sacramento	2025 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	50	Diesel	0.000135012	0.000163364	0.000194417	0.000516369	0.002313825	0.214649666	0.000123417	0.000117987	0	0	7251.540378	8882.677015	7.708332963	113826.9887
Sacramento	2025 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	300	Diesel	0.000242503	0.000293429	0.000349205	0.000964535	0.002710753	0.169773767	9.19E-05	8.79E-05	0	0	5748.199023	1578.69655	1.583453982	106562.0203
Sacramento	2025 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	50	Diesel	7.28E-06	8.81E-06	1.05E-05	6.97E-05	0.000141172	0.020404793	6.02E-06	5.75E-06	0	0	690.8653452	1578.696655	1.583454013	11508.69941
Sacramento	2025 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	600	Diesel	0.000105405	0.00012754	0.000151783	0.000533478	0.002974943	0.288910438	5.11E-05	4.89E-05	0	0	9781.92759	1578.696655	1.583454013	181155.4404
Sacramento	2025 Commercial Harbor Craft - ME - Excursion	Aggregate	600	Diesel	2.99E-05	3.61E-05	4.30E-05	0.000130411	0.000814777	0.131200518	8.83E-06	8.44E-06	0	0	4442.186216	1039.186056	5.102426169	82707.39844
Sacramento	2025 Commercial Harbor Craft - ME - Excursion	Aggregate	800	Diesel	0.000344065	0.000416319	0.000495454	0.001505446	0.009019546	1.454991659	0.000106738	0.000102042	0	0	49263.09753	5461.563942	5.102425999	914812.0001
Sacramento	2025 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	600	Diesel	0.000858269	0.001038506	0.001235908	0.002378305	0.017459779	1.470210467	0.000375888	0.000359349	0	0	49777.23459	7876.983949	9.249999946	924362.3093
Sacramento	2025 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	800	Diesel	5.06E-05	6.12E-05	7.29E-05	0.000260258	0.001049246	0.181610363	2.83E-05	2.70E-05	0	0	6147.590479	471.4464404	3.083332969	114160.7551
Sacramento	2025 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	9999	Diesel	0.000240925	0.000291519	0.000346932	0.002278244	0.005298756	1.61136196	0.000183871	0.00017578	0	0	54557.48202	2489.793787	3.083333042	1081068.467
Sacramento	2025 Commercial Harbor Craft - ME - Work Boat	Aggregate	300	Diesel	0.000188061	0.000227554	0.000270808	0.000598653	0.003247741	0.23945083	7.17E-05	6.85E-05	0	0	8107.324553	1960.344748	3.068023	150142.7947
Sacramento	2025 Commercial Harbor Craft - ME - Work Boat	Aggregate	600	Diesel	0.000653214	0.000790388	0.000940628	0.00198813	0.010637158	0.739174294	0.000246895	0.000236032	0	0	25026.95788	3920.688978	6.136045	463484.2713
Sacramento	2025 Commercial Harbor Craft - ME - Work Boat	Aggregate	9999	Diesel	0.006162973	0.007457197	0.008874681	0.026363057	0.052666479	8.758853399	0.002280647	0.002180298	0	0	296557.1955	11762.07079	18.40814081	5816402.512
Sacramento	2025 Construction and Mining - Bore/Drill Rigs	Aggregate	100	Diesel	6.81E-05	8.24E-05	9.80E-05	0.000785033	0.000702591	0.128690223	5.20E-05	4.78E-05	1.22E-06	0	4181.81124	1693.883216	3.3133831	74372.21174
Sacramento	2025 Construction and Mining - Bore/Drill Rigs	Aggregate	175	Diesel	0.000372252	0.000450425	0.000536043	0.005424809	0.003539397	0.923996084	0.000162433	0.000149438	8.75E-06	0	30025.41397	8536.743393	13.127827	597388.3296
Sacramento	2025 Construction and Mining - Bore/Drill Rigs	Aggregate	300	Diesel	0.000435513	0.000526971	0.000627139	0.002592914	0.004633784	1.098881318	0.00019999	0.000183991	1.04E-05	0	35708.34015	6291.824268	10.27144717	711158.0747
Sacramento	2025 Construction and Mining - Bore/Drill Rigs	Aggregate	50	Diesel	4.50E-05	5.44E-05	6.48E-05	0.000372767	0.00030981	0.043606862	1.63E-05	1.50E-05	4.13E-07	0	1417.012604	1272.356142	2.689915946	25267.49012
Sacramento	2025 Construction and Mining - Bore/Drill Rigs	Aggregate	600	Diesel	0.000574882	0.000695607	0.00082783	0.004575897	0.005636862	1.58058782	0.00024829	0.000228426	1.50E-05	0	51361.47696	5077.072009	8.827523752	1030996.56
Sacramento	2025 Construction and Mining - Bore/Drill Rigs	Aggregate	75	Diesel	7.91E-05	9.57E-05	0.000113893	0.001011095	0.000981095	0.168327065	3.21E-05	2.95E-05	1.59E-06	0	5469.817334	3051.463009	6.265823785	97095.71431
Sacramento	2025 Construction and Mining - Bore/Drill Rigs	Aggregate	750	Diesel	0.000208246	0.000251978	0.000299875	0.001272382	0.002115679	0.656712658	8.57E-05	7.88E-05	6.22E-06	0	21339.99239	1294.807052	2.29626971	423035.4382
Sacramento	2025 Construction and Mining - Bore/Drill Rigs	Aggregate	9999	Diesel	6.49E-05	7.86E-05	9.35E-05	0.000403257	0.00108147	0.215728348	2.44E-05	2.25E-05	2.04E-06	0	7010.13032	325.9331238	0.557665501	138966.0079
Sacramento	2025 Construction and Mining - Bucket	Aggregate	100	Diesel	5.34E-06	6.46E-06	7.69E-06	6.06E-05	5.23E-05	0.009952594	3.80E-06	3.50E-06	9.43E-08	0	323.4112706	184.8823121	0.360842383	5766.914887
Sacramento	2025 Construction and Mining - Bucket	Aggregate	175	Diesel	5.40E-06	6.53E-06	7.78E-06	9.65E-05	4.48E-05	0.016152079	1.81E-06	1.67E-06	1.53E-07	0	524.8646281	213.1848724	0.360842383	10404.70558
Sacramento	2025 Construction and Mining - Bucket	Aggregate	300	Diesel	1.30E-05	1.58E-05	1.88E-05	9.15E-05	7.60E-05	0.042018393	3.68E-06	3.39E-06	3.98E-07	0	1365.395002	289.6476835	0.426450089	27067.04211
Sacramento	2025 Construction and Mining - Bucket	Aggregate	50	Diesel	2.55E-06	3.09E-06	3.68E-06	2.60E-05	2.32E-05	0.003436786	9.10E-07	8.37E-07	3.26E-08	0	111.6789599	128.8847486	0.295234677	1991.405726
Sacramento	2025 Construction and Mining - Bucket	Aggregate	75	Diesel	3.89E-06	4.71E-06	5.60E-06	5.80E-05	5.34E-05	0.009766956	1.14E-06	1.05E-06	9.25E-08	0	317.3789334	218.779006	0.426450089	5659.349139
Sacramento	2025 Construction and Mining - Bucket	Aggregate	750	Diesel	7.55E-06	9.13E-06	1.09E-05	6.50E-05	5.14E-05	0.033241387	2.92E-06	2.69E-06	3.15E-07	0	1080.184684	75.53671273	0.131215412	21413.14732
Sacramento	2025 Construction and Mining - Compactor	Aggregate	100	Diesel	1.10E-06	1.33E-06	1.58E-06	2.76E-05	1.64E-05	0.004716821	1.30E-06	1.20E-06	4.47E-08	0	153.2739295	89.55253326	0.196823118	2733.107303
Sacramento	2025 Construction and Mining - Compactor	Aggregate	175	Diesel	2.22E-05	2.69E-05	3.20E-05	0.000480266	0.000169673	0.081286569	6.63E-06	6.10E-06	7.70E-07	0	2641.421255	1066.013131	1.574584944	52362.47405
Sacramento	2025 Construction and Mining - Compactor	Aggregate	300	Diesel	5.62E-06	6.80E-06	8.09E-06	4.17E-05	3.57E-05	0.020728671	1.63E-06	1.50E-06	1.96E-07	0	673.5817717	157.255031	0.262430824	13352.8145
Sacramento	2025 Construction and Mining - Compactor	Aggregate	50	Diesel	3.19E-06	3.86E-06	4.59E-06	3.50E-05	2.95E-05	0.005019939	7.73E-07	7.11E-07	4.76E-08	0	163.1237935	240.8101034	0.557665501	2908.745361
Sacramento	2025 Construction and Mining - Compactor	Aggregate	600	Diesel	1.31E-05	1.58E-05	1.89E-05	0.000102052	0.000100249	0.053505131	3.56E-06	3.27E-06	5.07E-07	0	1738.658572	217.2530869	0.360842383	34466.46921
Sacramento	2025 Construction and Mining - Compactor	Aggregate	75	Diesel	2.03E-06	2.46E-06	2.92E-06	3.15E-05	2.81E-05	0.005392039	4.62E-07	4.25E-07	5.11E-08	0	175.2152425	128.7220779	0.295234677	3124.354288
Sacramento	2025 Construction and Mining - Compactor	Aggregate	9999	Diesel	2.65E-06	3.20E-06	3.81E-06	2.97E-05	5.14E-05	0.015637862	9.11E-07	8.38E-07	1.48E-07	0	508.1550661	17.77301747	0.032803853	10073.46193
Sacramento	2025 Construction and Mining - Concrete Mixer	Aggregate	175	Diesel	1.30E-06	1.57E-06	1.87E-06	2.85E-05	9.66E-06	0.004614978	4.33E-07	3.98E-07	4.37E-08	0	149.9645238	62.77378101	0.098411559	2972.836488
Sacramento	2025 Construction and Mining - Concrete Mixer	Aggregate	300	Diesel	1.23E-06	1.48E-06	1.77E-06	1.13E-05	6.70E-06	0.005513214	2.86E-07	2.63E-07	5.22E-08	0	179.1528406	42.70627654	0.065607706	3551.453957
Sacramento	2025 Construction and Mining - Concrete Mixer	Aggregate	50	Diesel	8.11E-07	9.81E-07	1.17E-06	1.38E-05	1.17E-05	0.002300678	1.27E-07	1.17E-07	2.18E-08	0	74.7609492	135.6432073	0.32803853	1333.101441
Sacramento	2025 Construction and Mining - Concrete Mixer	Aggregate	600	Diesel	1.21E-06	1.46E-06	1.74E-06	7.89E-06	1.37E-05	0.004164583	4.22E-07	3.88E-07	3.95E-08	0	135.3288354	22.24464743	0.032803853	2682.704479
Sacramento	2025 Construction and Mining - Concrete Mixer	Aggregate	75	Diesel	3.61E-07	4.37E-07	5.20E-07	4.24E-06	3.31E-06	0.000643186	6.20E-08	5.70E-08	6.09E-09	0	20.90042947	17.54644296	0.032803853	372.6864485
Sacramento	2025 Construction and Mining - Concrete Pump	Aggregate	100	Diesel	1.88E-06	2.28E-06	2.71E-06	2.46E-05	2.00E-05	0.004025261	1.29E-06	1.19E-06	3.81E-08	0	130.8015565	70.18647934	0.131215412	2332.39071
Sacramento	2025 Construction and Mining - Concrete Pump	Aggregate	175	Diesel	2.00E-05	2.42E-05	2.87E-05	0.000425632	0.000143063	0.07063607	5.09E-06	4.68E-06	6.69E-07	0	2295.331431	842.8272887	1.049723296	45501.72839
Sacramento	2025 Construction and Mining - Concrete Pump	Aggregate	300	Diesel	6.85E-06	8.29E-06	9.86E-06	6.14E-05	2.62E-05	0.0284183	1.58E-06	1.46E-06	2.69E-07	0	923.4576195	245.6200737	0.393646236	18306.25295
Sacramento	2025 Construction and Mining - Concrete Pump	Aggregate	50	Diesel	3.30E-07	3.99E-07	4.75E-07	2.72E-06	2.36E-06	0.000383022	8.49E-08	7.81E-08	3.63E-09	0	12.44636321	12.58149591	0.032803853	221.9375879
Sacramento	2025 Construction and Mining - Concrete Pump	Aggregate	600	Diesel	2.21E-05	2.68E-05	3.18E-05	0.000123831	0.000299458	0.065705222	8.96E-06	8.24E-06	6.22E-07	0	2135.102667	304.1930266	0.590469354	42325.41772
Sacramento	2025 Construction and Mining - Concrete Pump	Aggregate	75	Diesel	2.35E-06	2.84E-06	3.38E-06	2.83E-05	2.75E-05	0.004689866	8.91E-07	8.19E-07	4.44E-08	0	152.3979986	114.4663268	0.229626971	2717.488124
Sacramento	2025 Construction and Mining - Crane less than 35ton	Aggregate	100	Diesel	2.00E-06	2.42E-06	2.88E-06	3.58E-05	2.76E-05	0.00650674	1.87E-06	1.72E-06	6.16E-08	0	211.4376506	143.4470374	0.688880913	3770.254921
Sacramento	2025 Construction and Mining - Crane less than 35ton	Aggregate	175	Diesel	1.58E-05	1.91E-05	2.27E-05	0.000250063	0.000182653	0.045765164	8.33E-06	7.66E-06	4.34E-07	0	1487.146982	687.800438	2.46180591	26793.96839
Sacramento	2025 Construction and Mining - Crane less than 35ton	Aggregate	300	Diesel	3.01E-06	3.64E-06	4.34E-06	2.27E-05	3.91E-05	0.012366695	1.35E-06	1.24E-06	1.17E-07	0	401.8579153	118.2444876	0.426450089	7966.269911
Sacramento	2025 Construction and Mining - Crane less than 35ton	Aggregate	50	Diesel	1.04E-06	1.26E-06	1.50E-06	1.99E-05	1.93E-05	0.003559948	4.77E-07	4.38E-07	3.37E-08	0	115.6811325	188.537801	1.115331002	2062.770552
Sacramento	2025 Construction and Mining - Crane less than 35ton	Aggregate	600	Diesel	2.68E-06	3.25E-06	3.86E-06	3.10E-05	3.04E-05	0.009588922	1.37E-06	1.26E-06	9.08E-08	0	311.5936907	57.51506431	0.229626971	6176.908175
Sacramento	2025 Construction and Mining - Crane less than 35ton	Aggregate	75	Diesel	1.96E-06	2.37E-06	2.82E-06	3.64E-05	3.29E-05	0.006828119	7.07E-07	6.51E-07	6.47E-08	0	221.8809274	169.8626982	0.787550923	3465.496073
Sacramento	2025 Construction and Mining - Crane less than 35ton	Aggregate	750	Diesel	3.23E-07	3.90E-07	4.65E-07	3.69E-06	3.68E-06	0.002116878	2.06E-07	1.89E-07	2.01E-08	0	68.78832283	7.797976117	0.032803853	1363.632084
Sacramento	2025 Construction and Mining - Crane less than 35ton	Aggregate	9999	Diesel	3.99E-06	4.83E-06	5.74E-06	5.43E-05	5.71E-05	0.00251535	2.86E-06	2.64E-06	2.38E-08	0	81.73674476	5.587297929	0.032803853	1620.316399
Sacramento	2025 Construction and Mining - Cranes	Aggregate	100	Diesel	3.02E-05	3.65E-05	4.34E-05	0.000313013	0.000317812	0.059658993	2.18E-05	2.01E-05	5.65E-07	0	1938.629383	956.5619679	4.95910582	23742.04596
Sacramento	2025 Construction and Mining - Cranes	Aggregate	175	Diesel	0.000198586	0.00024029	0.000285964	0.002435411	0.002349018	0.446915675	0.000116985	0.000107626	4.23E-06	0	14522.60282	5841.537933	22.29793567	246255.2635
Sacramento	2025 Construction and Mining - Cranes	Aggregate	25	Diesel	6.17E-07	7.47E-07	8.89E-07	1.95E-06	1.33E-06	0.000120007	1.14E-07	1.05E-07	1.14E-09	0	3.899640987	11.0244202	0.065607706	69.53653044
Sacramento	2025 Construction and Mining - Cranes	Aggregate	300	Diesel	0.000453624	0.000548885	0.000653218	0.003662204	0.005094446	1.445879873	0.000242997	0.000223557	1.37E-05	0	46984.11872	12755.00091	50.15456856	883224.901
Sacramento	2025 Construction and Mining - Cranes	Aggregate	50	Diesel	4.25E-06	5.14E-06	6.12E-06	3.04E-05	2.62E-05	0.005075509	1.40E-06	1.29E-06	4.81E-08	0	164.9295447	166.5568417	0.853398284	1933.043915
Sacramento	2025 Construction and Mining - Cranes	Aggregate	600	Diesel	0.000505949	0.000612198	0.000728566	0.005482637	0.005749348	2.014861124	0.000237728	0.00021871	1.91E-05	0	65473.26374	10494.95246	40.08003548	1270601.948
Sacramento	2025 Construction and Mining - Cranes	Aggregate	75	Diesel	1.39E-05	1.69E-05	2.01E-05	0.000108251	0.000158527	0.019726713	9.46E-06	8.71E-06	1.87E-07	0	641.0229774	459.2425115	2.52756397	8168.143988
Sacramento	2025 Construction and Mining - Cranes	Aggregate	750	Diesel	6.70E-05	8.10E-05	9.64E-05	0.000652156	0.000841109	0.314190746	3.39E-05	3.12E-05	2.98E-06	0	10209.68312	1086.647465	4.625343273	202392.6576
Sacramento	2025 Construction and Mining - Cranes	Aggregate	9999	Diesel	2.21E-05	2.68E-05	3.19E-05	0.00019103	0.000530287	0.107030743	1.16E-05	1.07E-05	1.01E-06	0	3477.982663	262.6027591	1.082527149	68946.13142
Sacramento	2025 Construction and Mining - Crawler Tractors	Aggregate	100	Diesel	0.000386835	0.000468071	0.000557043	0.003974194	0.003910214	0.669141014	0.000285481	0.000262643	6.34E-06	0	21743.85399	9876.120921	28.15526114	373230.4917
Sacramento	2025 Construction and Mining - Crawler Tractors	Aggregate	175	Diesel	0.000959927	0.001161511	0.001382295	0.014278582	0.010032341	2.41781456	0.000476608	0.00043848	2.29E-05	0	78567.30596	26593.31829	57.81180342	1547784.329
Sacramento	2025 Construction and Mining - Crawler Tractors	Aggregate	300	Diesel	0.001027329	0.001243068	0.001479354	0.007305657	0.01027985	2.993166994	0.000486994	0.000448034	2.84E-05	0	97263.48369	20321.82327	46.83035913	1919002.579
Sacramento	2025 Construction and Mining - Crawler Tractors	Aggregate	50	Diesel	3.97E-05	4.81E-05	5.72E-05	0.000215471	0.000178294	0.025475151	1.34E-05	1.23E-05	2.41E-07	0	827.8194738	771.0750174	2.822070986	12982.88099
Sacramento	2025 Construction and Mining - Crawler Tractors	Aggregate	600	Diesel	0.001592528	0.001926959	0.002293241	0.014135128	0.016013866	5.247469688	0.000668084	0.000614637	4.97E-05	0	170517.443	20508.39819	46.78821676	3437197.882
Sacramento	2025 Construction and Mining - Crawler Tractors	Aggregate	75	Diesel	0.000147912	0.000178973	0.000212993	0.001089663	0.001632746	0.17371258	9.67E-05	8.90E-05	1.65E-06	0	5644.820598	3287.398248	11.1899888	94125.49142
Sacramento	2025 Construction and Mining - Crawler Tractors	Aggregate	750	Diesel	9.09E-05	0.00011001	0.00013092	0.0008592	0.000941337	0.333063022	4.12E-05	3.79E-05	3.16E-06	0	10822.94102	832.7465081	2.1388119	231096.0027
Sacramento	2025 Construction and Mining - Crawler Tractors	Aggregate	9999	Diesel	0.000144189	0.000174468	0.000207632	0.001417678	0.002708636	0.549835536	7.43E-05	6.83E-05	5.21E-06	0	17867.00168	1014.522783	2.529821729	371677.5198
Sacramento	2025 Construction and Mining - Crushing/Processing Equipment	Aggregate	100	Diesel	2.17E-06	2.63E-06	3.13E-06	5.25E-05	2.85E-05	0.00903443	1.97E-06	1.81E-06	8.56E-08	0	293.5753824	169.3820199	0.32803853	5234.895619
Sacramento	2025 Construction and Mining - Crushing/Processing Equipment	Aggregate	175	Diesel	3.08E-05	3.73E-05	4.44E-05	0.000766244	0.000214618	0.129020187	7.43E-06	6.83E-06	1.22E-06	0	4192.533477	1770.865251	2.591504387	83111.09975
Sacramento	2025 Construction and Mining - Crushing/Processing Equipment	Aggregate	300	Diesel	1.57E-05	1.90E-05	2.26E-05	0.000127169	8.66E-05	0.063178502	3.96E-06	3.64E-06	5.98E-07	0	2052.996441	511.9606583	0.885704031	40697.77688
Sacramento	2025 Construction and Mining - Crushing/Processing Equipment	Aggregate	50	Diesel	1.12E-06	1.35E-06	1.61E-06	1.75E-05	1.60E-05	0.002822531	3.72E-07	3.42E-07	2.67E-08	0	91.71863452	109.6621017	0.295234677	1635.482764
Sacramento	2025 Construction and Mining - Crushing/Processing Equipment	Aggregate	600	Diesel	7.62E-05	9.22E-05	0.000109783	0.000677663	0.000290376	0.349229176	1.66E-05	1.53E-05	3.31E-06	0	11348.263	1636.847914	2.788327505	224963.4079
Sacramento	2025 Construction and Mining - Crushing/Processing Equipment	Aggregate	75	Diesel	4.62E-06	5.59E-06	6.65E-06	8.20E-05	7.09E-05	0.014099683	7.00E-07	6.44E-07	1.34E-07	0	458.1716455	333.9118326	0.754488619	8169.897351
Sacramento	2025 Construction and Mining - Crushing/Processing Equipment	Aggregate	750	Diesel	8.28E-06	1.00E-05	1.19E-05	6.35E-05	6.43E-05	0.032902621	2.88E-06	2.65E-06	3.12E-07	0	1069.176396	84.91726741	0.164019265	21194.92346
Sacramento	2025 Construction and Mining - Crushing/Processing Equipment	Aggregate	9999	Diesel	1.33E-05	1.61E-05	1.91E-05	0.000137687	0.000247244	0.071440194	5.87E-06	5.40E-06	6.77E-07	0	2321.461552	137.5220482	0.262430824	46019.72142
Sacramento	2025 Construction and Mining - Excavators	Aggregate	100	Diesel	0.000589484	0.000713275	0.000848857	0.00994148	0.006719019	1.664905878	0.000483812	0.000445107	1.58E-05	0	54101.40697	28204.96907	53.3751394	960333.4024
Sacramento	2025 Construction and Mining - Excavators	Aggregate	175	Diesel	0.003179896	0.003847674	0.00457905	0.056310394	0.02697339	9.394330259	0.001135814	0.001044949	8.90E-05	0	305270.4008	108626.5927	151.6617364	6049611.263
Sacramento	2025 Construction and Mining - Excavators	Aggregate	25	Diesel	3.07E-07	3.71E-07	4.42E-07	9.95E-07	7.96E-07	7.18E-05	6.81E-08	6.27E-08	6.80E-10	0	2.334122029	13.69110071	0.032803853	41.62094615
Sacramento	2025 Construction and Mining - Excavators	Aggregate	300	Diesel	0.003120266	0.003775522	0.004493183	0.021382245	0.026754667	10.0510688	0.001086238	0.000999339	9.52E-05	0	326611.2342	72516.89928	112.993498	6476722.028
Sacramento	2025 Construction and Mining - Excavators	Aggregate	50	Diesel	0.001791514	0.002167732	0.00257978	0.020189072	0.016720267	2.69713178	0.00060521	0.000556793	2.55E-05	0	87643.76775	115823.5849	245.1434516	1562337.255
Sacramento	2025 Construction and Mining - Excavators	Aggregate	600	Diesel	0.003162587	0.00382673	0.004554125	0.024322816	0.021762227	11.60364434	0.000914348	0.0008412	0.000109919	0	377062.4474	52376.7287	78.77122173	7494731.476
Sacramento	2025 Construction and Mining - Excavators	Aggregate	75	Diesel	0.000891092	0.001078221	0.001283173	0.012816008	0.011543553	2.141258337	0.000233944	0.000215229	2.03E-05	0	69580.56324	52792.47043	101.3986198	1237766.189
Sacramento	2025 Construction and Mining - Excavators	Aggregate	750	Diesel	9.45E-05	0.000114319	0.000136049	0.000663254	0.001028694	0.340198672	3.74E-05	3.44E-05	3.22E-06	0	11054.81521	869.0428684	1.64067348	221161.7794
Sacramento	2025 Construction and Mining - Excavators	Aggregate	9999	Diesel	0.000426197	0.000515698	0.000613724	0.003168781	0.007695702	1.640012257	0.000183214	0.000168557	1.55E-05	0	53292.48442	1763.569755	3.052514412	1080125.856
Sacramento	2025 Construction and Mining - Graders	Aggregate	100	Diesel	6.78E-05	8.20E-05	9.76E-05	0.000448196	0.000666581	0.068911334	5.20E-05	4.78E-05	6.53E-07	0	2239.285835	1065.075677	4.03658556	37130.92645
Sacramento	2025 Construction and Mining - Graders	Aggregate	175	Diesel	0.000651896	0.000788794	0.00093873	0.006404949	0.00769902	1.101270971	0.000401577	0.00036945	1.04E-05	0	35785.99233	11218.16185	34.38998308	664811.2158
Sacramento	2025 Construction and Mining - Graders	Aggregate	300	Diesel	0.000998959	0.001208741	0.001438501	0.007701598	0.010362631	3.637163161	0.000420903	0.000387231	3.45E-05	0	118190.2515	24979.50753	64.32142278	2322699.198
Sacramento	2025 Construction and Mining - Graders	Aggregate	50	Diesel	1.50E-05	1.82E-05	2.16E-05	7.42E-05	6.20E-05	0.008453343	4.93E-06	4.53E-06	8.01E-08	0	274.6928605	307.5930355	1.213915532	4552.873546
Sacramento	2025 Construction and Mining - Graders	Aggregate	600	Diesel	0.000198689	0.000240414	0.000286112	0.001724707	0.001542537	0.879372656	6.75E-05	6.21E-05	8.33E-06	0	28575.36786	4021.377586	9.516647944	566862.4019
Sacramento	2025 Construction and Mining - Graders	Aggregate	75	Diesel	2.67E-05	3.23E-05	3.85E-05	0.000187857	0.000284921	0.032356941	1.81E-05	1.66E-05	3.07E-07	0	1051.444434	572.3321618	2.331627499	14323.45096
Sacramento	2025 Construction and Mining - Graders	Aggregate	750	Diesel	6.14E-06	7.43E-06	8.84E-06	6.20E-05	4.40E-05	0.033510122	2.52E-06	2.32E-06	3.17E-07	0	1088.91727	74.5702596	0.196823118	21586.25862
Sacramento	2025 Construction and Mining - Graders	Aggregate	9999	Diesel	5.50E-06	6.65E-06	7.91E-06	4.35E-05	0.000106611	0.02409013	2.19E-06	2.02E-06	2.28E-07	0	782.8129636	50.39839493	0.131215412	15518.16978
Sacramento	2025 Construction and Mining - Hopper Tractor Trailer	Aggregate	300	Diesel	1.23E-06	1.48E-06	1.76E-06	1.22E-05	1.52E-06	0.00609181	1.29E-07	1.19E-07	5.77E-08	0	197.9544376	46.26199206	0.065607706	3924.169264
Sacramento	2025 Construction and Mining - Hopper Tractor Trailer	Aggregate	600	Diesel	1.33E-06	1.61E-06	1.92E-06	1.03E-05	8.19E-06	0.00526576	3.90E-07	3.59E-07	4.99E-08	0	171.1117779	28.98671867	0.065607706	3392.051159
Sacramento	2025 Construction and Mining - Misc - Asphalt Pavers	Aggregate	100	Gasoline	4.52E-05	4.16E-05	4.98E-05	0.002374074	0.000118454	0.056918357	3.97E-06	3.00E-06	5.50E-07	8.07E-07	2303.15	594.95	1.54	36291.95
Sacramento	2025 Construction and Mining - Misc - Asphalt Pavers	Aggregate	15	Gasoline	0.000152437	0.000153961	0.000167747	0.005048652	0.000113723	1.99E-07	0.000064617	4.88E-05	8.06E-08	1.11E-07	315.7505644	0	2.809954898	0
Sacramento	2025 Construction and Mining - Misc - Asphalt Pavers	Aggregate	25	Gasoline	0.000673406	0.00068014	0.000741042	0.02241609	0.000439856	8.34E-07	0.000270298	0.000204224	3.56E-07	4.92E-07	1401.490717	0	4.808546076	0
Sacramento	2025 Construction and Mining - Misc - Asphalt Pavers	Aggregate	50	Gasoline	9.80E-05	9.01E-05	0.000107789	0.008105693	0.000139375	0.054975977	3.79E-06	2.86E-06	6.68E-07	9.01E-07	2573.25	1098.65	2.8	35156.8
Sacramento	2025 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	100	Gasoline	4.41E-05	4.06E-05	4.85E-05	0.001625351	0.000139212	0.069477285	4.84E-06	3.66E-06	6.71E-07	9.58E-07	2733.85	427.05	3.99	37580.4
Sacramento	2025 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	15	Gasoline	1.99E-05	2.01E-05	2.19E-05	0.000718424	1.49E-05	2.84E-08	9.20E-06	6.95E-06	1.14E-08	1.58E-08	44.7019198	0	0.960146108	0
Sacramento	2025 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	15	Diesel	1.10E-05	1.32E-05	1.58E-05	6.92E-05	8.27E-05	0.000158471	2.91E-06	2.20E-06	1.50E-09	1.30E-09	5.154555528	0	0.988420553	0
Sacramento	2025 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	175	Gasoline	1.03E-05	9.50E-06	1.14E-05	0.000777465	5.38E-05	0.023947879	1.72E-06	1.30E-06	2.38E-07	3.32E-07	949	102.2	0.97	12877.2
Sacramento	2025 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	25	Gasoline	0.000190344	0.000192248	0.000209462	0.006871886	0.000124347	2.56E-07	8.29E-05	6.26E-05	1.09E-07	1.50E-07	427.5468722	0	4.806957962	0
Sacramento	2025 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	25	Diesel	6.68E-05	8.03E-05	9.60E-05	0.000274199	0.000507662	0.0007339	1.71E-05	1.29E-05	6.97E-09	6.00E-09	23.87138918	0	3.75576229	0
Sacramento	2025 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	50	Gasoline	7.65E-06	7.04E-06	8.42E-06	0.000470311	1.32E-05	0.005565679	3.84E-07	2.90E-07	6.77E-08	8.31E-08	237.25	87.6	0.88	2803.2
Sacramento	2025 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	15	Gasoline	0.007151118	0.007222628	0.007869368	0.225238744	0.005192886	8.85E-06	0.002868408	0.002167242	3.65E-06	5.04E-06	14132.37448	0	675.6860314	0
Sacramento	2025 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	15	Diesel	0.000075715	9.11E-05	0.000108842	0.000477693	0.000570308	0.001093281	2.01E-05	1.52E-05	1.04E-08	8.94E-09	35.56089538	0	30.17492833	0
Sacramento	2025 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	25	Gasoline	9.75E-05	9.84E-05	0.000107239	0.003114692	0.000062681	1.16E-07	3.75E-05	2.83E-05	4.98E-08	6.87E-08	195.2408112	0	2.825857014	0
Sacramento	2025 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	25	Diesel	1.95E-05	2.34E-05	2.80E-05	0.000079651	0.000148046	0.000213436	5.12E-06	3.87E-06	2.03E-09	1.74E-09	6.942369383	0	2.683739901	0
Sacramento	2025 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	5	Gasoline	0.003206602	0.003238668	0.00352867	0.086757674	0.001451652	3.27E-06	4.11E-05	3.11E-05	1.43E-06	1.98E-06	5502.355498	0	398.786797	0
Sacramento	2025 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	100	Gasoline	5.86E-05	5.39E-05	6.45E-05	0.00288892	0.000148313	0.136487874	9.52E-06	7.19E-06	1.32E-06	1.87E-06	5347.25	1135.15	1.86	74919.9
Sacramento	2025 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	15	Gasoline	0.005069734	0.005120432	0.005578934	0.164620002	0.003781998	6.50E-06	0.00210695	0.001591918	2.63E-06	3.63E-06	10308.50964	0	99.03513614	0
Sacramento	2025 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	25	Gasoline	0.003163652	0.00319529	0.003481406	0.103260468	0.002066366	0.000003843	0.001245134	0.000940768	1.64E-06	2.27E-06	6464.028348	0	30.98450728	0
Sacramento	2025 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	25	Diesel	1.33E-05	1.60E-05	1.92E-05	5.47E-05	0.000101273	0.000146405	3.41E-06	2.57E-06	1.39E-09	1.20E-09	4.762085968	0	0.995936402	0
Sacramento	2025 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	5	Gasoline	0.000269564	0.00027226	0.000296638	0.007173708	0.000122036	2.70E-07	3.40E-06	2.57E-06	1.18E-07	1.63E-07	455.5470288	0	22.06421382	0
Sacramento	2025 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	50	Gasoline	0.00014268	0.000131237	0.000157011	0.010599281	0.000231702	0.127714711	8.80E-06	6.65E-06	1.55E-06	1.92E-06	5482.3	1981.95	3.24	69368.25
Sacramento	2025 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	50	Diesel	3.19E-05	3.80E-05	4.59E-05	0.000375209	0.000313551	0.050945728	8.69E-06	7.99E-06	6.41E-07	4.17E-07	1657.1	1197.2	2.07	39507.6
Sacramento	2025 Construction and Mining - Misc - Cranes	Aggregate	100	Gasoline	6.80E-05	6.25E-05	7.48E-05	0.003087015	0.000177201	0.066738366	4.65E-06	3.52E-06	6.45E-07	9.53E-07	2719.25	824.9	1.97	61042.6
Sacramento	2025 Construction and Mining - Misc - Cranes	Aggregate	175	Gasoline	3.34E-06	3.07E-06	3.68E-06	0.000158348	1.29E-05	0.004385626	3.14E-07	2.38E-07	4.36E-08	6.39E-08	182.5	32.85	0.07	4106.25
Sacramento	2025 Construction and Mining - Misc - Cranes	Aggregate	50	Gasoline	3.55E-05	3.26E-05	3.90E-05	0.002665646	4.99E-05	0.016874165	1.16E-06	8.79E-07	2.05E-07	2.84E-07	810.3	405.15	0.97	14990.55
Sacramento	2025 Construction and Mining - Misc - Crushing/Proc. Equipment	Aggregate	15	Gasoline	2.92E-05	0.000029451	3.21E-05	0.001010644	2.18E-05	3.99E-08	1.29E-05	9.77E-06	1.61E-08	2.22E-08	63.03082336	0	0.598472578	0
Sacramento	2025 Construction and Mining - Misc - Crushing/Proc. Equipment	Aggregate	25	Gasoline	0.000035817	3.62E-05	3.94E-05	0.001248792	2.34E-05	4.65E-08	1.51E-05	1.14E-05	1.98E-08	2.73E-08	77.8554933	0	0.391894298	0
Sacramento	2025 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	100	Gasoline	3.77E-06	3.47E-06	4.15E-06	0.000142308	1.17E-05	0.005720473	3.99E-07	3.01E-07	5.53E-08	8.06E-08	229.95	87.6	0.74	5781.6
Sacramento	2025 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	15	Gasoline	0.000658942	0.000665532	0.000725126	0.01827342	0.000490102	7.21E-07	0.00023375	0.000176611	2.98E-07	4.12E-07	1156.799342	0	43.4883358	0
Sacramento	2025 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	25	Gasoline	0.000271638	0.000274356	0.000298922	0.007579034	0.000177076	0.000000282	9.14E-05	6.90E-05	1.23E-07	1.69E-07	479.5739174	0	8.051980262	0
Sacramento	2025 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	25	Diesel	9.59E-06	1.15E-05	1.38E-05	0.000039363	7.29E-05	0.000105356	0.00000245	1.85E-06	1.00E-09	8.61E-10	3.426887552	0	1.38512744	0
Sacramento	2025 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	5	Gasoline	0.000177499	0.000179274	0.000195327	0.003995006	8.04E-05	1.50E-07	1.89E-06	1.43E-06	6.81E-08	9.40E-08	257.2553712	0	20.39529706	0
Sacramento	2025 Construction and Mining - Misc - Excavators	Aggregate	25	Diesel	0.000068488	0.000082376	9.85E-05	0.000281161	0.000520552	0.000752533	1.75E-05	1.32E-05	7.14E-09	6.15E-09	24.47747886	0	2.175855349	0
Sacramento	2025 Construction and Mining - Misc - Other	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.477165554	0
Sacramento	2025 Construction and Mining - Misc - Other	Aggregate	15	Diesel	0.000166803	0.000200628	0.000239782	0.001052377	0.001256411	0.002408543	4.42E-05	3.34E-05	2.29E-08	1.97E-08	78.34213405	0	18.07326467	0
Sacramento	2025 Construction and Mining - Misc - Other	Aggregate	175	Gasoline	5.48E-05	5.04E-05	6.03E-05	0.004663543	0.000181916	0.141263284	1.01E-05	7.65E-06	1.40E-06	1.97E-06	5624.65	1029.3	2.77	129691.8
Sacramento	2025 Construction and Mining - Misc - Other	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.477165554	0
Sacramento	2025 Construction and Mining - Misc - Other	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.477165554	0
Sacramento	2025 Construction and Mining - Misc - Other	Aggregate	25	Diesel	3.58E-05	4.31E-05	0.0000515	0.000147074	0.000272298	0.000393646	9.16E-06	6.92E-06	3.74E-09	3.22E-09	12.80403298	0	2.864234234	0
Sacramento	2025 Construction and Mining - Misc - Other	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.477165554	0
Sacramento	2025 Construction and Mining - Misc - Pavers	Aggregate	25	Diesel	1.80E-05	2.17E-05	2.59E-05	7.39E-05	0.000136824	0.000197799	4.60E-06	3.48E-06	1.88E-09	1.62E-09	6.433766965	0	0.856782691	0
Sacramento	2025 Construction and Mining - Misc - Paving Equipment	Aggregate	100	Gasoline	1.40E-05	1.29E-05	1.54E-05	0.000710422	3.58E-05	0.031508803	2.20E-06	1.66E-06	3.04E-07	4.32E-07	1233.7	346.75	1.95	22885.5
Sacramento	2025 Construction and Mining - Misc - Paving Equipment	Aggregate	15	Gasoline	0.013895294	0.014034248	0.015290924	0.428671932	0.010364402	1.69E-05	0.005486518	0.00414537	6.89E-06	9.51E-06	26933.72186	0	475.607335	0
Sacramento	2025 Construction and Mining - Misc - Paving Equipment	Aggregate	25	Gasoline	0.000717206	0.000724378	0.000789242	0.022242892	0.00046841	8.28E-07	0.000268208	0.000202646	3.56E-07	4.91E-07	1397.039207	0	10.56823043	0
Sacramento	2025 Construction and Mining - Misc - Paving Equipment	Aggregate	25	Diesel	3.06E-05	3.68E-05	4.40E-05	0.000125601	0.000232543	0.000336175	7.82E-06	5.91E-06	3.19E-09	2.75E-09	10.93467477	0	2.130950253	0
Sacramento	2025 Construction and Mining - Misc - Paving Equipment	Aggregate	5	Gasoline	0.003756626	0.003794192	0.004133938	0.09047047	0.001700844	3.41E-06	4.29E-05	3.24E-05	1.51E-06	2.09E-06	5791.549832	0	281.312243	0
Sacramento	2025 Construction and Mining - Misc - Paving Equipment	Aggregate	50	Gasoline	7.97E-05	7.33E-05	8.77E-05	0.006069891	0.000128375	0.069315136	4.78E-06	3.61E-06	8.43E-07	1.05E-06	2996.65	1339.55	7.65	49563.35
Sacramento	2025 Construction and Mining - Misc - Plate Compactors	Aggregate	15	Gasoline	0.004910174	0.004959276	0.005403347	0.15037133	0.003665012	5.96E-06	0.001929646	0.001457954	2.42E-06	3.35E-06	9452.599042	0	222.8430023	0
Sacramento	2025 Construction and Mining - Misc - Plate Compactors	Aggregate	15	Diesel	6.51E-05	7.83E-05	9.36E-05	0.000410893	0.000490556	0.000940397	1.73E-05	1.30E-05	8.93E-09	7.69E-09	30.58808192	0	19.01375521	0
Sacramento	2025 Construction and Mining - Misc - Plate Compactors	Aggregate	5	Gasoline	0.002706004	0.002733064	0.002977792	0.063656722	0.001225192	2.40E-06	0.000030191	0.000022811	1.07E-06	1.47E-06	4083.212324	0	200.5357442	0
Sacramento	2025 Construction and Mining - Misc - Rollers	Aggregate	100	Gasoline	0.000320308	0.000294619	0.000352479	0.015455821	0.000775944	0.251015347	1.75E-05	1.32E-05	2.43E-06	3.67E-06	10471.85	2314.1	3.7	173557.5
Sacramento	2025 Construction and Mining - Misc - Rollers	Aggregate	15	Gasoline	0.001383708	0.001397544	0.001522686	0.04521484	0.001032256	1.79E-06	0.0005787	0.00043724	7.23E-07	9.98E-07	2830.215182	0	34.22083524	0
Sacramento	2025 Construction and Mining - Misc - Rollers	Aggregate	15	Diesel	0.00023619	0.000284084	0.000339527	0.001490143	0.001779051	0.003410444	6.26E-05	4.73E-05	3.24E-08	2.79E-08	110.9307431	0	40.63141363	0
Sacramento	2025 Construction and Mining - Misc - Rollers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.042600214	0
Sacramento	2025 Construction and Mining - Misc - Rollers	Aggregate	25	Gasoline	0.002084058	0.002104898	0.002293378	0.068429226	0.001361234	2.55E-06	0.000825132	0.000623434	1.09E-06	1.50E-06	4281.99836	0	23.1126826	0
Sacramento	2025 Construction and Mining - Misc - Rollers	Aggregate	25	Diesel	0.00021474	0.000258285	0.000308692	0.000881563	0.001632157	0.00235952	5.49E-05	4.15E-05	2.24E-08	1.93E-08	76.74756998	0	16.88455609	0
Sacramento	2025 Construction and Mining - Misc - Rollers	Aggregate	5	Gasoline	0.000155492	0.000157047	0.000171109	0.004365542	7.04E-05	1.64E-07	2.07E-06	1.56E-06	7.20E-08	9.93E-08	276.109287	0	21.16611722	0
Sacramento	2025 Construction and Mining - Misc - Rollers	Aggregate	50	Gasoline	0.000172455	0.000158625	0.000189777	0.013803247	0.000223005	0.0666177	4.59E-06	3.47E-06	8.10E-07	1.18E-06	3376.25	1219.1	1.97	45106.7
Sacramento	2025 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	100	Gasoline	0.000590289	0.000542948	0.000649577	0.026780591	0.001539759	0.580839005	4.05E-05	3.06E-05	5.61E-06	8.28E-06	23644.7	4642.8	11.2	394638
Sacramento	2025 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	175	Gasoline	2.52E-05	2.32E-05	2.78E-05	0.001199003	9.78E-05	0.033229558	2.38E-06	1.80E-06	3.30E-07	4.68E-07	1335.9	116.8	0.3	16585.6
Sacramento	2025 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	50	Gasoline	4.80E-05	4.41E-05	5.28E-05	0.003602608	6.76E-05	0.022874575	1.58E-06	1.19E-06	2.78E-07	3.91E-07	1116.9	328.5	0.8	15439.5
Sacramento	2025 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	100	Gasoline	0.000317228	0.000291786	0.00034909	0.015969977	0.000800671	0.305585126	2.13E-05	1.61E-05	2.95E-06	4.40E-06	12552.35	3361.65	6.58	242038.8
Sacramento	2025 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.063695956	0
Sacramento	2025 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.063695956	0
Sacramento	2025 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.063695956	0
Sacramento	2025 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25	Diesel	1.25E-05	1.50E-05	1.79E-05	5.11E-05	9.47E-05	0.000136867	3.18E-06	2.41E-06	1.30E-09	1.12E-09	4.451854873	0	0.5605918	0
Sacramento	2025 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.063695956	0
Sacramento	2025 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	50	Gasoline	5.67E-05	5.22E-05	6.24E-05	0.004638841	7.64E-05	0.025858203	1.78E-06	1.35E-06	3.14E-07	4.41E-07	1259.25	500.05	1.01	20002
Sacramento	2025 Construction and Mining - Misc - Signal Boards	Aggregate	15	Gasoline	0.000173529	0.000175264	0.000190958	0.005882418	0.000129467	2.32E-07	7.53E-05	5.69E-05	9.38E-08	1.30E-07	367.3642754	0	4.46004742	0
Sacramento	2025 Construction and Mining - Misc - Signal Boards	Aggregate	15	Diesel	0.001018027	0.001224462	0.00146343	0.006422825	0.007668075	0.014699719	0.00026967	0.000203751	1.40E-07	1.20E-07	478.1343729	0	166.2451342	0
Sacramento	2025 Construction and Mining - Misc - Signal Boards	Aggregate	5	Gasoline	9.39E-06	9.49E-06	1.03E-05	0.000250422	4.25E-06	9.43E-09	1.19E-07	8.97E-08	4.11E-09	5.68E-09	15.90031296	0	0.632393558	0
Sacramento	2025 Construction and Mining - Misc - Signal Boards	Aggregate	50	Diesel	1.40E-05	1.67E-05	2.02E-05	0.000162763	0.000137407	0.022443052	3.80E-06	3.50E-06	2.83E-07	1.84E-07	730	441.65	0.81	16341.05
Sacramento	2025 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	100	Gasoline	0.000251634	0.000231453	0.000276908	0.013209781	0.000638614	0.542709889	3.78E-05	2.86E-05	5.24E-06	7.48E-06	21352.5	4996.85	16.12	399748
Sacramento	2025 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	15	Gasoline	6.54E-05	6.60E-05	7.19E-05	0.0019014	4.88E-05	7.51E-08	2.43E-05	1.84E-05	3.06E-08	4.22E-08	119.9521958	0	0.961019528	0
Sacramento	2025 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.072802356	0
Sacramento	2025 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	25	Gasoline	0.005637636	0.005694012	0.006203876	0.169916174	0.003681792	6.32E-06	0.002048882	0.001548044	2.72E-06	3.76E-06	10692.82153	0	59.61810418	0
Sacramento	2025 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	25	Diesel	0.003530513	0.004246431	0.005075169	0.014483524	0.026856213	0.038776681	0.000913982	0.000690564	3.68E-07	3.17E-07	1261.280215	0	223.6033796	0
Sacramento	2025 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.072802356	0
Sacramento	2025 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	50	Gasoline	0.000437755	0.000402647	0.000481723	0.034326174	0.000688272	0.366993713	2.53E-05	1.91E-05	4.46E-06	5.60E-06	15983.35	8358.5	26.94	267472
Sacramento	2025 Construction and Mining - Misc - Surfacing Equipment	Aggregate	15	Gasoline	0.008700144	0.008787144	0.009573976	0.23023406	0.006486964	9.09E-06	0.002946736	0.002226424	3.74E-06	5.17E-06	14626.75099	0	152.8695636	0
Sacramento	2025 Construction and Mining - Misc - Surfacing Equipment	Aggregate	25	Gasoline	0.00029789	0.000300868	0.00032781	0.007925264	0.000194508	2.95E-07	9.56E-05	7.22E-05	1.28E-07	1.77E-07	503.2834488	0	2.087429352	0
Sacramento	2025 Construction and Mining - Misc - Surfacing Equipment	Aggregate	5	Gasoline	0.000898032	0.000907012	0.00098823	0.020219372	0.000406616	7.61E-07	9.59E-06	7.25E-06	3.39E-07	4.68E-07	1301.969311	0	51.47712768	0
Sacramento	2025 Construction and Mining - Misc - Tampers/Rammers	Aggregate	15	Gasoline	0.000923793	0.00093303	0.001016579	0.035882518	0.000716549	1.58E-06	0.000511398	0.00038639	5.80E-07	8.00E-07	2223.380744	0	123.8266901	0
Sacramento	2025 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	100	Gasoline	0.000177027	0.00016283	0.000194808	0.012431704	0.000456091	0.214097506	1.49E-05	1.13E-05	2.07E-06	3.10E-06	8862.2	3033.15	3.48	191088.45

Sacramento	2025 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.162889838	0
Sacramento	2025 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.162889838	0
Sacramento	2025 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.162889838	0
Sacramento	2025 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25	Diesel	0.00032773	0.000394187	0.000471117	0.001345417	0.002490953	0.003601035	8.38E-05	6.33E-05	3.42E-08	2.94E-08	117.1300354	0	15.99109843	0
Sacramento	2025 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.162889838	0
Sacramento	2025 Construction and Mining - Misc - Trenchers	Aggregate	100	Gasoline	0.00024514	0.00022548	0.000269762	0.011074095	0.000642515	0.244522496	1.70E-05	1.29E-05	2.36E-06	3.48E-06	9942.6	2401.7	5.98	158512.2
Sacramento	2025 Construction and Mining - Misc - Trenchers	Aggregate	15	Gasoline	0.002479522	0.002504316	0.002728562	0.080272418	0.001849696	3.17E-06	0.001027396	0.000776256	1.28E-06	1.77E-06	5027.624918	0	36.68919432	0
Sacramento	2025 Construction and Mining - Misc - Trenchers	Aggregate	15	Diesel	9.35E-05	0.000112488	0.000134441	0.000590047	0.000704444	0.001350421	2.48E-05	0.000018718	1.28E-08	1.10E-08	43.92483901	0	13.50962435	0
Sacramento	2025 Construction and Mining - Misc - Trenchers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.044524872	0
Sacramento	2025 Construction and Mining - Misc - Trenchers	Aggregate	25	Gasoline	0.00426244	0.004305064	0.004690554	0.138679482	0.002784032	5.16E-06	0.001672224	0.001263458	2.21E-06	3.05E-06	8683.006372	0	28.43642314	0
Sacramento	2025 Construction and Mining - Misc - Trenchers	Aggregate	25	Diesel	0.000318345	0.000382898	0.000457625	0.001306888	0.00241962	0.003497912	8.14E-05	6.15E-05	3.32E-08	2.86E-08	113.7757815	0	11.40994351	0
Sacramento	2025 Construction and Mining - Misc - Trenchers	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.044524872	0
Sacramento	2025 Construction and Mining - Misc - Trenchers	Aggregate	50	Gasoline	0.000701459	0.000645202	0.000771913	0.052455334	0.000993638	0.33871722	2.34E-05	1.76E-05	4.12E-06	5.62E-06	16045.4	7230.65	17.97	216919.5
Sacramento	2025 Construction and Mining - Nurse Rig Other	Aggregate	175	Diesel	4.23E-07	5.12E-07	6.09E-07	6.01E-06	4.40E-06	0.001026419	3.33E-07	3.06E-07	9.72E-09	0	33.35367035	18.36638236	0.032803853	661.1897648
Sacramento	2025 Construction and Mining - Off-Highway Tractors	Aggregate	100	Diesel	0.00020697	0.000250433	0.000298036	0.002357075	0.00205673	0.379908431	0.000146811	0.000135067	3.60E-06	0	12345.19076	5951.667039	9.415334402	219631.5684
Sacramento	2025 Construction and Mining - Off-Highway Tractors	Aggregate	175	Diesel	0.000722576	0.000874317	0.001040509	0.012789194	0.00535756	2.065143085	0.000245049	0.000225445	1.96E-05	0	67107.18484	21121.13347	20.83227654	1332383.762
Sacramento	2025 Construction and Mining - Off-Highway Tractors	Aggregate	300	Diesel	0.000353238	0.000427418	0.000508663	0.002216652	0.003155397	0.926176035	0.00014195	0.000130594	8.77E-06	0	30096.25184	6420.408021	8.137701602	600511.4144
Sacramento	2025 Construction and Mining - Off-Highway Tractors	Aggregate	50	Diesel	0.000558346	0.000675599	0.000804018	0.003999132	0.003284187	0.454233346	0.00017772	0.000163502	4.30E-06	0	14760.39183	16018.2685	26.37809918	256863.2359
Sacramento	2025 Construction and Mining - Off-Highway Tractors	Aggregate	600	Diesel	0.000762979	0.000923205	0.00109869	0.005346128	0.004758584	2.443576184	0.000216123	0.000198833	2.31E-05	0	79404.43442	9715.703118	10.5695656	1606821.201
Sacramento	2025 Construction and Mining - Off-Highway Tractors	Aggregate	75	Diesel	0.000256916	0.000310869	0.00036996	0.002434938	0.002656967	0.398108464	0.000121902	0.00011215	3.77E-06	0	12936.60399	8707.002816	14.24331584	222592.0248
Sacramento	2025 Construction and Mining - Off-Highway Tractors	Aggregate	750	Diesel	6.09E-05	7.37E-05	8.77E-05	0.000448387	0.000395027	0.199691703	2.08E-05	1.91E-05	1.89E-06	0	6489.016733	507.764008	0.688958964	128981.9916
Sacramento	2025 Construction and Mining - Off-Highway Tractors	Aggregate	9999	Diesel	4.62E-05	5.59E-05	6.65E-05	0.000355835	0.000738534	0.177682914	1.76E-05	1.62E-05	1.68E-06	0	5773.837278	182.6857674	0.230305544	126782.9287
Sacramento	2025 Construction and Mining - Off-Highway Trucks	Aggregate	100	Diesel	5.52E-06	6.68E-06	7.95E-06	6.26E-05	5.03E-05	0.010318245	3.22E-06	2.96E-06	9.77E-08	0	335.2931844	184.2682082	0.295234677	5978.787483
Sacramento	2025 Construction and Mining - Off-Highway Trucks	Aggregate	175	Diesel	0.000219133	0.000265151	0.000315551	0.003164406	0.002031107	0.532067128	0.000105443	9.70E-05	5.04E-06	0	17289.61415	5719.636391	6.364415187	342966.0377
Sacramento	2025 Construction and Mining - Off-Highway Trucks	Aggregate	300	Diesel	0.00052827	0.000639206	0.000760708	0.003253042	0.005201238	1.245849474	0.000252659	0.000232446	1.18E-05	0	40484.09601	9230.267932	12.63405941	805912.0204
Sacramento	2025 Construction and Mining - Off-Highway Trucks	Aggregate	50	Diesel	1.88E-05	2.27E-05	2.70E-05	0.000166915	0.000142819	0.019437484	6.90E-06	6.35E-06	1.84E-07	0	631.6244388	1054.204318	1.705800356	11262.82449
Sacramento	2025 Construction and Mining - Off-Highway Trucks	Aggregate	600	Diesel	0.002710439	0.003279631	0.003903032	0.019617412	0.017766443	9.16371112	0.000760355	0.000699526	8.68E-05	0	297776.3916	36007.55822	43.34354977	5938089.439
Sacramento	2025 Construction and Mining - Off-Highway Trucks	Aggregate	75	Diesel	1.40E-05	1.70E-05	2.02E-05	0.000133243	0.000151588	0.021731374	6.93E-06	6.38E-06	2.06E-07	0	706.1647749	455.6765463	0.853475903	11745.16846
Sacramento	2025 Construction and Mining - Off-Highway Trucks	Aggregate	750	Diesel	0.00035477	0.000429272	0.000510869	0.00273025	0.003496049	1.130998256	0.000147207	0.000135431	1.07E-05	0	36751.98565	3236.321346	5.629847799	846513.2974
Sacramento	2025 Construction and Mining - Off-Highway Trucks	Aggregate	9999	Diesel	0.001267197	0.001533309	0.001824764	0.008727023	0.021156439	4.340726925	0.000516192	0.000474897	4.11E-05	0	141052.6788	6572.35228	9.82222133	2971863.204
Sacramento	2025 Construction and Mining - Other Construction Equipment	Aggregate	100	Diesel	0.000167625	0.000202827	0.00024138	0.002073906	0.001797347	0.360289599	0.000125276	0.000115254	3.41E-06	0	11707.67339	5522.715175	17.03156334	198620.1811
Sacramento	2025 Construction and Mining - Other Construction Equipment	Aggregate	175	Diesel	0.000418638	0.000506552	0.000602838	0.006627897	0.004222261	1.15921371	0.00018714	0.000172169	1.10E-05	0	37668.85174	13373.02285	29.99250863	736454.097
Sacramento	2025 Construction and Mining - Other Construction Equipment	Aggregate	300	Diesel	0.00037521	0.000454004	0.000540302	0.002688585	0.004106638	1.103205158	0.00018299	0.000168351	1.05E-05	0	35848.84409	7166.998332	18.65204091	698876.2468
Sacramento	2025 Construction and Mining - Other Construction Equipment	Aggregate	50	Diesel	0.000229828	0.000278092	0.000330952	0.001959964	0.001777455	0.273625786	8.16E-05	7.50E-05	2.59E-06	0	8891.517662	9287.337681	30.05178778	151981.2656
Sacramento	2025 Construction and Mining - Other Construction Equipment	Aggregate	600	Diesel	0.000933016	0.00112895	0.001343544	0.008277609	0.008796614	3.483668724	0.000372024	0.000342262	3.30E-05	0	113202.423	13326.86479	32.10995216	2269498.199
Sacramento	2025 Construction and Mining - Other Construction Equipment	Aggregate	75	Diesel	0.000216763	0.000262283	0.000312139	0.002667807	0.00284984	0.462675629	9.91E-05	9.12E-05	4.38E-06	0	15034.72529	9449.939916	29.00478744	257633.896
Sacramento	2025 Construction and Mining - Other Construction Equipment	Aggregate	750	Diesel	0.000118397	0.00014326	0.000170491	0.001081298	0.001167698	0.551800034	4.86E-05	4.47E-05	5.23E-06	0	17930.83837	1324.112361	3.511878961	359602.3128
Sacramento	2025 Construction and Mining - Other Construction Equipment	Aggregate	9999	Diesel	0.000162146	0.000196196	0.00023349	0.001430796	0.003390345	0.737065081	7.73E-05	7.11E-05	6.98E-06	0	23951.0584	979.5942819	2.559477945	479961.9511
Sacramento	2025 Construction and Mining - Other Material Handling Equipment	Aggregate	100	Diesel	6.13E-05	7.42E-05	8.83E-05	0.000687961	0.000632442	0.115380832	4.43E-05	4.07E-05	1.09E-06	0	3749.320279	1867.499082	4.790017553	65898.81105
Sacramento	2025 Construction and Mining - Other Material Handling Equipment	Aggregate	175	Diesel	0.00018265	0.000221006	0.000263015	0.002805168	0.001851304	0.480268267	8.52E-05	7.84E-05	4.55E-06	0	15606.40112	5958.557566	11.64676087	308300.2254
Sacramento	2025 Construction and Mining - Other Material Handling Equipment	Aggregate	300	Diesel	0.00016694	0.000201998	0.000240394	0.001153011	0.001616497	0.496469805	7.43E-05	6.83E-05	4.70E-06	0	16132.87293	3418.373705	7.284198107	319303.1676
Sacramento	2025 Construction and Mining - Other Material Handling Equipment	Aggregate	50	Diesel	3.86E-05	4.67E-05	5.56E-05	0.00037248	0.000332197	0.053406686	1.39E-05	1.28E-05	5.06E-07	0	1735.459586	2114.89128	6.102691526	28684.82983
Sacramento	2025 Construction and Mining - Other Material Handling Equipment	Aggregate	600	Diesel	0.000226823	0.000274456	0.000326626	0.001852884	0.001811137	0.879034351	7.59E-05	6.98E-05	8.33E-06	0	28564.3746	3580.958038	7.021261929	567965.8317
Sacramento	2025 Construction and Mining - Other Material Handling Equipment	Aggregate	75	Diesel	3.06E-05	3.70E-05	4.40E-05	0.000384746	0.000401183	0.064792929	1.36E-05	1.25E-05	6.14E-07	0	2105.457542	1453.431855	3.838050801	37543.51053
Sacramento	2025 Construction and Mining - Other Material Handling Equipment	Aggregate	750	Diesel	3.20E-05	3.88E-05	4.61E-05	0.00033101	0.000311103	0.095890553	1.69E-05	1.56E-05	9.08E-07	0	3115.98025	225.5233006	0.623273207	61769.94097
Sacramento	2025 Construction and Mining - Other Material Handling Equipment	Aggregate	9999	Diesel	7.21E-05	8.72E-05	0.000103799	0.000617512	0.00142541	0.324894503	3.36E-05	3.09E-05	3.08E-06	0	10557.50355	540.2889343	1.148134855	209287.7101
Sacramento	2025 Construction and Mining - Pavers	Aggregate	100	Diesel	0.000111127	0.000134464	0.000160023	0.001374008	0.001181095	0.231544612	7.98E-05	7.34E-05	2.19E-06	0	7524.082553	3783.038619	8.693777602	133083.9717
Sacramento	2025 Construction and Mining - Pavers	Aggregate	175	Diesel	0.000290281	0.00035124	0.000418004	0.004611184	0.002690351	0.778982534	0.000116544	0.00010722	7.38E-06	0	25313.17334	8533.351503	15.38586655	501498.2851
Sacramento	2025 Construction and Mining - Pavers	Aggregate	300	Diesel	0.000261008	0.000315819	0.000375851	0.001900626	0.002160052	0.94589962	8.31E-05	7.64E-05	8.96E-06	0	30737.17319	6368.006701	11.38345771	609263.201
Sacramento	2025 Construction and Mining - Pavers	Aggregate	50	Diesel	6.03E-05	7.29E-05	8.68E-05	0.000360668	0.000301738	0.042069835	1.81E-05	1.67E-05	3.99E-07	0	1367.066644	1545.612107	4.363106396	24021.3239
Sacramento	2025 Construction and Mining - Pavers	Aggregate	600	Diesel	4.43E-05	5.36E-05	6.37E-05	0.000323312	0.000357244	0.167521691	1.42E-05	1.30E-05	1.59E-06	0	5443.646569	684.9936251	1.181376401	108803.6111
Sacramento	2025 Construction and Mining - Pavers	Aggregate	75	Diesel	0.000126393	0.000152935	0.000182005	0.001285168	0.001444816	0.21419007	6.03E-05	5.54E-05	2.03E-06	0	6960.143687	4407.427422	11.31833258	122490.123
Sacramento	2025 Construction and Mining - Pavers	Aggregate	750	Diesel	1.25E-06	1.51E-06	1.79E-06	1.32E-05	5.08E-06	0.006889653	3.69E-07	3.39E-07	6.53E-08	0	223.8804781	16.77292774	0.032803853	4438.116679
Sacramento	2025 Construction and Mining - Pavers	Aggregate	9999	Diesel	4.22E-05	5.10E-05	6.08E-05	0.000304351	0.000795659	0.157862534	1.87E-05	1.72E-05	1.50E-06	0	5129.770573	124.6052859	0.229626971	101690.5115
Sacramento	2025 Construction and Mining - Paving Equipment	Aggregate	100	Diesel	5.67E-05	6.86E-05	8.17E-05	0.000754875	0.000605163	0.131717137	4.09E-05	3.76E-05	1.25E-06	0	4280.17136	2311.533623	5.415527557	71831.20846
Sacramento	2025 Construction and Mining - Paving Equipment	Aggregate	175	Diesel	0.00026643	0.00032238	0.000383659	0.005097676	0.002189152	0.864834601	9.57E-05	8.81E-05	8.19E-06	0	28102.95124	11423.81999	17.48643469	555369.5974
Sacramento	2025 Construction and Mining - Paving Equipment	Aggregate	300	Diesel	0.000115879	0.000140214	0.000166866	0.000818526	0.001052071	0.389552142	4.30E-05	3.96E-05	3.69E-06	0	12658.56482	2975.551624	5.545429063	250238.6583
Sacramento	2025 Construction and Mining - Paving Equipment	Aggregate	50	Diesel	7.57E-05	9.16E-05	0.000109021	0.000777443	0.00066072	0.108627073	2.41E-05	2.22E-05	1.03E-06	0	3529.855693	4671.046161	12.07232309	61971.50209
Sacramento	2025 Construction and Mining - Paving Equipment	Aggregate	600	Diesel	0.000225747	0.000273154	0.000325075	0.001821445	0.001311888	0.923279553	6.48E-05	5.96E-05	8.75E-06	0	30002.13016	4662.694758	8.007369944	597707.1791
Sacramento	2025 Construction and Mining - Paving Equipment	Aggregate	75	Diesel	4.23E-05	5.12E-05	6.09E-05	0.000474231	0.00051269	0.078925055	1.85E-05	1.70E-05	7.48E-07	0	2564.683422	1940.044791	4.756558685	45732.20648
Sacramento	2025 Construction and Mining - Paving Equipment	Aggregate	750	Diesel	4.23E-05	5.12E-05	6.09E-05	0.000387939	0.000301911	0.200396676	1.64E-05	1.51E-05	1.90E-06	0	6511.924956	563.5660026	1.082527149	129089.7849
Sacramento	2025 Construction and Mining - Paving Equipment	Aggregate	9999	Diesel	3.32E-05	4.02E-05	4.79E-05	0.000239351	0.00057758	0.125610295	1.44E-05	1.33E-05	1.19E-06	0	4081.728443	225.019072	0.426450089	80914.54526
Sacramento	2025 Construction and Mining - Rollers	Aggregate	100	Diesel	0.000342346	0.000414239	0.000492979	0.003855355	0.003545082	0.650436039	0.000252012	0.000231851	6.16E-06	0	21136.03256	11175.22773	29.59738009	364236.839
Sacramento	2025 Construction and Mining - Rollers	Aggregate	175	Diesel	0.001220123	0.001476349	0.001756978	0.021852531	0.010750626	3.739254505	0.000464068	0.000426943	3.54E-05	0	121507.7275	47618.76545	80.18106035	2401937.584
Sacramento	2025 Construction and Mining - Rollers	Aggregate	300	Diesel	0.000117255	0.000141879	0.000168848	0.000816528	0.001281168	0.321824513	5.82E-05	5.35E-05	3.05E-06	0	10457.7437	2390.324457	5.321197783	203016.8019
Sacramento	2025 Construction and Mining - Rollers	Aggregate	50	Diesel	0.000960641	0.001162376	0.001383323	0.007844071	0.006714935	1.049778592	0.000304347	0.00028	9.94E-06	0	34112.7385	44397.46613	122.6961344	589665.0453
Sacramento	2025 Construction and Mining - Rollers	Aggregate	600	Diesel	8.05E-05	9.74E-05	0.000115962	0.00072492	0.000787659	0.260332534	3.33E-05	3.07E-05	2.47E-06	0	8459.551114	1135.743082	2.299394534	171843.4967
Sacramento	2025 Construction and Mining - Rollers	Aggregate	75	Diesel	0.00021633	0.00026176	0.000311516	0.002492249	0.002725968	0.417284939	9.76E-05	8.98E-05	3.95E-06	0	13559.74689	9360.136821	24.93196003	240150.4689
Sacramento	2025 Construction and Mining - Rollers	Aggregate	750	Diesel	1.71E-06	2.07E-06	2.46E-06	1.16E-05	1.67E-05	0.00629232	6.76E-07	6.22E-07	5.96E-08	0	204.4700364	14.87679614	0.032803853	4053.331877
Sacramento	2025 Construction and Mining - Rollers	Aggregate	9999	Diesel	6.50E-05	7.87E-05	9.36E-05	0.000537481	0.001132373	0.282899937	2.81E-05	2.58E-05	2.68E-06	0	9192.882796	205.3607941	0.426450089	182236.0163
Sacramento	2025 Construction and Mining - Rough Terrain Forklifts	Aggregate	100	Diesel	0.000327896	0.000396754	0.00047217	0.005241333	0.003797811	0.930547785	0.000253	0.00023276	8.81E-06	0	30238.31262	15166.59565	47.57571415	522474.2483
Sacramento	2025 Construction and Mining - Rough Terrain Forklifts	Aggregate	175	Diesel	0.001658287	0.002006528	0.002387934	0.034107297	0.015382626	5.981759207	0.000612728	0.00056371	5.67E-05	0	194378.309	79562.51515	166.9081798	3850770.153
Sacramento	2025 Construction and Mining - Rough Terrain Forklifts	Aggregate	300	Diesel	1.46E-05	1.76E-05	2.10E-05	0.000117042	0.000147291	0.051073242	6.55E-06	6.02E-06	4.84E-07	0	1659.633898	387.0735444	1.017343001	32352.21292
Sacramento	2025 Construction and Mining - Rough Terrain Forklifts	Aggregate	50	Diesel	2.07E-05	2.50E-05	2.98E-05	0.0002165	0.000196269	0.033461136	6.82E-06	6.27E-06	3.17E-07	0	1087.325463	1097.608367	4.067677772	19388.66691
Sacramento	2025 Construction and Mining - Rough Terrain Forklifts	Aggregate	600	Diesel	2.89E-06	3.50E-06	4.16E-06	2.71E-05	2.42E-05	0.014553399	7.85E-07	7.23E-07	1.38E-07	0	472.9152522	69.38339743	0.164041881	9356.696292
Sacramento	2025 Construction and Mining - Rough Terrain Forklifts	Aggregate	75	Diesel	0.000420473	0.000508772	0.000605481	0.007577017	0.006901658	1.329326381	9.65E-05	8.88E-05	1.26E-05	0	43196.69267	27212.26008	83.09469664	765930.3235
Sacramento	2025 Construction and Mining - Rough Terrain Forklifts	Aggregate	750	Diesel	6.45E-07	7.81E-07	9.29E-07	8.95E-06	1.58E-06	0.004765344	1.26E-07	1.16E-07	4.51E-08	0	154.8506958	12.27444973	0.032826469	3068.612433
Sacramento	2025 Construction and Mining - Rubber Tired Dozers	Aggregate	100	Diesel	2.72E-05	3.30E-05	3.92E-05	0.000271891	0.000265899	0.045426144	2.17E-05	2.00E-05	4.30E-07	0	1476.130467	720.4028175	1.641212998	24978.74388
Sacramento	2025 Construction and Mining - Rubber Tired Dozers	Aggregate	175	Diesel	6.61E-05	7.99E-05	9.51E-05	0.000855452	0.000688463	0.141376133	3.33E-05	3.07E-05	1.34E-06	0	4594.042123	1591.775139	2.723773885	90862.02158
Sacramento	2025 Construction and Mining - Rubber Tired Dozers	Aggregate	300	Diesel	6.85E-05	8.29E-05	9.86E-05	0.000486093	0.000611627	0.176979627	3.26E-05	3.00E-05	1.68E-06	0	5750.983865	1250.685285	2.199871728	113902.9546
Sacramento	2025 Construction and Mining - Rubber Tired Dozers	Aggregate	50	Diesel	7.30E-06	8.83E-06	1.05E-05	5.74E-05	4.28E-05	0.009880341	1.95E-06	1.80E-06	9.36E-08	0	321.0634018	223.797357	0.59171062	3482.600709
Sacramento	2025 Construction and Mining - Rubber Tired Dozers	Aggregate	600	Diesel	0.000360417	0.000436104	0.000519	0.003502441	0.003573219	0.936793239	0.000174105	0.000160177	8.87E-06	0	30441.25975	4305.292144	8.035381647	671093.2979
Sacramento	2025 Construction and Mining - Rubber Tired Dozers	Aggregate	75	Diesel	1.34E-05	1.62E-05	1.93E-05	0.000126831	0.000155402	0.021726478	7.09E-06	6.52E-06	2.06E-07	0	706.0056842	454.3882216	0.985006124	11227.37461
Sacramento	2025 Construction and Mining - Rubber Tired Dozers	Aggregate	750	Diesel	1.70E-05	2.06E-05	2.45E-05	0.000190989	0.00020682	0.032918828	9.89E-06	9.10E-06	3.12E-07	0	1069.703062	84.0219232	0.164277716	22452.35684
Sacramento	2025 Construction and Mining - Rubber Tired Dozers	Aggregate	9999	Diesel	1.87E-05	2.26E-05	2.69E-05	0.000159523	0.0004129	0.079623206	1.02E-05	9.36E-06	7.54E-07	0	2587.369974	97.95997995	0.164019265	51290.98317
Sacramento	2025 Construction and Mining - Rubber Tired Loaders	Aggregate	100	Diesel	0.000377099	0.00045629	0.000543023	0.004832576	0.003844512	0.806560001	0.000275375	0.000253345	7.64E-06	0	26209.30796	14697.6791	27.36632399	456799.7616
Sacramento	2025 Construction and Mining - Rubber Tired Loaders	Aggregate	175	Diesel	0.002504592	0.003030557	0.003606613	0.036713322	0.023439691	6.117143862	0.001115929	0.001026655	5.79E-05	0	198777.657	74122.518	102.2293022	3933167.177
Sacramento	2025 Construction and Mining - Rubber Tired Loaders	Aggregate	300	Diesel	0.003643742	0.004408928	0.005246988	0.025277274	0.029263548	11.49738996	0.001247406	0.001147613	0.000108913	0	373609.6926	91351.54291	129.3915353	7413055.404
Sacramento	2025 Construction and Mining - Rubber Tired Loaders	Aggregate	50	Diesel	7.79E-05	9.43E-05	0.000112241	0.000540852	0.00043147	0.06384463	2.50E-05	2.30E-05	6.05E-07	0	2074.642399	2469.705056	5.052849294	35041.54538
Sacramento	2025 Construction and Mining - Rubber Tired Loaders	Aggregate	600	Diesel	0.002635138	0.003188517	0.003794599	0.020561304	0.019283525	8.868005546	0.000839037	0.000771914	8.40E-05	0	288167.3874	41701.28597	57.49360955	5758997.137
Sacramento	2025 Construction and Mining - Rubber Tired Loaders	Aggregate	75	Diesel	0.000277315	0.000335551	0.000399334	0.002988576	0.003154108	0.494011233	0.00012172	0.000111982	4.68E-06	0	16052.98121	11630.19745	22.54157032	278127.0288
Sacramento	2025 Construction and Mining - Rubber Tired Loaders	Aggregate	750	Diesel	7.40E-05	8.96E-05	0.0001066	0.000715575	0.00074995	0.224166834	3.41E-05	3.14E-05	2.12E-06	0	7284.340391	773.3117378	1.584939877	189702.7833
Sacramento	2025 Construction and Mining - Rubber Tired Loaders	Aggregate	9999	Diesel	0.00020726	0.000250785	0.000298454	0.001489156	0.003810428	0.774999594	8.82E-05	8.11E-05	7.34E-06	0	25183.747	1470.998118	2.329571669	502797.5714
Sacramento	2025 Construction and Mining - Scrapers	Aggregate	100	Diesel	9.71E-06	1.17E-05	1.40E-05	0.000132949	0.000108552	0.02432176	6.84E-06	6.29E-06	2.30E-07	0	790.3398317	315.6570041	1.017915655	12493.40431
Sacramento	2025 Construction and Mining - Scrapers	Aggregate	175	Diesel	0.000138194	0.000167214	0.000198999	0.001291299	0.001660522	0.196700701	9.33E-05	8.59E-05	1.86E-06	0	6391.823598	1727.12593	6.169959894	123935.7363
Sacramento	2025 Construction and Mining - Scrapers	Aggregate	300	Diesel	0.001079951	0.001306741	0.00155513	0.008018701	0.012627824	2.876229807	0.000601493	0.000553374	2.72E-05	0	93463.58938	15544.6403	48.72147692	1783441.158
Sacramento	2025 Construction and Mining - Scrapers	Aggregate	50	Diesel	2.82E-06	3.41E-06	4.06E-06	1.68E-05	1.20E-05	0.00280774	7.90E-07	7.27E-07	2.66E-08	0	91.238006	39.21714123	0.164454026	779.9283825
Sacramento	2025 Construction and Mining - Scrapers	Aggregate	600	Diesel	0.003160778	0.003824541	0.00455152	0.036064486	0.034842146	10.13035493	0.001546032	0.00142235	9.60E-05	0	329187.6508	32989.33346	101.7627979	6903860.787
Sacramento	2025 Construction and Mining - Scrapers	Aggregate	75	Diesel	1.32E-05	1.59E-05	1.90E-05	0.000114474	0.000149302	0.020032597	7.98E-06	7.35E-06	1.90E-07	0	650.9627412	335.5249775	1.280021344	10443.89409
Sacramento	2025 Construction and Mining - Scrapers	Aggregate	750	Diesel	0.000360912	0.000436704	0.000519714	0.00384532	0.004049702	1.650247391	0.000157024	0.000144462	1.56E-05	0	53625.07689	4167.445163	15.35503555	1233544.158
Sacramento	2025 Construction and Mining - Skid Steer Loaders	Aggregate	100	Diesel	0.001277549	0.001545834	0.00183967	0.021811874	0.015255722	3.689976729	0.001010615	0.000929765	3.50E-05	0	119906.4376	68882.81978	146.7335286	2135292.169
Sacramento	2025 Construction and Mining - Skid Steer Loaders	Aggregate	175	Diesel	0.000273004	0.000330335	0.000393126	0.006441377	0.001953672	1.084124846	6.33E-05	5.82E-05	1.03E-05	0	35228.826	16831.90329	25.42394067	697500.9372
Sacramento	2025 Construction and Mining - Skid Steer Loaders	Aggregate	300	Diesel	3.11E-05	3.76E-05	4.48E-05	0.000206844	0.000266682	0.088684323	1.24E-05	1.14E-05	8.40E-07	0	2881.812563	742.2674318	1.377761826	57127.89479
Sacramento	2025 Construction and Mining - Skid Steer Loaders	Aggregate	50	Diesel	0.000912765	0.001104445	0.001314381	0.007630558	0.006472251	1.022370722	0.00028008	0.000257673	9.68E-06	0	33222.11498	37324.33774	96.51573503	579774.6713
Sacramento	2025 Construction and Mining - Skid Steer Loaders	Aggregate	600	Diesel	1.57E-05	1.90E-05	2.26E-05	0.000117876	0.000100439	0.061602494	4.46E-06	4.10E-06	5.84E-07	0	2001.783802	226.9841086	0.393646236	39682.55808
Sacramento	2025 Construction and Mining - Skid Steer Loaders	Aggregate	75	Diesel	0.003020534	0.003654846	0.004349569	0.043048416	0.039813853	7.267358374	0.000862598	0.00079359	6.88E-05	0	236154.0783	169356.8311	376.0045244	4200210.981
Sacramento	2025 Construction and Mining - Skid Steer Loaders	Aggregate	750	Diesel	2.16E-06	2.61E-06	3.11E-06	1.12E-05	2.90E-05	0.005927002	8.76E-07	8.06E-07	5.61E-08	0	192.5989571	16.07310083	0.032803853	3818.00437
Sacramento	2025 Construction and Mining - Skid Steer Loaders	Aggregate	9999	Diesel	0.000104659	0.000126637	0.000150709	0.000920053	0.001883733	0.453687596	4.45E-05	4.09E-05	4.30E-06	0	14742.65757	347.152146	0.721684766	292252.5225
Sacramento	2025 Construction and Mining - Spray Truck	Aggregate	100	Diesel	4.59E-06	5.55E-06	6.61E-06	4.41E-05	4.16E-05	0.007247027	3.32E-06	3.05E-06	6.86E-08	0	235.4933928	139.8802597	0.262430824	4199.205396
Sacramento	2025 Construction and Mining - Spray Truck	Aggregate	175	Diesel	8.10E-06	9.80E-06	1.17E-05	0.00014619	6.68E-05	0.023310992	3.42E-06	3.15E-06	2.21E-07	0	757.4947574	257.8760765	0.426450089	15016.27183
Sacramento	2025 Construction and Mining - Spray Truck	Aggregate	300	Diesel	9.71E-06	1.18E-05	1.40E-05	5.52E-05	9.27E-05	0.021531699	4.58E-06	4.21E-06	2.04E-07	0	699.6763198	144.6540951	0.229914833	13682.25726
Sacramento	2025 Construction and Mining - Spray Truck	Aggregate	50	Diesel	1.17E-05	1.42E-05	1.68E-05	0.000136837	0.000121065	0.016562477	5.53E-06	5.08E-06	1.57E-07	0	538.2005864	742.0778058	1.508977238	9596.935098
Sacramento	2025 Construction and Mining - Spray Truck	Aggregate	600	Diesel	2.78E-05	3.37E-05	4.01E-05	0.000249084	0.000190846	0.087689924	9.31E-06	8.56E-06	8.31E-07	0	2849.499387	357.2993032	0.524861648	56487.33137
Sacramento	2025 Construction and Mining - Spray Truck	Aggregate	75	Diesel	5.32E-06	6.43E-06	7.66E-06	6.14E-05	6.61E-05	0.009954345	2.40E-06	2.21E-06	9.43E-08	0	323.4681912	238.3853667	0.459253942	5767.929869
Sacramento	2025 Construction and Mining - Spreader Tractor Trailer	Aggregate	50	Diesel	7.53E-07	9.12E-07	1.08E-06	7.20E-06	6.32E-06	0.000952731	2.04E-07	1.88E-07	9.03E-09	0	30.95914826	57.50708276	0.131215412	552.0487047
Sacramento	2025 Construction and Mining - Spreader Tractor Trailer	Aggregate	600	Diesel	5.90E-06	7.14E-06	8.50E-06	3.82E-05	6.22E-05	0.019921039	2.04E-06	1.88E-06	1.89E-07	0	647.33765	103.9915849	0.196823118	12832.56158
Sacramento	2025 Construction and Mining - Spreader Truck	Aggregate	100	Diesel	4.84E-06	5.86E-06	6.97E-06	6.90E-05	5.72E-05	0.011623564	4.38E-06	4.03E-06	1.10E-07	0	377.7097412	193.2931725	0.426450089	6735.13921
Sacramento	2025 Construction and Mining - Spreader Truck	Aggregate	175	Diesel	3.74E-06	4.53E-06	5.39E-06	8.81E-05	1.96E-05	0.014008201	1.04E-06	9.58E-07	1.33E-07	0	455.1989448	170.0228813	0.196823118	9023.681056
Sacramento	2025 Construction and Mining - Spreader Truck	Aggregate	300	Diesel	3.21E-06	3.88E-06	4.62E-06	2.03E-05	2.35E-05	0.00989299	9.17E-07	8.44E-07	9.37E-08	0	321.4744205	64.97368569	0.098411559	6372.779794
Sacramento	2025 Construction and Mining - Spreader Truck	Aggregate	50	Diesel	1.93E-07	2.34E-07	2.78E-07	2.34E-06	1.78E-06	0.000283053	6.46E-08	5.94E-08	2.68E-09	0	9.197863294	17.26440981	0.032803853	164.0118931
Sacramento	2025 Construction and Mining - Spreader Truck	Aggregate	600	Diesel	2.79E-05	3.38E-05	4.02E-05	0.000237348	0.00019982	0.092909269	9.75E-06	8.97E-06	8.80E-07	0	3019.102913	389.7056625	0.65607706	59849.48355
Sacramento	2025 Construction and Mining - Spreader Truck	Aggregate	75	Diesel	5.19E-07	6.28E-07	7.47E-07	9.21E-06	8.19E-06	0.001623556	2.95E-07	2.72E-07	1.54E-08	0	52.75773145	33.45485776	0.065607706	940.7506001
Sacramento	2025 Construction and Mining - Surfacing Equipment	Aggregate	100	Diesel	1.05E-05	1.27E-05	1.52E-05	0.000144045	0.000106689	0.026662676	8.09E-06	7.44E-06	2.53E-07	0	866.4082986	487.2785258	1.018800771	12627.16751
Sacramento	2025 Construction and Mining - Surfacing Equipment	Aggregate	175	Diesel	4.09E-05	4.95E-05	5.89E-05	0.000581244	0.000404712	0.098558219	1.99E-05	1.83E-05	9.34E-07	0	3202.666509	1583.206807	2.460726668	63143.21203
Sacramento	2025 Construction and Mining - Surfacing Equipment	Aggregate	300	Diesel	4.13E-05	5.00E-05	5.95E-05	0.000273291	0.000413436	0.115371505	1.80E-05	1.66E-05	1.09E-06	0	3749.017181	1024.897978	1.87264881	73285.58893
Sacramento	2025 Construction and Mining - Surfacing Equipment	Aggregate	50	Diesel	1.34E-05	1.62E-05	1.93E-05	9.18E-05	7.52E-05	0.011714557	4.16E-06	3.83E-06	1.11E-07	0	380.6665733	527.0232636	1.115829108	5819.238606
Sacramento	2025 Construction and Mining - Surfacing Equipment	Aggregate	600	Diesel	0.00018778	0.000227213	0.000270403	0.001480963	0.001380871	0.66174018	6.20E-05	5.70E-05	6.27E-06	0	21503.3626	3642.045512	5.610997012	427361.9393
Sacramento	2025 Construction and Mining - Surfacing Equipment	Aggregate	75	Diesel	9.89E-06	1.20E-05	1.42E-05	0.000116552	0.000113967	0.01999898	3.87E-06	3.56E-06	1.89E-07	0	649.8703571	534.7556905	1.08332402	10255.13148
Sacramento	2025 Construction and Mining - Surfacing Equipment	Aggregate	750	Diesel	7.10E-05	8.60E-05	0.000102294	0.000529465	0.000598436	0.278563624	2.77E-05	2.54E-05	2.64E-06	0	9051.973574	941.6850684	1.672996503	179442.6885
Sacramento	2025 Construction and Mining - Surfacing Equipment	Aggregate	9999	Diesel	3.10E-05	3.75E-05	4.46E-05	0.000251784	0.000564479	0.123765079	1.31E-05	1.21E-05	1.17E-06	0	4021.76782	330.9040199	0.658567591	90252.75883
Sacramento	2025 Construction and Mining - Tank Truck	Aggregate	100	Diesel	5.97E-07	7.23E-07	8.60E-07	1.78E-05	6.98E-06	0.002897186	5.79E-07	5.32E-07	2.74E-08	0	94.14456604	52.59213074	0.065607706	1678.740813
Sacramento	2025 Construction and Mining - Tank Truck	Aggregate	175	Diesel	1.88E-06	2.27E-06	2.70E-06	2.45E-05	2.15E-05	0.004070217	1.06E-06	9.77E-07	3.86E-08	0	132.2624086	51.35607162	0.164019265	2621.916866
Sacramento	2025 Construction and Mining - Tank Truck	Aggregate	300	Diesel	6.32E-05	7.64E-05	9.10E-05	0.000419451	0.000439619	0.198788803	1.78E-05	1.64E-05	1.88E-06	0	6459.67683	1469.063847	2.066642739	128054.039
Sacramento	2025 Construction and Mining - Tank Truck	Aggregate	600	Diesel	2.55E-05	3.09E-05	3.67E-05	0.000158949	0.000184353	0.079643579	8.58E-06	7.90E-06	7.54E-07	0	2588.031992	376.832732	0.557665501	51304.10674
Sacramento	2025 Construction and Mining - Tanker Truck Trailer	Aggregate	100	Diesel	9.61E-07	1.16E-06	1.38E-06	2.70E-05	1.19E-05	0.00429567	9.69E-07	8.91E-07	4.07E-08	0	139.5885465	77.97857483	0.098411559	2489.076109
Sacramento	2025 Construction and Mining - Tanker Truck Trailer	Aggregate	175	Diesel	2.42E-06	2.93E-06	3.49E-06	3.58E-05	1.81E-05	0.005874421	7.24E-07	6.66E-07	5.56E-08	0	190.890344	70.28053322	0.098411559	3784.13351
Sacramento	2025 Construction and Mining - Tanker Truck Trailer	Aggregate	300	Diesel	4.58E-07	5.54E-07	6.60E-07	4.67E-06	5.81E-07	0.002341613	4.93E-08	4.53E-08	2.22E-08	0	76.09112917	21.81029473	0.032803853	1508.399983
Sacramento	2025 Construction and Mining - Tanker Truck Trailer	Aggregate	50	Diesel	1.18E-06	1.43E-06	1.70E-06	9.52E-06	8.27E-06	0.001211044	2.95E-07	2.71E-07	1.15E-08	0	39.35307767	51.77510333	0.098411559	701.7252338
Sacramento	2025 Construction and Mining - Tanker Truck Trailer	Aggregate	600	Diesel	1.30E-06	1.58E-06	1.88E-06	1.30E-05	1.83E-06	0.006718953	1.41E-07	1.29E-07	6.36E-08	0	218.3335606	24.080098	0.032803853	4328.156814
Sacramento	2025 Construction and Mining - Tanker Truck Trailer	Aggregate	75	Diesel	6.20E-07	7.50E-07	8.92E-07	8.85E-06	7.31E-06	0.001434447	8.29E-08	7.62E-08	1.36E-08	0	46.61261445	35.01172576	0.065607706	831.1738168
Sacramento	2025 Construction and Mining - Telescopic Handler	Aggregate	100	Diesel	1.18E-05	1.43E-05	1.70E-05	0.000334129	0.000174681	0.059327615	1.15E-05	1.06E-05	5.62E-07	0	1927.861196	1235.994713	3.674031536	34376.69754
Sacramento	2025 Construction and Mining - Telescopic Handler	Aggregate	175	Diesel	7.36E-05	8.90E-05	0.00010596	0.001880179	0.00063076	0.330110428	2.22E-05	2.04E-05	3.13E-06	0	10726.99595	4986.276728	10.16919443	212647.6593
Sacramento	2025 Construction and Mining - Telescopic Handler	Aggregate	300	Diesel	1.72E-06	2.08E-06	2.48E-06	1.88E-05	3.62E-06	0.009563581	2.35E-07	2.16E-07	9.06E-08	0	310.7702326	87.50071469	0.196823118	6160.584273
Sacramento	2025 Construction and Mining - Telescopic Handler	Aggregate	50	Diesel	2.10E-06	2.54E-06	3.02E-06	2.60E-05	2.36E-05	0.004290256	5.34E-07	4.91E-07	4.06E-08	0	139.4126112	182.054831	0.65607706	2485.938915
Sacramento	2025 Construction and Mining - Telescopic Handler	Aggregate	600	Diesel	7.08E-07	8.57E-07	1.02E-06	8.44E-06	1.20E-06	0.004479207	8.90E-08	8.19E-08	4.24E-08	0	145.552603	15.15428751	0.032803853	2885.376342
Sacramento	2025 Construction and Mining - Telescopic Handler	Aggregate	75	Diesel	3.39E-05	4.10E-05	4.88E-05	0.000689067	0.000606986	0.121809682	5.22E-06	4.80E-06	1.15E-06	0	3958.226859	2902.676873	8.594609486	70581.20565
Sacramento	2025 Construction and Mining - Telescopic Handler	Aggregate	750	Diesel	7.24E-07	8.77E-07	1.04E-06	9.19E-06	1.52E-06	0.004923751	1.52E-07	1.40E-07	4.66E-08	0	159.9981472	12.43819219	0.032803853	3171.739008
Sacramento	2025 Construction and Mining - Telescopic Handler	Aggregate	9999	Diesel	8.05E-06	9.74E-06	1.16E-05	6.95E-05	0.000215357	0.03726829	4.27E-06	3.93E-06	3.53E-07	0	1211.039589	23.53643374	0.065607706	24007.16242
Sacramento	2025 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	100	Diesel	0.004918452	0.005951327	0.007082571	0.066664433	0.051420118	11.20427254	0.00354063	0.003257379	0.000106136	0	364084.791	199080.2611	415.5263466	6445316.32
Sacramento	2025 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	175	Diesel	0.00394464	0.004773014	0.005680281	0.070644919	0.033934964	11.87212125	0.001438343	0.001323276	0.000112462	0	385786.6514	162866.2975	246.525457	7621751.635
Sacramento	2025 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	25	Diesel	1.92E-07	2.33E-07	2.77E-07	2.09E-06	1.64E-06	0.000242292	1.05E-07	9.68E-08	2.30E-09	0	7.873328149	16.49746378	0.065607706	140.3934168
Sacramento	2025 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	300	Diesel	0.001547246	0.001872168	0.002228035	0.010951832	0.0130987	5.029241079	0.000556319	0.000511814	4.76E-05	0	163426.0663	39914.46224	67.85341805	3236344.029
Sacramento	2025 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	50	Diesel	0.001316713	0.001593223	0.001896067	0.008705269	0.007219415	1.054482587	0.000413655	0.000380563	9.99E-06	0	34265.59565	41921.85606	105.9729816	579784.129
Sacramento	2025 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	600	Diesel	0.001095946	0.001326095	0.001578162	0.008760848	0.008878004	3.832346112	0.000369669	0.000340096	3.63E-05	0	124532.7555	17177.12294	28.90738673	2478522.787
Sacramento	2025 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	75	Diesel	0.002616885	0.003166431	0.003768314	0.028765924	0.030869043	4.790040089	0.001127528	0.001037325	4.54E-05	0	155653.1884	111131.6784	250.2955839	2720021.788
Sacramento	2025 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	750	Diesel	4.74E-05	5.73E-05	6.82E-05	0.000429173	0.000395899	0.176265788	2.04E-05	1.88E-05	1.67E-06	0	5727.787535	446.8376825	0.853398284	115427.3619
Sacramento	2025 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	9999	Diesel	0.000239915	0.000290298	0.000345478	0.002050534	0.003937308	0.710966229	0.000116744	0.000107405	6.73E-06	0	23102.97164	633.2891744	1.148134855	457984.0306
Sacramento	2025 Construction and Mining - Trenchers	Aggregate	100	Diesel	8.36E-05	0.000101132	0.000120355	0.000755228	0.000763684	0.125412373	5.71E-05	5.25E-05	1.19E-06	0	4075.296934	1631.978026	5.118262937	71392.08797
Sacramento	2025 Construction and Mining - Trenchers	Aggregate	175	Diesel	8.90E-05	0.000107676	0.000128143	0.001209087	0.000933807	0.204731469	4.49E-05	4.13E-05	1.94E-06	0	6652.784809	2097.914547	5.118834449	130730.3414
Sacramento	2025 Construction and Mining - Trenchers	Aggregate	300	Diesel	5.36E-05	6.48E-05	7.71E-05	0.000325657	0.000651282	0.123023072	2.95E-05	2.72E-05	1.17E-06	0	3997.656201	706.2806138	1.968920624	78968.45023
Sacramento	2025 Construction and Mining - Trenchers	Aggregate	50	Diesel	0.000288659	0.000349278	0.000415669	0.002327322	0.002078877	0.323607366	9.21E-05	8.47E-05	3.07E-06	0	10515.67783	8852.863601	28.47541849	184458.8531
Sacramento	2025 Construction and Mining - Trenchers	Aggregate	600	Diesel	6.34E-05	7.67E-05	9.13E-05	0.000476126	0.000703481	0.199710329	2.74E-05	2.52E-05	1.89E-06	0	6489.621981	594.7261224	1.740288784	131140.3643
Sacramento	2025 Construction and Mining - Trenchers	Aggregate	75	Diesel	7.70E-05	9.32E-05	0.000110943	0.000632136	0.000873162	0.104003655	4.74E-05	4.36E-05	9.85E-07	0	3379.616903	1858.523783	6.23446474	57489.66606
Sacramento	2025 Construction and Mining - Trenchers	Aggregate	750	Diesel	2.86E-06	3.46E-06	4.12E-06	1.73E-05	4.67E-05	0.007528713	1.39E-06	1.28E-06	7.13E-08	0	244.6468419	19.06071049	0.098885245	6088.731994
Sacramento	2025 Construction and Mining - Trenchers	Aggregate	9999	Diesel	5.25E-05	6.36E-05	7.56E-05	0.000538227	0.000948969	0.25716186	2.24E-05	2.06E-05	2.44E-06	0	8356.5195	386.8063766	0.885704031	165656.2863
Sacramento	2025 Construction and Mining - Vacuum Truck	Aggregate	100	Diesel	4.23E-06	5.12E-06	6.10E-06	7.70E-05	5.25E-05	0.012574552	3.83E-06	3.52E-06	1.19E-07	0	408.6122703	211.6608439	0.426450089	7286.178308
Sacramento	2025 Construction and Mining - Vacuum Truck	Aggregate	175	Diesel	4.69E-05	5.67E-05	6.75E-05	0.000655256	0.000468404	0.111604891	2.23E-05	2.05E-05	1.06E-06	0	3626.620392	1315.845851	2.165054298	71892.66605
Sacramento	2025 Construction and Mining - Vacuum Truck	Aggregate	300	Diesel	4.02E-05	4.87E-05	5.79E-05	0.00024736	0.000398477	0.124169625	1.48E-05	1.36E-05	1.18E-06	0	4034.913618	882.6712514	1.377761826	79986.50697
Sacramento	2025 Construction and Mining - Vacuum Truck	Aggregate	50	Diesel	7.01E-06	8.48E-06	1.01E-05	4.62E-05	3.79E-05	0.005346078	2.06E-06	1.90E-06	5.06E-08	0	173.7217461	239.9966913	0.557665501	3097.722976
Sacramento	2025 Construction and Mining - Vacuum Truck	Aggregate	600	Diesel	5.03E-05	6.09E-05	7.24E-05	0.000323751	0.000464771	0.168901837	1.70E-05	1.56E-05	1.60E-06	0	5488.494661	860.5408711	1.672996503	108801.7137
Sacramento	2025 Construction and Mining - Vacuum Truck	Aggregate	75	Diesel	3.53E-06	4.27E-06	5.08E-06	4.89E-05	4.32E-05	0.008113784	1.36E-06	1.25E-06	7.69E-08	0	263.6588289	188.9436475	0.360842383	4701.437964
Sacramento	2025 Construction and Mining - Water Truck	Aggregate	175	Diesel	1.56E-05	1.89E-05	2.25E-05	0.000196403	0.000157651	0.032559081	7.73E-06	7.11E-06	3.08E-07	0	1058.01303	390.931888	0.688880913	20973.62537
Sacramento	2025 Construction and Mining - Water Truck	Aggregate	300	Diesel	0.000111275	0.000134642	0.000160236	0.000645191	0.001262539	0.208018086	6.30E-05	5.79E-05	1.97E-06	0	6759.584002	1522.529602	2.922911378	133172.9952
Sacramento	2025 Construction and Mining - Water Truck	Aggregate	50	Diesel	1.42E-06	1.72E-06	2.04E-06	1.52E-05	1.36E-05	0.001842989	5.02E-07	4.62E-07	1.75E-08	0	59.88826326	76.9204139	0.131215412	1067.898828
Sacramento	2025 Construction and Mining - Water Truck	Aggregate	600	Diesel	0.000300576	0.000363696	0.000432829	0.002115719	0.002509533	0.960674266	0.000106277	9.78E-05	9.10E-06	0	31217.27789	4017.226029	6.56154975	620305.1889
Sacramento	2025 Construction and Mining - Water Truck	Aggregate	75	Diesel	9.95E-06	1.20E-05	1.43E-05	6.12E-05	0.000103152	0.00949907	7.52E-06	6.92E-06	9.00E-08	0	308.6739271	236.2039854	0.524861648	5504.125636
Sacramento	2025 Construction and Mining - Water Truck	Aggregate	750	Diesel	8.52E-06	1.03E-05	1.23E-05	7.55E-05	0.000121489	0.015584624	4.71E-06	4.33E-06	1.48E-07	0	506.4250694	42.04668566	0.098411559	10039.16717
Sacramento	2025 Construction and Mining - Water Truck	Aggregate	9999	Diesel	1.45E-05	1.76E-05	2.09E-05	0.000103565	0.00025524	0.054742061	6.05E-06	5.56E-06	5.19E-07	0	1778.852824	113.2604512	0.196823118	35263.26393
Sacramento	2025 Forestry - Extraction	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Extraction	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Extraction	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Extraction	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Extraction	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Extraction	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Extraction	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Extraction	Aggregate	9999	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Maintenance & Construction	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Maintenance & Construction	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Maintenance & Construction	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Maintenance & Construction	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Maintenance & Construction	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Maintenance & Construction	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Maintenance & Construction	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Manufacturing	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Manufacturing	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Manufacturing	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Manufacturing	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Manufacturing	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Forestry - Manufacturing	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Industrial - Aerial Lifts	Aggregate	100	Diesel	2.93E-05	3.55E-05	4.23E-05	0.000636792	0.000401626	0.115069082	2.68E-05	2.46E-05	1.09E-06	0	3739.189893	2674.121287	9.415346346	66625.28123
Sacramento	2025 Industrial - Aerial Lifts	Aggregate	175	Diesel	4.47E-05	5.41E-05	6.44E-05	0.000971342	0.000430705	0.171227695	1.85E-05	1.70E-05	1.62E-06	0	5564.073838	2992.82911	6.666976775	110257.3802
Sacramento	2025 Industrial - Aerial Lifts	Aggregate	300	Diesel	7.24E-07	8.76E-07	1.04E-06	6.97E-06	4.30E-06	0.003652279	1.61E-07	1.48E-07	3.46E-08	0	118.681446	32.41080763	0.07898693	2352.693319
Sacramento	2025 Industrial - Aerial Lifts	Aggregate	50	Diesel	0.00011571	0.000140009	0.000166623	0.001734911	0.00165844	0.294735119	4.24E-05	3.90E-05	2.79E-06	0	9577.469106	11759.00217	50.01638429	169561.7897
Sacramento	2025 Industrial - Aerial Lifts	Aggregate	600	Diesel	4.59E-07	5.56E-07	6.61E-07	4.04E-06	4.82E-06	0.002151831	1.32E-07	1.22E-07	2.04E-08	0	69.92412696	11.88709438	0.031594772	1386.147808
Sacramento	2025 Industrial - Aerial Lifts	Aggregate	75	Diesel	0.000177333	0.000214573	0.000255359	0.003299523	0.003009077	0.585946433	5.22E-05	4.80E-05	5.55E-06	0	19040.43157	16043.91659	54.53499051	338227.2378
Sacramento	2025 Industrial - Boom	Aggregate	100	Diesel	1.44E-05	1.74E-05	2.07E-05	0.000341382	0.00018257	0.05878873	1.38E-05	1.27E-05	5.57E-07	0	1910.350036	1275.894718	2.559176532	34064.44692

Sacramento	2025 Industrial - Boom	Aggregate	175	Diesel	1.66E-05	2.01E-05	2.40E-05	0.000316803	0.00013275	0.053176324	5.47E-06	5.03E-06	5.04E-07	0	1727.973931	885.1748719	1.137411792	34254.66118
Sacramento	2025 Industrial - Boom	Aggregate	300	Diesel	2.13E-06	2.58E-06	3.07E-06	1.66E-05	1.52E-05	0.008039516	5.76E-07	5.30E-07	7.62E-08	0	261.2454718	71.9381172	0.110706164	5361.798308
Sacramento	2025 Industrial - Boom	Aggregate	50	Diesel	0.000160481	0.000194182	0.000231092	0.002462951	0.002098523	0.384262324	4.83E-05	4.45E-05	3.64E-06	0	12486.67126	13717.79284	33.68002695	222656.3417
Sacramento	2025 Industrial - Boom	Aggregate	600	Diesel	3.14E-06	3.80E-06	4.52E-06	1.86E-05	2.78E-05	0.00762885	1.47E-06	1.36E-06	7.23E-08	0	247.9007987	38.81217215	0.063189544	4914.285867
Sacramento	2025 Industrial - Boom	Aggregate	75	Diesel	0.000234517	0.000283765	0.000337704	0.003826642	0.003304352	0.646066939	4.33E-05	3.98E-05	6.12E-06	0	20994.05789	16288.61187	31.21563474	374355.9856
Sacramento	2025 Industrial - Boom	Aggregate	9999	Diesel	9.57E-07	1.16E-06	1.38E-06	1.01E-05	1.75E-05	0.005275444	3.16E-07	2.90E-07	5.00E-08	0	171.4264891	9.994970201	0.015797386	3398.289868
Sacramento	2025 Industrial - Forklifts	Aggregate	100	Diesel	0.000328898	0.000397966	0.000473613	0.004985735	0.003663757	0.855741742	0.000256704	0.000236168	8.11E-06	0	27807.47722	28785.18208	70.44605059	485098.2566
Sacramento	2025 Industrial - Forklifts	Aggregate	175	Diesel	0.000816023	0.000987387	0.001175072	0.014873831	0.007138774	2.527598506	0.000302571	0.000278365	2.39E-05	0	82134.75443	64380.42785	106.0955618	1626183.397
Sacramento	2025 Industrial - Forklifts	Aggregate	25	Diesel	9.62E-09	1.16E-08	1.39E-08	3.13E-08	2.50E-08	2.26E-06	2.14E-09	1.97E-09	2.14E-11	0	0.073530717	5.463185577	0.015797386	1.311164539
Sacramento	2025 Industrial - Forklifts	Aggregate	300	Diesel	7.54E-05	9.13E-05	0.000108636	0.00053331	0.000676156	0.228778357	3.05E-05	2.80E-05	2.17E-06	0	7434.192621	3438.37955	6.685098896	147554.8357
Sacramento	2025 Industrial - Forklifts	Aggregate	50	Diesel	0.000106177	0.000128474	0.000152894	0.000955583	0.000804984	0.134731308	3.32E-05	3.06E-05	1.28E-06	0	4378.117372	8472.088172	23.29460707	71737.07144
Sacramento	2025 Industrial - Forklifts	Aggregate	600	Diesel	2.29E-05	2.77E-05	3.30E-05	0.000210046	0.000217913	0.0695699	9.72E-06	8.95E-06	6.59E-07	0	2260.686048	636.3368346	1.264241534	45214.82453
Sacramento	2025 Industrial - Forklifts	Aggregate	75	Diesel	0.000509373	0.000616342	0.000733498	0.007637697	0.007110558	1.304947556	0.000152273	0.000140091	1.24E-05	0	42404.49852	56126.79873	132.7009996	745708.6777
Sacramento	2025 Industrial - Forklifts	Aggregate	750	Diesel	9.78E-07	1.18E-06	1.41E-06	1.02E-05	4.92E-06	0.005303147	3.25E-07	2.99E-07	5.02E-08	0	172.3266818	23.29182905	0.047392158	3416.134927
Sacramento	2025 Industrial - Forklifts	Aggregate	9999	Diesel	2.50E-05	3.03E-05	3.60E-05	0.000186139	0.000478534	0.098403505	1.12E-05	1.03E-05	9.32E-07	0	3197.639069	156.3576851	0.31594772	63388.7126
Sacramento	2025 Industrial - Garbage Refuse	Aggregate	175	Diesel	2.31E-07	2.80E-07	3.33E-07	3.36E-06	3.07E-06	0.000583544	1.41E-07	1.30E-07	5.53E-09	0	18.96238001	8.992885295	0.015797386	375.9026053
Sacramento	2025 Industrial - Garbage Refuse	Aggregate	300	Diesel	6.98E-07	8.44E-07	1.00E-06	5.43E-06	4.76E-06	0.002794768	1.85E-07	1.70E-07	2.65E-08	0	90.81648574	20.07481643	0.031594772	1800.309538
Sacramento	2025 Industrial - Garbage Refuse	Aggregate	50	Diesel	3.76E-08	4.55E-08	5.42E-08	6.42E-07	6.45E-07	0.000100226	1.71E-08	1.58E-08	9.49E-10	0	3.256871748	6.113155496	0.015797386	58.07497721
Sacramento	2025 Industrial - Garbage Refuse	Aggregate	600	Diesel	1.04E-05	1.26E-05	1.50E-05	8.04E-05	6.14E-05	0.041648925	2.48E-06	2.28E-06	3.95E-07	0	1353.389096	145.0435592	0.205366018	26829.04187
Sacramento	2025 Industrial - Garbage Refuse	Aggregate	75	Diesel	2.04E-07	2.47E-07	2.94E-07	2.70E-06	2.25E-06	0.000426783	6.80E-08	6.26E-08	4.04E-09	0	13.86838837	8.794255315	0.015797386	247.2944595
Sacramento	2025 Industrial - Garbage Refuse	Aggregate	9999	Diesel	1.99E-06	2.41E-06	2.87E-06	2.03E-05	3.54E-05	0.010488673	8.21E-07	7.55E-07	9.94E-08	0	340.8312499	18.82505867	0.031594772	6756.501807
Sacramento	2025 Industrial - Garbage Transfer	Aggregate	300	Diesel	9.77E-07	1.18E-06	1.41E-06	6.10E-06	9.00E-06	0.002941775	3.12E-07	2.87E-07	2.79E-08	0	95.59350128	21.72450877	0.031594772	1895.007175
Sacramento	2025 Industrial - Garbage Transfer	Aggregate	600	Diesel	1.58E-06	1.91E-06	2.27E-06	1.43E-05	5.01E-06	0.007226523	2.95E-07	2.71E-07	6.85E-08	0	234.8271142	22.79127733	0.031594772	4655.118395
Sacramento	2025 Industrial - Misc - Aerial Lifts	Aggregate	100	Gasoline	0.000158858	0.000146117	0.000174813	0.008841188	0.000404247	0.315810859	2.20E-05	1.66E-05	3.05E-06	4.38E-06	12493.95	4376.35	12.14	293215.45
Sacramento	2025 Industrial - Misc - Aerial Lifts	Aggregate	15	Gasoline	0.000026674	2.69E-05	0.000029353	0.000757044	1.99E-05	2.99E-08	9.69E-06	7.32E-06	1.22E-08	1.68E-08	47.843355	0	0.441971674	0
Sacramento	2025 Industrial - Misc - Aerial Lifts	Aggregate	15	Diesel	2.89E-05	3.47E-05	4.15E-05	0.000182219	0.000217547	0.000417038	7.65E-06	5.78E-06	3.96E-09	3.41E-09	13.56489821	0	6.321496524	0
Sacramento	2025 Industrial - Misc - Aerial Lifts	Aggregate	15	Electric	3.19E-06	2.89E-07	3.16E-06	0.000112804	3.08E-06	1.04E-08	2.88E-07	2.17E-07	2.36E-10	2.12E-09	6.070276527	0	0.153181123	0
Sacramento	2025 Industrial - Misc - Aerial Lifts	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.140696392	0
Sacramento	2025 Industrial - Misc - Aerial Lifts	Aggregate	25	Gasoline	0.001468332	0.001483016	0.00161581	0.039033422	0.000958752	1.45E-06	0.000470672	0.00035562	6.31E-07	8.71E-07	2478.918532	0	14.68958914	0
Sacramento	2025 Industrial - Misc - Aerial Lifts	Aggregate	25	Diesel	5.44E-05	6.54E-05	7.82E-05	0.000222962	0.00041418	0.000597142	1.44E-05	1.09E-05	5.67E-09	4.88E-09	19.42308716	0	9.055437565	0
Sacramento	2025 Industrial - Misc - Aerial Lifts	Aggregate	25	Electric	0.000267608	2.42E-05	0.000264904	0.006841308	0.000188036	6.02E-07	1.84E-05	1.39E-05	1.46E-08	1.31E-07	375.6958364	0	6.090198567	0
Sacramento	2025 Industrial - Misc - Aerial Lifts	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.140696392	0
Sacramento	2025 Industrial - Misc - Aerial Lifts	Aggregate	50	Gasoline	0.000201427	0.000185272	0.000221658	0.016626567	0.00030616	0.157315999	1.08E-05	8.19E-06	1.91E-06	2.44E-06	6971.5	4376.35	12.14	144419.55
Sacramento	2025 Industrial - Misc - Forklifts	Aggregate	100	Gasoline	0.010969666	0.010089899	0.012071448	1.053541215	0.054792979	12.55810426	0.000875581	0.00066155	0.000121329	0.000188939	539327.65	255664.25	141.92	17896497.5
Sacramento	2025 Industrial - Misc - Forklifts	Aggregate	100	Nat Gas	0	0	0.001995397	0.922201234	0.093091492	20.06302849	0.001784279	0	0	0	1117713.95	468911.85	260.28	32823829.5
Sacramento	2025 Industrial - Misc - Forklifts	Aggregate	175	Gasoline	0.000573664	0.000527656	0.000631283	0.039435637	0.003359952	0.931015731	6.67E-05	5.04E-05	9.25E-06	1.32E-05	37646.1	9351.3	5.19	1365289.8
Sacramento	2025 Industrial - Misc - Forklifts	Aggregate	175	Nat Gas	0	0	9.11E-05	0.053869755	0.004567421	1.531344424	0.000136188	0	0	0	83840.5	17151.35	9.53	2504097.1
Sacramento	2025 Industrial - Misc - Forklifts	Aggregate	25	Gasoline	9.38E-06	9.47E-06	1.03E-05	0.000783362	5.25E-06	2.12E-07	1.90E-08	1.43E-08	1.20E-08	1.65E-08	47.14137708	0	0.113082522	0
Sacramento	2025 Industrial - Misc - Forklifts	Aggregate	25	Electric	4.95E-05	4.48E-06	4.90E-05	0.00071204	1.99E-05	5.51E-08	2.20E-06	1.66E-06	1.61E-09	1.45E-08	41.30409693	0	0.211698385	0
Sacramento	2025 Industrial - Misc - Forklifts	Aggregate	50	Gasoline	0.005199936	0.004782901	0.005722213	0.618572841	0.012264237	2.119801927	0.000146137	0.000110415	2.58E-05	4.13E-05	117756.3	72850.35	40.45	2986864.35
Sacramento	2025 Industrial - Misc - Forklifts	Aggregate	50	Nat Gas	0	0	0.000336886	0.054702053	0.014277366	3.348218591	0.000297769	0	0	0	178463.1	133597.3	74.15	5477489.3
Sacramento	2025 Industrial - Misc - Other General Industrial Equipment	Aggregate	100	Gasoline	4.95E-05	4.56E-05	5.45E-05	0.003658717	0.000295688	0.090624745	6.32E-06	4.77E-06	8.76E-07	1.28E-06	3650	908.85	1.28	71799.15
Sacramento	2025 Industrial - Misc - Other General Industrial Equipment	Aggregate	15	Gasoline	0.000305917	0.000308976	0.000336643	0.018113246	0.000158174	7.12E-06	1.52E-06	1.15E-06	2.82E-07	3.89E-07	1101.707771	0	15.29737981	0
Sacramento	2025 Industrial - Misc - Other General Industrial Equipment	Aggregate	15	Diesel	1.65E-05	1.99E-05	0.000023738	0.00011694	0.000139613	0.000258454	4.91E-06	3.71E-06	2.45E-09	2.11E-09	8.406670496	0	1.536839953	0
Sacramento	2025 Industrial - Misc - Other General Industrial Equipment	Aggregate	175	Gasoline	6.96E-06	6.40E-06	7.66E-06	0.000664411	5.92E-05	0.018786518	1.35E-06	1.02E-06	1.87E-07	2.62E-07	748.25	80.3	0.11	13972.2
Sacramento	2025 Industrial - Misc - Other General Industrial Equipment	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.01351843	0
Sacramento	2025 Industrial - Misc - Other General Industrial Equipment	Aggregate	25	Gasoline	0.00027125	0.000273964	0.000298496	0.023936172	0.000151823	6.47E-06	5.79E-07	4.38E-07	3.66E-07	5.05E-07	1438.458199	0	5.133871724	0
Sacramento	2025 Industrial - Misc - Other General Industrial Equipment	Aggregate	25	Diesel	4.78E-05	5.75E-05	6.88E-05	0.000196382	0.000363588	0.00052562	0.000012227	9.24E-06	4.99E-09	4.30E-09	17.09671547	0	1.594659071	0
Sacramento	2025 Industrial - Misc - Other General Industrial Equipment	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.01351843	0
Sacramento	2025 Industrial - Misc - Other General Industrial Equipment	Aggregate	50	Gasoline	0.000160193	0.000147345	0.000176282	0.015555113	0.000361867	0.10591346	7.30E-06	5.52E-06	1.29E-06	1.74E-06	4953.05	2763.05	3.87	82891.5
Sacramento	2025 Industrial - Misc - Other Material Handling Equipment	Aggregate	100	Gasoline	0.000104389	9.60E-05	0.000114874	0.005686028	0.00049397	0.125289202	8.74E-06	6.60E-06	1.21E-06	1.78E-06	5088.1	1868.8	4.82	100915.2
Sacramento	2025 Industrial - Misc - Other Material Handling Equipment	Aggregate	50	Gasoline	4.13E-06	3.80E-06	4.55E-06	0.000345847	8.66E-06	0.002174188	1.50E-07	1.13E-07	2.64E-08	3.58E-08	102.2	14.6	0.04	598.6
Sacramento	2025 Industrial - Misc - Sweepers/Scrubbers	Aggregate	100	Gasoline	0.000260341	0.000239462	0.00028649	0.016880448	0.001657525	0.549109398	3.83E-05	2.89E-05	5.31E-06	7.64E-06	21808.75	4865.45	9.42	330850.6
Sacramento	2025 Industrial - Misc - Sweepers/Scrubbers	Aggregate	15	Gasoline	0.000123663	0.000124899	0.000136083	0.0076356	6.23E-05	3.14E-06	3.16E-07	2.39E-07	1.18E-07	1.63E-07	463.7384436	0	6.783910606	0
Sacramento	2025 Industrial - Misc - Sweepers/Scrubbers	Aggregate	15	Diesel	6.68E-06	8.04E-06	9.61E-06	4.73E-05	5.65E-05	0.000104595	1.99E-06	1.50E-06	9.93E-10	8.55E-10	3.402151087	0	0.730454148	0
Sacramento	2025 Industrial - Misc - Sweepers/Scrubbers	Aggregate	175	Gasoline	2.02E-06	1.86E-06	2.22E-06	0.000216707	1.95E-05	0.006392448	4.58E-07	3.46E-07	6.35E-08	8.82E-08	251.85	29.2	0.06	4088
Sacramento	2025 Industrial - Misc - Sweepers/Scrubbers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.009517172	0
Sacramento	2025 Industrial - Misc - Sweepers/Scrubbers	Aggregate	25	Gasoline	0.000271922	0.000274642	0.000299234	0.025982234	0.000152197	7.03E-06	6.29E-07	4.75E-07	3.96E-07	5.47E-07	1558.487249	0	6.750048346	0
Sacramento	2025 Industrial - Misc - Sweepers/Scrubbers	Aggregate	25	Diesel	9.62E-06	1.16E-05	1.38E-05	3.95E-05	7.31E-05	0.000105722	2.46E-06	1.86E-06	1.00E-09	8.64E-10	3.438794003	0	0.550310124	0
Sacramento	2025 Industrial - Misc - Sweepers/Scrubbers	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.009517172	0
Sacramento	2025 Industrial - Misc - Sweepers/Scrubbers	Aggregate	50	Gasoline	0.000446484	0.000410676	0.000491328	0.03931062	0.000987916	0.34234458	2.36E-05	1.78E-05	4.16E-06	5.38E-06	15359.2	5821.75	11.28	203761.25
Sacramento	2025 Industrial - Mower	Aggregate	100	Diesel	2.77E-05	3.35E-05	3.98E-05	0.000517891	0.000356272	0.086170818	2.46E-05	2.27E-05	8.16E-07	0	2800.13575	1459.638995	2.622518272	49930.33013
Sacramento	2025 Industrial - Mower	Aggregate	175	Diesel	7.29E-06	8.82E-06	1.05E-05	0.000159851	5.67E-05	0.026473282	2.03E-06	1.87E-06	2.51E-07	0	860.2539157	369.8146825	0.584743156	17212.70115
Sacramento	2025 Industrial - Mower	Aggregate	300	Diesel	4.24E-07	5.13E-07	6.11E-07	2.13E-06	6.04E-06	0.00107392	1.94E-07	1.78E-07	1.02E-08	0	34.89722383	10.40283532	0.015797386	691.788549
Sacramento	2025 Industrial - Mower	Aggregate	50	Diesel	0.000206057	0.000249329	0.000296722	0.002200166	0.001826367	0.279318275	7.35E-05	6.76E-05	2.65E-06	0	9076.496087	12113.92468	25.08651869	161698.8874
Sacramento	2025 Industrial - Mower	Aggregate	75	Diesel	8.16E-05	9.88E-05	0.000117533	0.001137771	0.000999585	0.187069254	2.23E-05	2.06E-05	1.77E-06	0	6078.848042	4938.545323	9.525823758	108395.107
Sacramento	2025 Industrial - Mower	Aggregate	9999	Diesel	1.53E-05	1.85E-05	2.20E-05	9.82E-05	0.000258443	0.04979407	7.30E-06	6.71E-06	4.72E-07	0	1618.066984	58.41169673	0.126379088	32075.91001
Sacramento	2025 Industrial - Other General Industrial Equipment	Aggregate	100	Diesel	3.81E-05	4.61E-05	5.49E-05	0.000443052	0.000393433	0.073827789	2.84E-05	2.61E-05	6.99E-07	0	2399.046896	1458.474287	3.618423929	42601.17451
Sacramento	2025 Industrial - Other General Industrial Equipment	Aggregate	175	Diesel	8.52E-05	0.000103084	0.000122679	0.001375321	0.000801226	0.232488061	3.83E-05	3.52E-05	2.20E-06	0	7554.740105	3385.297642	5.92533526	150505.7252
Sacramento	2025 Industrial - Other General Industrial Equipment	Aggregate	300	Diesel	5.77E-05	6.98E-05	8.31E-05	0.000376806	0.00056242	0.154605512	2.59E-05	2.38E-05	1.46E-06	0	5023.933072	1259.881805	2.654622949	100371.6348
Sacramento	2025 Industrial - Other General Industrial Equipment	Aggregate	50	Diesel	0.000195402	0.000236436	0.000281379	0.001519581	0.001350477	0.188198291	6.70E-05	6.16E-05	1.78E-06	0	6115.536309	9194.422733	23.2545851	108539.3647
Sacramento	2025 Industrial - Other General Industrial Equipment	Aggregate	600	Diesel	0.000153309	0.000185503	0.000220764	0.001191488	0.001412734	0.490241453	6.01E-05	5.53E-05	4.64E-06	0	15930.48155	2425.494442	4.761332052	331465.3091
Sacramento	2025 Industrial - Other General Industrial Equipment	Aggregate	75	Diesel	5.18E-05	6.27E-05	7.46E-05	0.000613758	0.000644767	0.10290967	2.51E-05	2.31E-05	9.75E-07	0	3344.067669	2897.812924	6.809611509	59225.0881
Sacramento	2025 Industrial - Other General Industrial Equipment	Aggregate	750	Diesel	3.26E-05	3.94E-05	4.69E-05	0.000234844	0.00031725	0.114151569	1.35E-05	1.24E-05	1.08E-06	0	3709.375143	323.7963881	0.71088237	73533.16299
Sacramento	2025 Industrial - Other General Industrial Equipment	Aggregate	9999	Diesel	4.94E-05	5.97E-05	7.11E-05	0.000365695	0.000925375	0.186432365	2.28E-05	2.10E-05	1.77E-06	0	6058.152231	326.4383329	0.63189544	120094.3766
Sacramento	2025 Industrial - Other Truck	Aggregate	100	Diesel	2.57E-06	3.11E-06	3.70E-06	6.43E-05	3.09E-05	0.01061909	2.46E-06	2.26E-06	1.01E-07	0	345.0691909	211.5856929	0.31594772	6153.108549
Sacramento	2025 Industrial - Other Truck	Aggregate	175	Diesel	2.72E-05	3.29E-05	3.91E-05	0.000526414	0.000182992	0.084869967	7.00E-06	6.44E-06	8.04E-07	0	2757.864378	952.3608855	1.011243484	55097.48783
Sacramento	2025 Industrial - Other Truck	Aggregate	300	Diesel	5.53E-05	6.69E-05	7.96E-05	0.000345287	0.000494183	0.15409827	2.02E-05	1.86E-05	1.46E-06	0	5007.450179	1122.288011	1.437562126	99265.68115
Sacramento	2025 Industrial - Other Truck	Aggregate	50	Diesel	6.12E-06	7.41E-06	8.82E-06	6.85E-05	5.44E-05	0.008720487	1.87E-06	1.72E-06	8.26E-08	0	283.3737367	471.9206578	0.805666686	5052.984758
Sacramento	2025 Industrial - Other Truck	Aggregate	600	Diesel	0.000176866	0.000214008	0.000254687	0.001179918	0.001076569	0.562855783	5.00E-05	4.60E-05	5.33E-06	0	18290.09685	2306.183348	3.681270685	365349.2553
Sacramento	2025 Industrial - Other Truck	Aggregate	75	Diesel	1.07E-05	1.29E-05	1.54E-05	0.000118934	0.000123208	0.019427891	4.70E-06	4.32E-06	1.84E-07	0	631.3127027	449.62839	0.71088237	11257.26576
Sacramento	2025 Industrial - Other Truck	Aggregate	750	Diesel	1.63E-05	1.98E-05	2.35E-05	8.39E-05	0.000157355	0.042850736	6.37E-06	5.86E-06	4.06E-07	0	1392.442136	105.2907012	0.379137264	27603.21364
Sacramento	2025 Industrial - Other Truck	Aggregate	9999	Diesel	1.41E-05	1.71E-05	2.03E-05	9.61E-05	0.000240995	0.048809313	5.63E-06	5.18E-06	4.62E-07	0	1586.067133	38.63106135	0.063189544	31441.55781
Sacramento	2025 Industrial - Railcars or Track Cars	Aggregate	100	Diesel	5.01E-07	6.06E-07	7.21E-07	5.84E-06	4.11E-06	0.000983229	2.38E-07	2.19E-07	9.31E-09	0	31.95019427	16.45060119	0.031594772	569.7205624
Sacramento	2025 Industrial - Railcars or Track Cars	Aggregate	175	Diesel	9.03E-06	1.09E-05	1.30E-05	0.000155029	7.85E-05	0.025532659	3.55E-06	3.26E-06	2.42E-07	0	829.6882145	295.6705658	0.505621008	16611.00177
Sacramento	2025 Industrial - Railcars or Track Cars	Aggregate	300	Diesel	7.48E-06	9.05E-06	1.08E-05	5.64E-05	4.25E-05	0.027656545	1.82E-06	1.67E-06	2.62E-07	0	898.7042497	212.1425082	0.31594772	17815.55209
Sacramento	2025 Industrial - Railcars or Track Cars	Aggregate	50	Diesel	2.50E-07	3.03E-07	3.60E-07	1.37E-06	1.11E-06	0.000170182	4.42E-08	4.06E-08	1.61E-09	0	5.530082329	8.238076824	0.015797386	98.60977959
Sacramento	2025 Industrial - Railcars or Track Cars	Aggregate	600	Diesel	2.42E-06	2.93E-06	3.49E-06	2.19E-05	7.72E-06	0.01138633	4.64E-07	4.27E-07	1.08E-07	0	370.0007661	61.17383226	0.094784316	7334.74658
Sacramento	2025 Industrial - Railcars or Track Cars	Aggregate	75	Diesel	4.49E-07	5.43E-07	6.46E-07	8.36E-06	7.02E-06	0.001475907	5.84E-08	5.37E-08	1.40E-08	0	47.9598654	41.38489153	0.079111392	814.620205
Sacramento	2025 Industrial - Railcars or Track Cars	Aggregate	9999	Diesel	1.40E-06	1.69E-06	2.02E-06	1.02E-05	3.02E-05	0.00487468	8.30E-07	7.64E-07	4.62E-08	0	158.4035671	10.75976114	0.015797386	3140.128692
Sacramento	2025 Industrial - Sweepers/Scrubbers	Aggregate	100	Diesel	3.86E-05	4.68E-05	5.56E-05	0.000530953	0.000424393	0.092827333	2.96E-05	2.72E-05	8.79E-07	0	3016.44038	1400.181969	4.598928083	53268.4092
Sacramento	2025 Industrial - Sweepers/Scrubbers	Aggregate	175	Diesel	8.16E-06	9.87E-06	1.17E-05	0.000123158	9.07E-05	0.021351572	4.31E-06	3.97E-06	2.02E-07	0	693.823068	252.1832092	0.632135314	13807.21383
Sacramento	2025 Industrial - Sweepers/Scrubbers	Aggregate	300	Diesel	7.23E-06	8.75E-06	1.04E-05	5.98E-05	6.29E-05	0.02936831	2.65E-06	2.44E-06	2.78E-07	0	954.3283606	188.1322727	0.458124194	18918.22212
Sacramento	2025 Industrial - Sweepers/Scrubbers	Aggregate	50	Diesel	5.88E-05	7.12E-05	8.47E-05	0.000532178	0.00049465	0.079036804	1.93E-05	1.77E-05	7.49E-07	0	2568.314743	2925.996022	11.07563434	44733.12536
Sacramento	2025 Industrial - Sweepers/Scrubbers	Aggregate	600	Diesel	1.37E-06	1.66E-06	1.98E-06	1.55E-05	1.26E-05	0.004611561	6.50E-07	5.98E-07	4.37E-08	0	149.8534856	20.04436435	0.047392158	2970.635311
Sacramento	2025 Industrial - Sweepers/Scrubbers	Aggregate	75	Diesel	2.83E-05	3.43E-05	4.08E-05	0.00041085	0.000407835	0.071655656	1.02E-05	9.43E-06	6.79E-07	0	2328.463059	1309.440568	4.281759307	41268.26802
Sacramento	2025 Industrial - Sweepers/Scrubbers	Aggregate	9999	Diesel	1.47E-06	1.77E-06	2.11E-06	1.75E-05	3.11E-05	0.009260322	7.18E-07	6.61E-07	8.77E-08	0	300.9157894	5.894499752	0.015797386	5965.233749
Sacramento	2025 Industrial - Tow Tractor	Aggregate	600	Diesel	5.60E-07	6.78E-07	8.07E-07	3.87E-06	7.79E-06	0.002067858	2.13E-07	1.96E-07	1.96E-08	0	67.19539054	8.372435158	0.015797386	1332.054434
Sacramento	2025 Industrial - Yard Goat	Aggregate	100	Diesel	5.72E-06	6.92E-06	8.24E-06	6.49E-05	5.29E-05	0.01063577	3.20E-06	2.94E-06	1.01E-07	0	345.611198	178.7469415	0.189568632	6162.773361
Sacramento	2025 Industrial - Yard Goat	Aggregate	175	Diesel	0.000532981	0.000644907	0.000767493	0.009280071	0.003830153	1.468396594	0.000160599	0.000147751	1.39E-05	0	47715.80352	14936.57666	11.83262242	946981.8043
Sacramento	2025 Industrial - Yard Goat	Aggregate	300	Diesel	0.000315335	0.000381555	0.000454082	0.00200781	0.001920315	0.912748848	8.58E-05	7.90E-05	8.65E-06	0	29659.93306	7619.018433	6.935292328	588521.106
Sacramento	2025 Industrial - Yard Goat	Aggregate	50	Diesel	2.09E-06	2.53E-06	3.02E-06	2.38E-05	1.88E-05	0.002550219	8.28E-07	7.62E-07	2.42E-08	0	82.86982408	122.7683367	0.221163404	1477.695014
Sacramento	2025 Industrial - Yard Goat	Aggregate	600	Diesel	2.64E-05	3.19E-05	3.79E-05	0.0001538	0.000181321	0.076116471	6.99E-06	6.43E-06	7.21E-07	0	2473.418006	340.8588577	0.316130074	50202.3738
Sacramento	2025 Industrial - Yard Goat	Aggregate	75	Diesel	2.87E-06	3.47E-06	4.13E-06	2.91E-05	3.12E-05	0.004535194	1.18E-06	1.08E-06	4.30E-08	0	147.3719166	116.3113494	0.142176474	2627.865437
Sacramento	2025 Industrial - Yard Goat	Aggregate	9999	Diesel	5.51E-06	6.67E-06	7.93E-06	2.98E-05	7.99E-05	0.015584077	2.01E-06	1.85E-06	1.48E-07	0	506.407298	15.25284867	0.015797386	10038.81488
Sacramento	2025 Lawn and Garden - Misc - Chainsaws	Aggregate	2	Gasoline	0.203709445	0.205789403	0.224199047	0.576151633	0.006498	3.077027485	0.002431	0.001839	0.00004496	0.0000619	175044.3537	0	41348.50343	0
Sacramento	2025 Lawn and Garden - Misc - Chainsaws	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	25150.57127	0
Sacramento	2025 Lawn and Garden - Misc - Chainsaws	Aggregate	5	Gasoline	0.1659	0.1675	0.182559839	0.534192643	0.005928	2.852687878	0.002261	0.001705	0.00004078	0.00005629	159286.7121	0	29419.01724	0
Sacramento	2025 Lawn and Garden - Misc - Chainsaws	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	17894.36203	0
Sacramento	2025 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	2	Gasoline	0.1758	0.177487769	0.193339586	0.310181646	0.006285	1.656860954	0.00131	0.00099	0.00002636	0.00003632	102847.4643	0	22264.57877	0
Sacramento	2025 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	13542.6153	0
Sacramento	2025 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	5	Gasoline	0.1628	0.1645	0.179251649	0.287580657	0.005827	1.536062705	0.001214	0.000918	0.0000244	0.00003361	95349.98843	0	15841.00929	0
Sacramento	2025 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	9635.42571	0
Sacramento	2025 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	15	Gasoline	0.00022	0.000222	0.000242	0.0122	0.0000896	0.027	0.000000477	0.000000361	0.00000045	0.000000621	1752.985413	0	181.3111836	0
Sacramento	2025 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	67.22483488	0
Sacramento	2025 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	2	Gasoline	0.0000689	0.0000696	0.0000758	0.000896	0.0000075	0.0021	3.42E-08	2.58E-08	3.83E-08	5.29E-08	139.7370799	0	62.72154124	0
Sacramento	2025 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	23.25529607	0
Sacramento	2025 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	25	Diesel	0.00000629	0.00000756	0.00000903	0.0000258	4.78E-05	0.006313165	0.00000161	0.00000121	5.99E-08	5.16E-08	205.3468692	0	0.489341641	0
Sacramento	2025 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	5	Gasoline	0.000257	0.00026	0.000283	0.0122	9.38E-05	0.0285	4.73E-07	3.58E-07	4.73E-07	6.53E-07	1812.862413	0	288.3109753	0
Sacramento	2025 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	106.8971992	0
Sacramento	2025 Lawn and Garden - Misc - Lawn Mowers	Aggregate	15	Gasoline	0.0004597	0.0004641	0.0005048	0.030639436	0.00021	0.065	0.000004782	3.61E-06	0.000001128	0.000001558	4280.14169	0	607.7382027	0
Sacramento	2025 Lawn and Garden - Misc - Lawn Mowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	259.3098403	0
Sacramento	2025 Lawn and Garden - Misc - Lawn Mowers	Aggregate	2	Gasoline	2.86E-05	2.89E-05	0.00003146	0.0006525	0.00001387	0.001764	0.000001365	0.000001031	3.02E-08	4.18E-08	107.8765075	0	40.45529289	0
Sacramento	2025 Lawn and Garden - Misc - Lawn Mowers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	17.26148211	0
Sacramento	2025 Lawn and Garden - Misc - Lawn Mowers	Aggregate	25	Gasoline	0.0003802	0.0003835	0.0004186	0.02583	0.0001317	0.05475	0.000004027	3.04E-06	9.25E-07	1.28E-06	3604.569453	0	165.457578	0
Sacramento	2025 Lawn and Garden - Misc - Lawn Mowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	70.59746768	0
Sacramento	2025 Lawn and Garden - Misc - Lawn Mowers	Aggregate	5	Gasoline	0.09875	0.099655611	0.108602005	4.812356487	0.06089	13.27565422	0.0008547	0.0006461	0.0002123	0.0002928	790049.5164	0	166154.8246	0
Sacramento	2025 Lawn and Garden - Misc - Lawn Mowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	70894.969	0
Sacramento	2025 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	15	Gasoline	0.002289	0.002312	0.002519	0.1645	0.001722	0.424506784	0.0000065	0.0000049	0.00000666	0.0000092	25768.41413	0	1378.420125	0
Sacramento	2025 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	2	Gasoline	0.25792	0.26058	0.283863259	1.602180854	0.01115	6.757810702	0.0036525	0.0027565	0.00009685	0.00013363	379520.6206	0	45727.7275	0
Sacramento	2025 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	108194.4399	0
Sacramento	2025 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	25	Gasoline	0.00004898	0.00004942	0.00005391	0.003577	0.00005437	0.013696	1.61E-07	1.22E-07	1.86E-07	2.56E-07	726.8365185	0	13.89936878	0
Sacramento	2025 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	5	Gasoline	0.353670007	0.357135166	0.389125257	1.315053174	0.0087031	8.588166632	0.00543054	0.00410798	0.000112627	0.000155593	443416.3981	0	22200.86389	0
Sacramento	2025 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	58223.51079	0
Sacramento	2025 Lawn and Garden - Misc - Other	Aggregate	15	Gasoline	0.001217	0.001229	0.001339	0.0679	0.00045	0.176328871	0.00000349	0.000002642	0.00000276	0.00000382	10715.81944	0	1332.831718	0
Sacramento	2025 Lawn and Garden - Misc - Other	Aggregate	15	Diesel	0.00000237	0.00000286	0.00000341	0.0000168	0.0000201	0.002781342	0.000000706	0.000000533	2.64E-08	2.27E-08	90.46808356	0	0.380417263	0
Sacramento	2025 Lawn and Garden - Misc - Other	Aggregate	25	Gasoline	0.0002162	0.0002192	0.000238	0.01992	0.000149	0.0418	0.000000828	0.000000626	0.000000703	0.00000097	2754.74033	0	114.937395	0
Sacramento	2025 Lawn and Garden - Misc - Other	Aggregate	25	Diesel	0.000000416	0.000000501	5.98E-07	0.00000171	0.00000316	0.00041812	0.000000106	8.04E-08	3.97E-09	3.42E-09	13.60009784	0	0.043	0
Sacramento	2025 Lawn and Garden - Misc - Other	Aggregate	5	Gasoline	0.000617	0.000623	0.000679	0.0307	0.000241	0.0696	0.00000127	0.00000096	0.000001179	1.63E-06	4477.856424	0	1085.274251	0
Sacramento	2025 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Gasoline	0.004904	0.004958	0.005398	0.260912391	0.003881	0.760789568	0.00002217	0.000016759	1.14E-05	1.58E-05	44306.706	0	1188.273469	0
Sacramento	2025 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Diesel	0.0006048	0.0007273	0.0008689	0.004286	0.005114589	0.708445956	0.00018	0.00013601	0.000006726	0.000005789	23043.45913	0	815.7004188	0
Sacramento	2025 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	71.12827569	0
Sacramento	2025 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Gasoline	0.162254227	0.1639282	0.178557692	9.487955023	0.084051	19.73422247	0.000607258	0.000458387	0.000335425	0.000462485	1313251.408	0	13849.72371	0
Sacramento	2025 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Diesel	0.001826	0.002201	0.002628	0.007498	0.01386	1.833797733	0.0004663	0.0003523	0.00001737	1.50E-05	59647.51824	0	1662.455745	0
Sacramento	2025 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	812.4584214	0
Sacramento	2025 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	5	Gasoline	0.0005419	0.0005463	0.0005957	0.01919	0.0002263	0.045	1.32E-06	9.96E-07	7.56E-07	1.04E-06	2871.266109	0	193.4163796	0
Sacramento	2025 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	11.5776157	0
Sacramento	2025 Lawn and Garden - Misc - Snowblowers	Aggregate	15	Gasoline	0.000796	0.000804	0.000877	0.059428786	0.000392	0.104	0.000002124	0.000001606	0.000002046	0.000002826	7465.247682	0	1827.056792	0
Sacramento	2025 Lawn and Garden - Misc - Snowblowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	176.6762935	0
Sacramento	2025 Lawn and Garden - Misc - Snowblowers	Aggregate	25	Gasoline	0.000002534	2.56E-06	0.000002784	0.0002544	0.000001824	0.0004451	9.10E-09	6.87E-09	8.39E-09	1.16E-08	31.84750469	0	3.763247381	0
Sacramento	2025 Lawn and Garden - Misc - Snowblowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0.363905819	0
Sacramento	2025 Lawn and Garden - Misc - Snowblowers	Aggregate	5	Gasoline	0.0003559	0.0003604	0.0003927	0.01871	0.0001543	0.04286	0.000000781	5.89E-07	0.000000714	0.000000986	2738.177106	0	1373.585435	0
Sacramento	2025 Lawn and Garden - Misc - Snowblowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	132.8256376	0
Sacramento	2025 Lawn and Garden - Misc - Tillers	Aggregate	15	Gasoline	0.0008909	0.0008993	0.0009805	0.05667	0.0005491	0.143816999	2.61E-06	1.97E-06	0.000002284	3.16E-06	8800.351031	0	1459.515684	0
Sacramento	2025 Lawn and Garden - Misc - Tillers	Aggregate	2	Gasoline	0.00371865	0.00375061	0.00409047	0.0109054	0.000066716	0.063437	6.22E-06	4.70E-06	1.01E-06	1.40E-06	3486.91613	0	1974.995815	0
Sacramento	2025 Lawn and Garden - Misc - Tillers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	608.0592212	0
Sacramento	2025 Lawn and Garden - Misc - Tillers	Aggregate	5	Gasoline	0.0005508	0.000556	0.000606	0.027975	0.00018286	0.06553	1.03E-06	7.80E-07	1.09E-06	0.000001512	4155.436946	0	981.0750932	0
Sacramento	2025 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	15	Gasoline	0.00005125	0.00005181	0.00005648	0.002834	0.00001982	0.007324	1.12E-07	8.48E-08	1.18E-07	1.62E-07	446.3468428	0	54.71247602	0
Sacramento	2025 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	2	Gasoline	0.377682995	0.38134964	0.415552425	2.101841425	0.02248	11.04814449	0.0032773	0.0024749	0.00014953	0.00020641	584406.3616	0	122344.9123	0
Sacramento	2025 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	182156.8371	0
Sacramento	2025 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	25	Gasoline	0.00005724	0.0000578	0.00006293	0.002878	0.000024	0.0113	0.000000127	0.000000096	1.53E-07	2.12E-07	597.0593789	0	25.18510761	0
Sacramento	2025 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	5	Gasoline	0.013885	0.01403	0.015294	0.251199201	0.0015697	0.853578887	0.00016826	0.00012705	1.23E-05	0.000017006	48368.60753	0	3944.943216	0
Sacramento	2025 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	2936.99094	0
Sacramento	2025 Lawn and Garden - Misc - Wood Splitters	Aggregate	15	Gasoline	0.0178775	0.018067396	0.019685204	0.889072945	0.009029	2.252994861	0.000077884	0.000058839	0.000035781	0.00004935	138467.0397	0	4746.111816	0
Sacramento	2025 Lawn and Garden - Misc - Wood Splitters	Aggregate	2	Gasoline	0.00033408	0.0003371	0.00036729	0.008897	0.00018118	0.020707	6.91E-07	5.22E-07	3.55E-07	4.90E-07	1336.777918	0	127.1141552	0
Sacramento	2025 Lawn and Garden - Misc - Wood Splitters	Aggregate	25	Gasoline	1.07E-05	1.08E-05	1.17E-05	0.00061014	4.63E-06	0.00145756	4.84E-08	3.66E-08	2.34E-08	3.23E-08	91.69122661	0	1.033446927	0
Sacramento	2025 Lawn and Garden - Misc - Wood Splitters	Aggregate	5	Gasoline	0.00114487	0.00116492	0.00126536	0.05007	0.00039573	0.11915777	3.98E-06	3.01E-06	1.96E-06	0.000002714	7526.219276	0	457.3009232	0
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	100	Gasoline	0.001996016	0.001835935	0.002196494	0.095192191	0.005045451	1.815213404	0.000126561	9.56E-05	1.75E-05	2.61E-05	74627.9	19790.3	40.95	1385321
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	15	Gasoline	0.117126939	0.118298209	0.128891052	7.608576722	0.072134918	15.01007815	0.000205586	0.0002721	0.000261048	0.000360342	1021028.871	0	9521.295782	0
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	15	Diesel	1.97E-05	2.37E-05	0.000028339	0.000121809	0.000148593	0.020069651	4.27E-06	5.65E-06	1.90E-07	1.64E-07	652.8009193	0	2.467088016	0
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	116752.0093	0
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	175	Gasoline	0.000192577	0.000177133	0.00021192	0.008425047	0.000696927	0.227343373	1.63E-05	1.23E-05	2.26E-06	3.20E-06	9143.25	1324.95	2.74	177543.3
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	25	Gasoline	0.001660916	0.001677524	0.001827736	0.239622866	0.002422387	0.365254542	4.78E-06	6.33E-06	7.09E-06	9.79E-06	27883.78654	0	98.54468339	0
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	25	Diesel	8.22E-05	9.89E-05	0.000118157	0.000331714	0.000615515	0.080096166	1.68E-05	2.22E-05	7.60E-07	6.55E-07	2605.269635	0	4.937038868	0
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	618.5726915	0
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	5	Gasoline	0.02482811	0.025076391	0.027321821	1.011528273	0.007452807	2.394158832	2.96E-05	3.92E-05	3.89E-05	5.36E-05	151814.2071	0	3588.669758	0
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	44004.97733	0
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	50	Gasoline	0.000642677	0.000591134	0.000707227	0.05051781	0.000865226	0.283077085	1.95E-05	1.47E-05	3.44E-06	4.84E-06	13804.3	6110.1	12.62	213853.5
Sacramento	2025 Light Commercial - Misc - Air Compressors	Aggregate	50	Diesel	0.000613328	0.000729912	0.000883193	0.00613961	0.004855801	0.727042665	0.000174126	0.000160196	9.13E-06	5.95E-06	23648.35	23162.9	28.48	857027.3
Sacramento	2025 Light Commercial - Misc - Gas Compressors	Aggregate	100	Nat Gas	0	0	0.000229863	0.1193249	0.009057409	2.853592	0	0	0	0	157906.3	16311.85	1.92	1435442.8
Sacramento	2025 Light Commercial - Misc - Gas Compressors	Aggregate	175	Nat Gas	0	0	6.41E-05	0.024271766	0.00242372	0.74265675	0	0	0	0	40551.5	2631.65	0.3	384220.9
Sacramento	2025 Light Commercial - Misc - Gas Compressors	Aggregate	300	Nat Gas	0	0	4.93E-05	0.027929154	0.002342644	0.76540327	0	0	0	0	41996.9	2106.05	0.25	442270.5
Sacramento	2025 Light Commercial - Misc - Gas Compressors	Aggregate	50	Nat Gas	0	0	4.22E-05	0.007461717	0.001530532	0.50780324	0	0	0	0	26984.45	7891.3	0.92	252521.6
Sacramento	2025 Light Commercial - Misc - Gas Compressors	Aggregate	600	Nat Gas	0	0	6.95E-05	0.03933356	0.003299223	1.077943	0	0	0	0	59148.25	1843.25	0.21	623018.5
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	100	Gasoline	0.000685917	0.000630906	0.000754809	0.029337929	0.004068417	1.217092955	8.49E-05	6.41E-05	1.18E-05	1.68E-05	47888	9230.85	80.29	766160.55
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	100	Nat Gas	0	0	3.30E-06	0.002485711	0.000249863	0.078911823	0	0	0	0	4299.7	682.55	5.95	56651.65
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	15	Gasoline	0.10780442	0.108882465	0.118632189	5.998115212	0.056322674	15.25750594	0.000208282	0.000275667	0.00023876	0.000329577	934653.8283	0	21500.53605	0
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	15	Diesel	0.001028865	0.001237498	0.00147901	0.007111866	0.00869799	1.169390543	0.000249822	0.000330646	1.11E-05	9.56E-06	38036.49798	0	245.3803474	0
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	175	Gasoline	6.92E-05	6.36E-05	7.61E-05	0.006406306	0.000705683	0.196734189	1.41E-05	1.07E-05	1.95E-06	2.74E-06	7829.25	872.35	7.59	127363.1
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	175	Nat Gas	0	0	3.66E-06	0.002977297	0.000340884	0.115074612	0	0	0	0	6201.35	565.75	4.95	82599.5
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	2	Gasoline	0.329799946	0.333097944	0.362924721	5.650478917	0.096429149	12.3015725	0.000430549	0.000569843	0.000217754	0.000300582	832919.2316	0	51907.74357	0
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	15892.55461	0
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	25	Gasoline	0.003799558	0.003837555	0.004181182	0.354938302	0.00217613	0.54904548	7.30E-06	9.67E-06	1.06E-05	1.47E-05	41775.814	0	412.2849084	0
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	25	Diesel	0.001485876	0.001787181	0.00213597	0.006116516	0.011340815	1.473604455	0.00031073	0.00041126	1.40E-05	1.20E-05	47931.59409	0	179.462253	0
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	5	Gasoline	0.031112368	0.031423492	0.034237263	1.437496201	0.007128729	3.045152502	5.07E-05	6.71E-05	5.23E-05	7.23E-05	201878.9113	0	11885.54957	0
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	50	Gasoline	0.003209745	0.002952323	0.003532129	0.21662052	0.006822654	2.457233687	0.000169399	0.000127991	2.99E-05	3.72E-05	106317.2	47731.05	415.61	1527393.6
Sacramento	2025 Light Commercial - Misc - Generator Sets	Aggregate	50	Diesel	0.001153268	0.001372484	0.001660706	0.0131695	0.012445894	2.003266809	0.000384571	0.000353805	2.53E-05	1.64E-05	65159.8	46643.35	138.16	1539230.55
Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	15	Gasoline	0.039710249	0.040107352	0.043698706	2.910806613	0.020249228	5.687018479	7.30E-05	9.66E-05	9.88E-05	0.000136367	387885.2368	0	12864.49433	0
Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	15	Diesel	9.77E-06	1.18E-05	1.41E-05	6.76E-05	8.26E-05	0.011124364	2.37E-06	3.14E-06	1.06E-07	9.09E-08	361.8396269	0	11.35711037	0
Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	24344.89416	0
Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	2	Gasoline	2.33E-05	2.36E-05	2.57E-05	0.00048645	7.94E-06	0.001097705	1.36E-08	1.80E-08	1.87E-08	2.58E-08	72.48831119	0	9.399230631	0
Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	17.78719545	0
Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	25	Gasoline	0.000624043	0.000630283	0.000686721	0.05106532	0.000307019	0.099766328	1.28E-06	1.70E-06	1.73E-06	2.38E-06	6795.245674	0	85.35516414	0
Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	25	Diesel	3.76E-06	4.52E-06	5.40E-06	1.54E-05	2.87E-05	0.003733889	7.80E-07	1.03E-06	3.54E-08	3.05E-08	121.451364	0	2.614736774	0
Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	161.5269427	0
Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	5	Gasoline	0.073761357	0.074498971	0.081169874	3.712909978	0.030016253	8.379532192	0.000103639	0.000137169	0.000137935	0.000190401	539753.1294	0	33617.48103	0

Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	63618.04801	0
Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	50	Gasoline	2.85E-05	2.62E-05	3.14E-05	0.001992878	4.79E-05	0.024879357	1.72E-06	1.30E-06	3.02E-07	3.73E-07	1065.8	423.4	3.7	12278.6
Sacramento	2025 Light Commercial - Misc - Pressure Washers	Aggregate	50	Diesel	3.85E-06	4.58E-06	5.55E-06	5.37E-05	5.73E-05	0.009650512	1.49E-06	1.37E-06	1.21E-07	7.90E-08	313.9	481.8	3.34	18308.4
Sacramento	2025 Light Commercial - Misc - Pumps	Aggregate	100	Gasoline	0.000757281	0.000696547	0.000833341	0.038238453	0.002035926	1.394760381	9.72E-05	7.35E-05	1.35E-05	1.93E-05	55144.2	9300.2	42.12	864918.6
Sacramento	2025 Light Commercial - Misc - Pumps	Aggregate	15	Gasoline	0.012386172	0.012510033	0.013630226	0.800934793	0.006990116	1.82663243	2.47E-05	3.26E-05	2.98E-05	4.11E-05	116684.5421	0	2980.994215	0
Sacramento	2025 Light Commercial - Misc - Pumps	Aggregate	15	Diesel	0.000753688	0.000906521	0.001083439	0.004631726	0.00567575	0.761972497	0.000165131	0.000218555	7.23E-06	6.23E-06	24784.50463	0	184.2966203	0
Sacramento	2025 Light Commercial - Misc - Pumps	Aggregate	175	Gasoline	2.78E-05	2.55E-05	3.05E-05	0.002110871	0.000101131	0.063320143	4.54E-06	3.43E-06	6.29E-07	8.82E-07	2518.5	277.4	1.28	39945.6
Sacramento	2025 Light Commercial - Misc - Pumps	Aggregate	2	Gasoline	0.005723863	0.005781101	0.006298762	0.053573003	0.000340421	0.158545053	1.58E-06	2.10E-06	2.59E-06	3.57E-06	9798.220715	0	1080.523543	0
Sacramento	2025 Light Commercial - Misc - Pumps	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	85521.26618	0
Sacramento	2025 Light Commercial - Misc - Pumps	Aggregate	25	Gasoline	9.21E-05	9.31E-05	0.000101405	0.006599065	6.60E-05	0.015042442	2.10E-07	2.78E-07	2.44E-07	3.37E-07	959.817269	0	9.926720643	0
Sacramento	2025 Light Commercial - Misc - Pumps	Aggregate	25	Diesel	0.000613767	0.000738227	0.000882301	0.002471877	0.004583567	0.595678788	0.000125612	0.000166251	5.65E-06	4.87E-06	19375.50732	0	55.04362567	0
Sacramento	2025 Light Commercial - Misc - Pumps	Aggregate	5	Gasoline	0.009517528	0.009612704	0.010473459	0.424132494	0.003184315	0.988894845	1.24E-05	1.64E-05	1.63E-05	2.24E-05	62980.85037	0	3272.839803	0
Sacramento	2025 Light Commercial - Misc - Pumps	Aggregate	50	Gasoline	0.000489765	0.000450486	0.000538957	0.037996225	0.000772467	0.37097608	2.56E-05	1.93E-05	4.51E-06	5.73E-06	16362.95	7329.2	33.21	227205.2
Sacramento	2025 Light Commercial - Misc - Pumps	Aggregate	50	Diesel	0.000743966	0.000885381	0.001071311	0.00809951	0.00738569	1.173434966	0.000239599	0.000220431	1.48E-05	9.60E-06	38168.05	24352.8	60.5	901053.6
Sacramento	2025 Light Commercial - Misc - Welders	Aggregate	100	Gasoline	0.000879597	0.000809053	0.000967943	0.036493691	0.002543253	1.168495052	8.15E-05	6.16E-05	1.13E-05	1.63E-05	46504.65	13994.1	67.35	979587
Sacramento	2025 Light Commercial - Misc - Welders	Aggregate	15	Gasoline	0.063779298	0.06441709	0.070185226	3.692220738	0.028803695	6.635944859	0.000145531	0.000192614	0.000120584	0.00016645	472209.6075	0	9759.561205	0
Sacramento	2025 Light Commercial - Misc - Welders	Aggregate	15	Diesel	0.000454513	0.000546679	0.000653369	0.002793361	0.003422856	0.459551233	9.96E-05	0.000131785	4.36E-06	3.76E-06	14947.71755	0	83.31493317	0
Sacramento	2025 Light Commercial - Misc - Welders	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	41598.86095	0
Sacramento	2025 Light Commercial - Misc - Welders	Aggregate	175	Gasoline	7.87E-05	7.24E-05	8.66E-05	0.00490132	0.000352767	0.14548634	1.04E-05	7.88E-06	1.45E-06	2.03E-06	5803.5	963.6	4.64	125268
Sacramento	2025 Light Commercial - Misc - Welders	Aggregate	25	Diesel	0.000755732	0.000908979	0.001086377	0.003043426	0.005643104	0.733358468	0.000154673	0.000204714	6.96E-06	6.00E-06	23853.78267	0	73.33533326	0
Sacramento	2025 Light Commercial - Misc - Welders	Aggregate	50	Gasoline	0.001196885	0.001100894	0.001317099	0.081958477	0.001887942	0.744348561	5.13E-05	3.88E-05	9.05E-06	1.16E-05	33215	13709.4	66	616923
Sacramento	2025 Light Commercial - Misc - Welders	Aggregate	50	Diesel	0.002598532	0.003092468	0.003741886	0.026397405	0.021858016	3.337618457	0.000773623	0.000711733	4.20E-05	2.73E-05	108561.95	91370.45	142.26	4203040.7
Sacramento	2025 Locomotive - Line Haul	Aggregate	0	Diesel	0.03082	0.037	0.044	0.213	0.882	0	0.02	0.019	0.001	0.001	0	0	0	0
Sacramento	2025 Locomotive - Passenger	Aggregate	0	Diesel	0.003919232	0.00000387	0.00000461	0.015254983	0.07944523	0	0.001701135	0.001565045	0.0000602	0.0000532	0	0	0	0
Sacramento	2025 Locomotive - Short Line	Aggregate	0	Diesel	0.000242451	4.87E-09	5.80E-09	0.000646535	0.006566368	0	0.000111387	0.000102476	0.00000313	0.00000277	0	0	0	0
Sacramento	2025 Locomotive - Switcher	Aggregate	0	Diesel	0.001649679	0.000000102	1.21E-07	0.004419655	0.025821533	0	0.000553541	0.000509258	0.0000149	0.0000132	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - A/C Unit	Aggregate	100	Diesel	3.04E-06	3.62E-06	4.38E-06	6.19E-05	4.10E-05	0.01088488	1.62E-06	1.49E-06	1.25E-07	8.91E-08	354.05	98.55	0.33	9953.55
Sacramento	2025 Military Tactical Support - Misc - A/C Unit	Aggregate	300	Diesel	1.60E-06	1.90E-06	2.30E-06	1.60E-05	1.67E-05	0.009201651	4.69E-07	4.32E-07	1.03E-07	7.53E-08	299.3	54.75	0.16	11388
Sacramento	2025 Military Tactical Support - Misc - A/C Unit	Aggregate	600	Diesel	9.33E-07	1.11E-06	1.34E-06	9.39E-06	9.29E-06	0.005498548	2.74E-07	2.52E-07	5.37E-08	4.50E-08	178.85	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Aircraft Support	Aggregate	100	Diesel	5.56E-07	6.62E-07	8.01E-07	1.13E-05	7.50E-06	0.001795444	2.96E-07	2.72E-07	2.28E-08	1.47E-08	58.4	0	0.09	0
Sacramento	2025 Military Tactical Support - Misc - Aircraft Support	Aggregate	175	Diesel	1.24E-06	1.48E-06	1.79E-06	2.93E-05	1.32E-05	0.005835193	5.38E-07	4.95E-07	6.44E-08	4.77E-08	189.8	51.1	0.16	7154
Sacramento	2025 Military Tactical Support - Misc - Cart	Aggregate	100	Diesel	2.84E-07	3.38E-07	4.09E-07	5.79E-06	3.83E-06	0.000897722	1.51E-07	1.39E-07	1.16E-08	7.35E-09	29.2	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Cart	Aggregate	175	Diesel	1.02E-07	1.21E-07	1.47E-07	2.40E-06	1.08E-06	0	4.41E-08	4.06E-08	5.27E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Cart	Aggregate	300	Diesel	3.52E-07	4.19E-07	5.07E-07	3.52E-06	3.69E-06	0.001795444	1.03E-07	9.51E-08	2.26E-08	1.47E-08	58.4	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Communications	Aggregate	100	Diesel	1.40E-07	1.67E-07	2.02E-07	2.86E-06	1.89E-06	0	7.47E-08	6.87E-08	5.75E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Communications	Aggregate	50	Diesel	8.25E-08	9.82E-08	1.19E-07	1.05E-06	1.00E-06	0	2.66E-08	2.44E-08	2.11E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Compressor	Aggregate	100	Diesel	3.13E-06	3.73E-06	4.51E-06	6.38E-05	4.22E-05	0.011109311	1.67E-06	1.53E-06	1.28E-07	9.09E-08	361.35	138.7	0.49	9847.7
Sacramento	2025 Military Tactical Support - Misc - Compressor	Aggregate	175	Diesel	1.48E-07	1.77E-07	2.14E-07	3.49E-06	1.57E-06	0	6.42E-08	5.91E-08	7.68E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Compressor	Aggregate	300	Diesel	3.19E-07	3.80E-07	4.59E-07	3.19E-06	3.34E-06	0.001795444	9.36E-08	8.61E-08	2.05E-08	1.47E-08	58.4	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Compressor	Aggregate	50	Diesel	1.01E-07	1.20E-07	1.46E-07	1.29E-06	1.23E-06	0	3.25E-08	2.99E-08	2.59E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Compressor	Aggregate	600	Diesel	1.82E-06	2.16E-06	2.62E-06	1.83E-05	1.81E-05	0.01088488	5.33E-07	4.91E-07	1.05E-07	8.91E-08	354.05	0	0.09	0
Sacramento	2025 Military Tactical Support - Misc - Crane	Aggregate	100	Diesel	2.59E-07	3.09E-07	3.74E-07	9.63E-06	4.35E-06	0.001683229	4.31E-08	3.96E-08	2.01E-08	1.38E-08	54.75	0	0.06	0
Sacramento	2025 Military Tactical Support - Misc - Crane	Aggregate	175	Diesel	4.81E-08	5.73E-08	6.93E-08	2.14E-06	3.04E-07	0	9.07E-09	8.35E-09	4.86E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Crane	Aggregate	300	Diesel	4.68E-08	5.57E-08	6.73E-08	7.39E-07	2.49E-07	0	7.74E-09	7.12E-09	4.92E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Deicer	Aggregate	100	Diesel	1.29E-07	1.53E-07	1.85E-07	2.62E-06	1.73E-06	0	6.84E-08	6.30E-08	5.27E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Generator	Aggregate	100	Diesel	1.63E-05	1.94E-05	2.35E-05	0.000331974	0.000219734	0.058015289	8.68E-06	7.98E-06	6.68E-07	4.75E-07	1887.05	660.65	2.22	54833.95
Sacramento	2025 Military Tactical Support - Misc - Generator	Aggregate	175	Diesel	1.77E-05	2.10E-05	2.54E-05	0.000415605	0.000187324	0.082702646	7.64E-06	7.03E-06	9.14E-07	6.77E-07	2690.05	532.9	1.79	78336.3
Sacramento	2025 Military Tactical Support - Misc - Generator	Aggregate	300	Diesel	5.70E-06	6.79E-06	8.21E-06	5.69E-05	5.97E-05	0.033103501	1.67E-06	1.54E-06	3.66E-07	2.71E-07	1076.75	127.75	0.47	28488.25
Sacramento	2025 Military Tactical Support - Misc - Generator	Aggregate	50	Diesel	5.29E-07	6.30E-07	7.62E-07	6.75E-06	6.43E-06	0.001234368	1.70E-07	1.57E-07	1.35E-08	1.01E-08	40.15	0	0.07	0
Sacramento	2025 Military Tactical Support - Misc - Generator	Aggregate	600	Diesel	3.51E-06	4.18E-06	5.06E-06	3.54E-05	3.50E-05	0.020647608	1.03E-06	9.49E-07	2.02E-07	1.69E-07	671.6	58.4	0.16	20323.2
Sacramento	2025 Military Tactical Support - Misc - Generator	Aggregate	750	Diesel	1.87E-07	2.23E-07	2.70E-07	1.87E-06	1.89E-06	0.001346583	5.52E-08	5.07E-08	1.10E-08	1.10E-08	43.8	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Hydraulic Unit	Aggregate	100	Diesel	1.86E-06	2.21E-06	2.68E-06	3.79E-05	2.51E-05	0.006508485	9.90E-07	9.11E-07	7.63E-08	5.33E-08	211.7	58.4	0.17	5548
Sacramento	2025 Military Tactical Support - Misc - Lift	Aggregate	100	Diesel	5.55E-08	6.61E-08	7.99E-08	1.13E-06	7.49E-07	0	2.96E-08	2.72E-08	2.28E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Light	Aggregate	50	Diesel	1.29E-07	1.53E-07	1.86E-07	1.64E-06	1.57E-06	0	4.15E-08	3.82E-08	3.30E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	100	Diesel	3.69E-07	4.39E-07	5.32E-07	7.52E-06	4.98E-06	0.001683229	1.97E-07	1.81E-07	1.51E-08	1.38E-08	54.75	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	175	Diesel	5.26E-07	6.26E-07	7.58E-07	1.24E-05	5.58E-06	0.001907659	2.28E-07	2.09E-07	2.72E-08	1.56E-08	62.05	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	300	Diesel	2.34E-07	2.78E-07	3.37E-07	2.34E-06	2.45E-06	0.001683229	6.86E-08	6.31E-08	1.50E-08	1.38E-08	54.75	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	50	Diesel	2.58E-08	3.07E-08	3.71E-08	3.29E-07	3.13E-07	0	8.30E-09	7.64E-09	6.60E-10	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	600	Diesel	9.40E-08	1.12E-07	1.35E-07	9.47E-07	9.37E-07	0	2.76E-08	2.54E-08	5.41E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	750	Diesel	1.10E-07	1.31E-07	1.58E-07	1.10E-06	1.11E-06	0	3.23E-08	2.97E-08	6.43E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Pressure Washers	Aggregate	175	Diesel	1.01E-07	1.21E-07	1.46E-07	2.38E-06	1.07E-06	0	4.38E-08	4.03E-08	5.24E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Pump	Aggregate	100	Diesel	1.31E-06	1.56E-06	1.89E-06	2.68E-05	1.77E-05	0.00448861	7.00E-07	6.44E-07	5.39E-08	3.67E-08	146	54.75	0.16	5475
Sacramento	2025 Military Tactical Support - Misc - Pump	Aggregate	50	Diesel	1.17E-06	1.39E-06	1.68E-06	1.49E-05	1.42E-05	0.001907659	3.76E-07	3.45E-07	2.99E-08	1.56E-08	62.05	58.4	0.16	2277.6
Sacramento	2025 Military Tactical Support - Misc - Start Cart	Aggregate	100	Diesel	2.92E-08	3.48E-08	4.21E-08	5.95E-07	3.94E-07	0	1.56E-08	1.43E-08	1.20E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Start Cart	Aggregate	600	Diesel	4.93E-08	5.86E-08	7.10E-08	4.96E-07	4.91E-07	0	1.45E-08	1.33E-08	2.84E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Test Stand	Aggregate	100	Diesel	8.87E-07	1.06E-06	1.28E-06	1.81E-05	1.20E-05	0.003029812	4.72E-07	4.34E-07	3.64E-08	2.48E-08	98.55	29.2	0.14	2686.4
Sacramento	2025 Military Tactical Support - Misc - Test Stand	Aggregate	175	Diesel	6.31E-08	7.51E-08	9.09E-08	1.48E-06	6.69E-07	0	2.73E-08	2.51E-08	3.26E-09	0	0	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Test Stand	Aggregate	300	Diesel	1.09E-06	1.30E-06	1.57E-06	1.09E-05	1.14E-05	0.005947409	3.20E-07	2.95E-07	7.02E-08	4.87E-08	193.45	14.6	0.13	2876.2
Sacramento	2025 Military Tactical Support - Misc - Test Stand	Aggregate	600	Diesel	7.17E-07	8.53E-07	1.03E-06	7.22E-06	7.14E-06	0.003927534	2.10E-07	1.93E-07	4.13E-08	3.21E-08	127.75	0	0	0
Sacramento	2025 Military Tactical Support - Misc - Welder	Aggregate	100	Diesel	1.05E-06	1.25E-06	1.51E-06	2.14E-05	1.42E-05	0.003703104	5.59E-07	5.15E-07	4.31E-08	3.03E-08	120.45	58.4	0.16	3620.8
Sacramento	2025 Military Tactical Support - Misc - Welder	Aggregate	50	Diesel	3.79E-07	4.51E-07	5.46E-07	4.83E-06	4.61E-06	0	1.22E-07	1.12E-07	9.70E-09	0	0	0	0	0
Sacramento	2025 Ocean Going Vessels - Bulk Cargo	Aggregate	0	Diesel	0.001065373	0.001319997	0.001577232	0.002500399	0.024149005	1.104534568	0.000337969	0.000310931	0.000702183	3.13E-05	35926.94255	841.451042	0	597102.6745
Sacramento	2025 Ocean Going Vessels - General Cargo	Aggregate	0	Diesel	0.001376832	0.001772532	0.002117731	0.003274014	0.032452355	1.541673386	0.000461311	0.000424406	0.000951872	4.06E-05	50145.65662	897.5862033	0	822638.4742
Sacramento	2025 Ocean Going Vessels - Tanker	Aggregate	Handysize	Diesel	0.000979312	0.001274304	0.001522658	0.002317062	0.023107091	1.055668988	0.000319344	0.000293796	0.000646805	3.03E-05	34337.50303	427.0042876	0	572876.1983
Sacramento	2025 Oil Drilling - Drill Rig	Aggregate	100	Diesel	1.59E-05	1.92E-05	2.29E-05	0.000276199	0.000183943	0.045720069	1.49E-05	1.37E-05	4.33E-07	0	1485.681609	588.9242141	1.119387066	26491.96292
Sacramento	2025 Oil Drilling - Drill Rig	Aggregate	175	Diesel	0.000182593	0.000220937	0.000262933	0.003211123	0.001622391	0.536651221	6.91E-05	6.36E-05	5.08E-06	0	17438.57506	4912.14755	7.295923933	342276.4263
Sacramento	2025 Oil Drilling - Drill Rig	Aggregate	300	Diesel	0.000333474	0.000403504	0.000480203	0.002227776	0.002915801	0.902655	0.000140028	0.000128826	8.55E-06	0	29331.9317	5011.295356	7.681311246	581464.4331
Sacramento	2025 Oil Drilling - Drill Rig	Aggregate	50	Diesel	1.76E-05	2.13E-05	2.54E-05	0.000217709	0.000179578	0.028493549	6.77E-06	6.23E-06	2.70E-07	0	925.9028343	721.4331102	1.698380376	16510.2559
Sacramento	2025 Oil Drilling - Drill Rig	Aggregate	600	Diesel	0.000688788	0.000833433	0.000991855	0.005689424	0.005367444	2.156207328	0.000259563	0.000238798	2.04E-05	0	70066.33332	6453.056488	10.8112901	1381793.746
Sacramento	2025 Oil Drilling - Drill Rig	Aggregate	75	Diesel	2.51E-05	3.04E-05	3.62E-05	0.000379006	0.000325671	0.064612934	4.97E-06	4.58E-06	6.12E-07	0	2099.608555	1135.156835	2.239002345	35861.80401
Sacramento	2025 Oil Drilling - Drill Rig	Aggregate	750	Diesel	8.84E-05	0.000106927	0.000127252	0.000647699	0.000796905	0.339046083	3.45E-05	3.17E-05	3.21E-06	0	11017.36163	652.2408205	1.119387066	218403.752
Sacramento	2025 Oil Drilling - Drill Rig	Aggregate	9999	Diesel	7.01E-05	8.48E-05	0.000100905	0.000609318	0.001345024	0.311913339	3.26E-05	3.00E-05	2.95E-06	0	10135.67836	464.8053984	0.77199108	200925.6169
Sacramento	2025 Oil Drilling - Drill Rig (Mobile)	Aggregate	100	Diesel	1.45E-05	1.76E-05	2.09E-05	0.000200769	0.000165273	0.031671038	1.18E-05	1.08E-05	3.00E-07	0	1029.155909	415.3312267	0.77199108	18351.41528
Sacramento	2025 Oil Drilling - Drill Rig (Mobile)	Aggregate	175	Diesel	0.000232665	0.000281524	0.000335037	0.003719753	0.002144918	0.622206889	9.97E-05	9.17E-05	5.89E-06	0	20218.72143	5572.118804	8.609008922	393277.7373
Sacramento	2025 Oil Drilling - Drill Rig (Mobile)	Aggregate	300	Diesel	0.000237552	0.000287439	0.000342076	0.001687375	0.001969084	0.724819156	9.18E-05	8.45E-05	6.87E-06	0	23553.12493	3921.648427	6.256474411	448983.2423
Sacramento	2025 Oil Drilling - Drill Rig (Mobile)	Aggregate	50	Diesel	1.65E-05	2.00E-05	2.38E-05	0.000173633	0.000145973	0.023115426	6.07E-06	5.59E-06	2.19E-07	0	751.1398013	673.8134369	1.54398216	13393.9652
Sacramento	2025 Oil Drilling - Drill Rig (Mobile)	Aggregate	600	Diesel	0.000794047	0.000960797	0.001143428	0.006356934	0.007170298	2.362573132	0.000312821	0.000287795	2.24E-05	0	76772.22612	7184.527978	12.35669583	1507938.329
Sacramento	2025 Oil Drilling - Drill Rig (Mobile)	Aggregate	75	Diesel	2.65E-05	3.20E-05	3.81E-05	0.000347607	0.000334627	0.057145354	9.16E-06	8.43E-06	5.41E-07	0	1856.94825	1008.125941	1.968577254	33112.21186
Sacramento	2025 Oil Drilling - Drill Rig (Mobile)	Aggregate	750	Diesel	0.000150287	0.000181847	0.000216413	0.001254639	0.00153886	0.435223949	6.94E-05	6.38E-05	4.12E-06	0	14142.67816	852.5632302	1.544940149	279934.2372
Sacramento	2025 Oil Drilling - Drill Rig (Mobile)	Aggregate	9999	Diesel	0.000117247	0.000141869	0.000168836	0.000688017	0.002017239	0.36548922	4.86E-05	4.47E-05	3.46E-06	0	11876.63598	615.641372	1.15798662	235437.6615
Sacramento	2025 Oil Drilling - Misc - Compressors (Workover)	Aggregate	25	Diesel	4.22E-06	5.03E-06	6.08E-06	2.08E-05	3.86E-05	0.003815319	1.54E-06	1.42E-06	6.32E-08	3.12E-08	124.1	240.9	0.32	5781.6
Sacramento	2025 Oil Drilling - Misc - Generator (Drilling)	Aggregate	50	Diesel	2.92E-06	3.47E-06	4.20E-06	3.03E-05	2.21E-05	0.003590888	6.97E-07	6.41E-07	4.17E-08	2.94E-08	116.8	116.8	0	3854.4
Sacramento	2025 Oil Drilling - Workover Rig (Mobile)	Aggregate	100	Diesel	1.10E-05	1.33E-05	1.58E-05	0.000100433	0.000100402	0.015914425	1.01E-05	9.27E-06	1.51E-07	0	517.1420017	229.1038137	0.231597324	9221.428502
Sacramento	2025 Oil Drilling - Workover Rig (Mobile)	Aggregate	175	Diesel	3.95E-06	4.78E-06	5.69E-06	6.12E-05	3.62E-05	0.010021719	1.99E-06	1.83E-06	9.49E-08	0	325.6575205	84.05956369	0.154398216	6455.703888
Sacramento	2025 Oil Drilling - Workover Rig (Mobile)	Aggregate	300	Diesel	0.000109163	0.000132087	0.000157195	0.000725193	0.001004592	0.2387249	5.53E-05	5.08E-05	2.26E-06	0	7757.407275	1216.310792	1.816016742	144302.7921
Sacramento	2025 Oil Drilling - Workover Rig (Mobile)	Aggregate	50	Diesel	4.52E-07	5.46E-07	6.50E-07	6.41E-06	4.84E-06	0.000927526	1.12E-07	1.03E-07	8.79E-09	0	30.14012774	21.93650297	0.038599554	537.4443229
Sacramento	2025 Oil Drilling - Workover Rig (Mobile)	Aggregate	600	Diesel	0.001773302	0.002145695	0.002553554	0.017064936	0.013589613	5.590678671	0.00065104	0.000598956	5.30E-05	0	181670.0788	16982.56991	21.70149483	3540246.862
Sacramento	2025 Oil Drilling - Workover Rig (Mobile)	Aggregate	750	Diesel	7.91E-05	9.57E-05	0.000113941	0.000649218	0.000827053	0.190737528	3.77E-05	3.46E-05	1.81E-06	0	6198.049254	378.2626531	0.656703991	123429.7832
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	120	Gasoline	0.379936628	0.383735993	0.418097081	1.270918239	0.025960904	4.221020937	0.019459597	0.014702809	7.20E-05	9.93E-05	281368.4672	0	1468.016888	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	15	Gasoline	1.98E-06	2.00E-06	2.18E-06	4.96E-05	9.59E-07	0.000121829	9.80E-09	7.40E-09	2.18E-09	3.00E-09	7.710732283	0	0.340856421	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	175	Gasoline	0.129802401	0.131100426	0.142839626	1.234273807	0.07182045	6.507308795	0.011594988	0.008760658	8.46E-05	0.000116798	331941.8911	0	1381.349268	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	250	Gasoline	0.154348289	0.155891772	0.169850877	1.997809122	0.048166111	10.49800298	0.001047887	0.000791737	0.000134378	0.000185492	528731.4742	0	1773.665796	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	50	Gasoline	0.173046509	0.174776974	0.190427127	0.37202636	0.001579291	0.881629368	0.008607279	0.006503278	0.000020095	2.77E-05	77207.58377	0	719.5485979	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	500	Gasoline	0.009936901	0.01003627	0.010934953	0.12812575	0.002888335	0.66224586	6.91E-05	5.22E-05	8.51E-06	1.17E-05	33502.98995	0	78.98650509	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	750	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Personal Water Craft	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	120	Gasoline	0.000656453	0.000663017	0.000722385	0.01246863	0.000495117	0.061635506	0.000210113	0.000158752	8.04E-07	1.11E-06	3115.090067	0	13.0488441	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	15	Gasoline	6.61E-05	6.68E-05	7.28E-05	0.001279446	4.58E-05	0.006724897	1.31E-05	9.92E-06	9.80E-08	1.35E-07	334.4192172	0	12.48113744	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	175	Gasoline	0.000738377	0.00074576	0.000812539	0.005228053	0.000520658	0.064614584	6.50E-06	4.91E-06	7.22E-07	9.97E-07	2812.489033	0	8.463520392	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	25	Gasoline	0.000123824	0.000125062	0.00013626	0.002332949	9.67E-05	0.012723245	4.62E-05	3.49E-05	1.74E-07	2.41E-07	627.3982927	0	14.22792738	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	250	Gasoline	0.001247259	0.001259731	0.001372532	0.008831169	0.000879489	0.110003775	1.10E-05	8.30E-06	1.22E-06	1.69E-06	4782.809596	0	8.463520392	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	50	Gasoline	0.000410523	0.000414629	0.000451756	0.007402872	0.000379096	0.041312203	0.000267497	0.000202109	5.41E-07	7.47E-07	2028.164233	0	25.32004316	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	500	Gasoline	0.001512054	0.001527174	0.001663923	0.017111573	0.001696888	0.168337236	1.76E-05	0.000013274	1.91E-06	2.63E-06	7478.296227	0	8.463520392	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	750	Gasoline	0.00625061	0.006313116	0.006878415	0.028864019	0.002943209	0.315632318	0.000032941	2.49E-05	3.63E-06	5.01E-06	14277.55849	0	8.463520392	0
Sacramento	2025 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	120	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	15	Gasoline	0.000864502	0.000873147	0.000951332	0.010790442	0.000404156	0.080843818	6.50E-06	4.91E-06	1.22E-06	1.69E-06	3760.232298	0	301.5829153	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	175	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	250	Gasoline	0.011908978	0.012028068	0.013105104	0.101493452	0.010372974	1.132335609	0.000113027	8.54E-05	1.29E-05	1.78E-05	49731.97807	0	235.9504087	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	50	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	500	Gasoline	0.109490033	0.110584934	0.120487103	1.205268144	0.042810666	13.27898611	0.001385862	0.001047097	0.000148722	0.000205292	580166.6414	0	1928.708556	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	750	Gasoline	0.000330716	0.000334023	0.000363933	0.005483695	0.000112742	0.085341667	8.91E-06	6.73E-06	9.03E-07	1.25E-06	3547.493174	0	7.437278776	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	120	Gasoline	0.027556444	0.027832008	0.030324185	0.078093404	0.000991528	0.24643841	0.001350022	0.001020016	4.48E-06	6.18E-06	17354.86886	0	164.4356181	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	175	Gasoline	0.004931934	0.004981253	0.005427293	0.045295361	0.001895898	0.234598075	0.00011294	0.000085332	3.09E-06	4.26E-06	12046.60681	0	95.05475829	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	250	Gasoline	0.014894985	0.015043935	0.016391022	0.144536447	0.006307735	0.93867508	0.001677439	0.001267398	1.16E-05	1.60E-05	45420.25577	0	301.670585	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	50	Gasoline	0.028235725	0.028518082	0.031071694	0.063457292	0.000479292	0.172878513	0.001386707	0.001047734	3.69E-06	5.10E-06	13841.81916	0	263.8155835	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	500	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	750	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	120	Gasoline	0.41179594	0.415913899	0.453156311	1.435623378	0.052511241	7.263584352	0.03259722	0.024629014	0.0001055	0.000145629	408648.8107	0	2467.925749	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	15	Gasoline	0.061786319	0.062404183	0.067992076	0.227710451	0.005673302	0.777090529	0.003294155	0.002488916	1.49E-05	2.06E-05	50370.79042	0	2582.616684	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	175	Gasoline	0.190335452	0.192238807	0.209452556	0.852302938	0.030094942	4.044039922	0.020154432	0.015227793	5.77E-05	7.97E-05	225557.654	0	734.0970478	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	25	Gasoline	0.075129169	0.075880461	0.082675068	0.193258999	0.00654204	0.769005288	0.004541044	0.003431011	1.36E-05	1.87E-05	49786.42761	0	1106.36222	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	250	Gasoline	0.17923517	0.181027523	0.197237373	0.888421151	0.054861805	5.31648165	0.038208559	0.02886869	6.99E-05	9.65E-05	273689.1844	0	673.0528093	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	50	Gasoline	0.177611622	0.179387738	0.195450757	0.498442694	0.019325306	2.236738216	0.012619029	0.009534377	3.59E-05	4.96E-05	135753.525	0	1621.406486	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	500	Gasoline	0.065824981	0.06648323	0.072436376	0.886033527	0.031583237	3.670892431	0.00876029	0.006618887	5.02E-05	6.94E-05	197413.4247	0	393.8254855	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	750	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	120	Gasoline	3.09E-06	3.12E-06	3.40E-06	2.63E-05	1.52E-06	0.000507557	4.64E-08	3.50E-08	5.48E-09	7.56E-09	20.87234639	0	0.289136296	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	15	Gasoline	0.002110691	0.002131798	0.002322686	0.034578863	0.002195807	0.267026105	3.84E-05	2.90E-05	4.05E-06	5.59E-06	12260.84385	0	1273.520513	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	175	Gasoline	0.015987329	0.016147202	0.017593081	0.179306126	0.0467945	3.117090585	0.000313585	0.000236931	3.35E-05	4.63E-05	128850.2509	0	1129.315822	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	250	Gasoline	0.073795029	0.074532979	0.081206927	0.819484293	0.065282546	7.560682994	0.000754691	0.000570211	8.80E-05	0.00012141	339630.5134	0	2174.293952	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	50	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	500	Gasoline	0.090835493	0.091743848	0.099958919	0.622272041	0.035314169	12.93470901	0.001349933	0.001019949	0.000136124	0.000187902	530728.3811	0	2625.925726	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	750	Gasoline	0.007765552	0.007843208	0.008545517	0.014479782	0.002373627	0.406780455	4.25E-05	3.21E-05	4.33E-06	5.98E-06	17031.2598	0	45.25498358	0
Sacramento	2025 Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Portable Equipment - Non-Rental Compressor	Aggregate	100	Diesel	0.000440571	0.00053309	0.000634422	0.011388549	0.005895799	1.663789438	0.000428785	0.000394482	1.54E-05	1.36E-05	54117.69744	42128.85114	101.3519496	3384415.229
Sacramento	2025 Portable Equipment - Non-Rental Compressor	Aggregate	175	Diesel	0.000110397	0.000133581	0.000158972	0.003181745	0.001251182	0.545472683	5.37E-05	4.94E-05	5.05E-06	4.46E-06	17742.46485	8921.403771	21.46276579	1109579.141
Sacramento	2025 Portable Equipment - Non-Rental Compressor	Aggregate	300	Diesel	0.000143102	0.000173153	0.000206066	0.001914829	0.001553329	1.015185271	5.73E-05	5.27E-05	9.41E-06	8.31E-06	33020.69847	7434.503142	17.88563816	2065050.068
Sacramento	2025 Portable Equipment - Non-Rental Compressor	Aggregate	50	Diesel	3.00E-06	3.63E-06	4.32E-06	7.49E-05	6.14E-05	0.013312787	5.72E-07	5.27E-07	1.23E-07	1.09E-07	433.0219805	495.6335428	1.192375877	24359.04028
Sacramento	2025 Portable Equipment - Non-Rental Compressor	Aggregate	600	Diesel	0.000221821	0.000268404	0.000319423	0.002087461	0.002513591	1.096077502	0.00010878	0.000100078	1.02E-05	8.97E-06	35651.86149	4956.335428	11.92375877	2229597.87
Sacramento	2025 Portable Equipment - Non-Rental Compressor	Aggregate	75	Diesel	0.000116979	0.000141545	0.00016845	0.002530024	0.001882578	0.387109646	1.35E-05	1.25E-05	3.58E-06	3.17E-06	12591.42667	12886.47211	31.00177281	787443.2613
Sacramento	2025 Portable Equipment - Non-Rental Compressor	Aggregate	750	Diesel	0.000136686	0.000165391	0.000196829	0.001551266	0.002719579	0.843625315	9.60E-05	8.83E-05	7.82E-06	6.90E-06	27440.4071	2478.167714	5.961879386	1716069.531
Sacramento	2025 Portable Equipment - Non-Rental Generator	Aggregate	100	Diesel	0.000828878	0.001002942	0.001193584	0.018486265	0.007656153	2.443572911	0.000676235	0.000622136	2.26E-05	2.00E-05	79481.53559	54567.53971	39.34840395	4970620.189
Sacramento	2025 Portable Equipment - Non-Rental Generator	Aggregate	175	Diesel	0.00112536	0.001361685	0.001620518	0.026274817	0.007168893	4.053868707	0.000340432	0.000313197	3.75E-05	3.32E-05	131859.2576	56221.10152	40.54077982	8246220.748
Sacramento	2025 Portable Equipment - Non-Rental Generator	Aggregate	300	Diesel	0.000901276	0.001090545	0.001297838	0.007331138	0.003942124	3.26951197	0.000191151	0.000175859	3.03E-05	2.68E-05	106346.6659	28110.55076	20.27038991	6650713.033
Sacramento	2025 Portable Equipment - Non-Rental Generator	Aggregate	50	Diesel	0.000124124	0.00015019	0.000178738	0.0017929	0.001151728	0.174033914	4.04E-05	3.71E-05	1.61E-06	1.42E-06	5660.76119	6614.247238	4.769503509	318438.1302
Sacramento	2025 Portable Equipment - Non-Rental Generator	Aggregate	600	Diesel	0.002429087	0.002939195	0.003497885	0.016673319	0.013058916	7.851720765	0.000668032	0.00061459	7.27E-05	6.42E-05	255391.1204	31417.67438	22.65514167	15971662.47

Sacramento	2025 Portable Equipment - Non-Rental Generator	Aggregate	75 Diesel	0.000841486	0.001018199	0.00121174	0.012505348	0.009023811	1.684491703	0.000210879	0.000194009	1.56E-05	1.38E-05	54791.07525	52913.9779	38.15602807	3426526.964
Sacramento	2025 Portable Equipment - Non-Rental Generator	Aggregate	750 Diesel	0.000614552	0.000743608	0.000884955	0.003760822	0.004039681	1.739934799	0.000250256	0.000230236	1.61E-05	1.42E-05	56594.46011	4960.685428	3.577127632	3539307.135
Sacramento	2025 Portable Equipment - Non-Rental Generator	Aggregate	9999 Diesel	0.003425806	0.004145226	0.004933161	0.023655792	0.048633155	11.11552536	0.001055445	0.000971009	0.000102928	9.10E-05	361552.1437	18189.1799	13.11613465	22610765.78
Sacramento	2025 Portable Equipment - Non-Rental Other	Aggregate	100 Diesel	0.000146523	0.000177293	0.000210994	0.005863749	0.002738527	0.919479971	0.000185326	0.0001705	8.52E-06	7.52E-06	29907.71411	20848.30619	64.38829737	1870370.099
Sacramento	2025 Portable Equipment - Non-Rental Other	Aggregate	175 Diesel	0.00006538	0.00074461	0.000886147	0.02207172	0.007765019	3.968612619	0.000306704	0.000282168	3.68E-05	3.25E-05	129086.1524	60614.51985	187.2030127	8072796.158
Sacramento	2025 Portable Equipment - Non-Rental Other	Aggregate	300 Diesel	0.000308162	0.000372876	0.000443753	0.002723753	0.003372694	1.300978493	0.000131431	0.000120916	1.20E-05	1.06E-05	42316.62903	11196.31258	34.57890044	2646399.431
Sacramento	2025 Portable Equipment - Non-Rental Other	Aggregate	600 Diesel	0.000320848	0.000388226	0.000462022	0.003153913	0.003304583	1.522567455	0.000125649	0.000115597	1.41E-05	1.25E-05	49524.20237	7335.515141	22.65514167	3097147.008
Sacramento	2025 Portable Equipment - Non-Rental Other	Aggregate	75 Diesel	0.000170466	0.000206263	0.00024547	0.004069877	0.003190473	0.638115292	6.40E-05	5.89E-05	5.91E-06	5.22E-06	20755.82675	19690.06096	60.81116974	1298029.104
Sacramento	2025 Portable Equipment - Non-Rental Other	Aggregate	750 Diesel	6.63E-05	8.02E-05	9.54E-05	0.000986434	0.000396849	0.527320811	2.35E-05	2.16E-05	4.89E-06	4.31E-06	17152.04308	1544.318977	4.769503509	1072655.315
Sacramento	2025 Portable Equipment - Non-Rental Other	Aggregate	9999 Diesel	0.00257733	0.003118569	0.003711354	0.028475517	0.050126357	14.56033656	0.00073977	0.000680589	0.000134884	0.000119143	473600.7275	9651.993607	29.80939693	29618065.63
Sacramento	2025 Portable Equipment - Non-Rental Pump	Aggregate	100 Diesel	0.000110264	0.00013342	0.00015878	0.003537626	0.001935411	0.557255214	0.000122203	0.000112427	5.16E-06	4.56E-06	18125.71253	13154.77351	40.54577982	1133546.703
Sacramento	2025 Portable Equipment - Non-Rental Pump	Aggregate	175 Diesel	0.000235718	0.000285218	0.000339433	0.007671071	0.003060654	1.372248119	0.000110341	0.000101514	1.27E-05	1.12E-05	44634.7998	22053.59088	67.965425	2791373.309
Sacramento	2025 Portable Equipment - Non-Rental Pump	Aggregate	300 Diesel	5.07E-05	6.14E-05	7.31E-05	0.000635794	0.000431273	0.331567806	1.40E-05	1.28E-05	3.07E-06	2.71E-06	10784.82998	3095.240825	9.539007018	674462.2287
Sacramento	2025 Portable Equipment - Non-Rental Pump	Aggregate	50 Diesel	1.62E-05	1.97E-05	2.34E-05	9.66E-05	8.53E-05	0.010604414	5.48E-06	5.04E-06	9.78E-08	8.68E-08	344.9275517	386.9051032	1.192375877	19403.40129
Sacramento	2025 Portable Equipment - Non-Rental Pump	Aggregate	600 Diesel	0.000269578	0.000326189	0.000388192	0.003332729	0.001367154	1.746931186	6.47E-05	5.96E-05	1.62E-05	1.43E-05	56822.02999	8125.007166	25.03989342	3553538.912
Sacramento	2025 Portable Equipment - Non-Rental Pump	Aggregate	75 Diesel	0.00015182	0.000183703	0.00021862	0.003639343	0.002923284	0.575760437	6.33E-05	5.83E-05	5.33E-06	4.71E-06	18727.62766	18184.53985	56.04166623	1171189.302
Sacramento	2025 Portable Equipment - Rental Compressor	Aggregate	100 Diesel	2.47E-05	2.98E-05	3.55E-05	0.000942339	0.00032539	0.137383183	2.56E-05	2.35E-05	1.27E-06	1.12E-06	4468.631272	3247.342973	5.963879386	279459.4827
Sacramento	2025 Portable Equipment - Rental Compressor	Aggregate	175 Diesel	0.000139761	0.000169111	0.000201256	0.007277221	0.000894987	1.339886332	2.19E-05	2.02E-05	1.24E-05	1.10E-05	43582.17539	20133.52643	36.96365219	2725544.232
Sacramento	2025 Portable Equipment - Rental Compressor	Aggregate	300 Diesel	0.000106255	0.000128569	0.000153007	0.001786828	0.000215007	0.955277469	1.58E-05	1.46E-05	8.85E-06	7.82E-06	31072.09111	7793.623135	14.30851053	1943187.965
Sacramento	2025 Portable Equipment - Rental Compressor	Aggregate	600 Diesel	0.000301467	0.000364775	0.000434112	0.003659926	0.000483249	1.88141305	3.43E-05	3.16E-05	1.74E-05	1.54E-05	61196.29073	7144.154541	13.11613465	3827096.645
Sacramento	2025 Portable Equipment - Rental Compressor	Aggregate	75 Diesel	2.34E-05	2.83E-05	3.37E-05	0.000551173	0.000418068	0.0861447	3.52E-06	3.24E-06	7.98E-07	7.05E-07	2802.008886	2597.874378	4.769503509	175232.1698
Sacramento	2025 Portable Equipment - Rental Compressor	Aggregate	750 Diesel	0.000158224	0.000191451	0.000227842	0.002003236	0.000324171	1.095222575	2.71E-05	2.49E-05	1.01E-05	8.96E-06	35624.0535	3247.342973	5.963879386	2227858.813
Sacramento	2025 Portable Equipment - Rental Generator	Aggregate	100 Diesel	0.000691519	0.000836738	0.000995788	0.019921438	0.00732612	2.721084532	0.000596281	0.000548579	2.52E-05	2.23E-05	88508.09242	58444.06279	39.34840995	5535123.445
Sacramento	2025 Portable Equipment - Rental Generator	Aggregate	175 Diesel	0.000815642	0.001030487	0.001226365	0.028279645	0.003748556	4.631781886	0.000108523	9.98E-05	4.29E-05	3.79E-05	150656.907	67299.22382	45.31028333	9421789.073
Sacramento	2025 Portable Equipment - Rental Generator	Aggregate	300 Diesel	0.000635963	0.000769515	0.000915786	0.005643807	0.00130536	2.506262069	6.61E-05	6.08E-05	2.32E-05	2.05E-05	81520.61144	24794.45088	16.69326228	5098140.015
Sacramento	2025 Portable Equipment - Rental Generator	Aggregate	600 Diesel	0.001247242	0.001509163	0.001796029	0.010772362	0.00288931	5.135654085	0.000173441	0.000159566	4.76E-05	4.20E-05	167046.2425	24794.45088	16.69326228	10446746.14
Sacramento	2025 Portable Equipment - Rental Generator	Aggregate	75 Diesel	0.000464043	0.000561492	0.000668222	0.008067975	0.005823343	1.155325685	4.89E-05	4.50E-05	1.07E-05	9.45E-06	37579.01357	35420.64412	23.84751754	2350118.202
Sacramento	2025 Portable Equipment - Rental Generator	Aggregate	750 Diesel	0.000496698	0.000601004	0.000715245	0.00261612	0.003809154	1.210341194	0.000190929	0.000175655	1.12E-05	9.90E-06	39368.4904	3542.064412	2.384751754	2462028.593
Sacramento	2025 Portable Equipment - Rental Generator	Aggregate	9999 Diesel	0.000573964	0.000694497	0.000826509	0.003176717	0.007349374	1.469700021	0.000199902	0.000183935	1.36E-05	1.20E-05	47804.59549	3542.064412	2.384751754	2989606.148
Sacramento	2025 Portable Equipment - Rental Other	Aggregate	100 Diesel	6.42E-05	7.77E-05	9.25E-05	0.001931989	0.000595627	0.256032466	5.27E-05	4.84E-05	2.37E-06	2.10E-06	8327.903938	6126.849427	4.769503509	520811.2027
Sacramento	2025 Portable Equipment - Rental Other	Aggregate	175 Diesel	0.000270859	0.000327739	0.000390037	0.006035371	0.001976375	0.92745684	6.39E-05	5.87E-05	8.59E-06	7.59E-06	30167.1759	12253.69885	9.539007018	1886596.333
Sacramento	2025 Portable Equipment - Rental Other	Aggregate	75 Diesel	0.000148892	0.000180281	0.000214549	0.00233574	0.001694603	0.321739914	2.70E-05	2.48E-05	2.98E-06	2.63E-06	10465.16037	10721.9865	8.34663114	654470.7149
Sacramento	2025 Portable Equipment - Rental Pump	Aggregate	100 Diesel	0.000260874	0.000315658	0.000375659	0.007864663	0.00226805	1.073513643	0.000208243	0.000191583	9.94E-06	8.78E-06	34917.93205	26288.37558	26.2322693	2183699.355
Sacramento	2025 Portable Equipment - Rental Pump	Aggregate	175 Diesel	0.000240112	0.000290535	0.000345761	0.005879154	0.002195178	0.939766334	7.57E-05	6.97E-05	8.70E-06	7.69E-06	30567.56401	15534.04011	15.5008864	1911635.824
Sacramento	2025 Portable Equipment - Rental Pump	Aggregate	300 Diesel	0.000357445	0.000432509	0.000514721	0.002475461	0.002302943	1.113578917	0.000350974	9.71E-05	1.03E-05	9.11E-06	36221.126	10754.33546	10.73138289	2265198.563
Sacramento	2025 Portable Equipment - Rental Pump	Aggregate	600 Diesel	9.06E-05	0.000109658	0.000130502	0.000827069	0.000144289	0.39476078	1.33E-05	1.22E-05	3.66E-06	3.23E-06	12840.29334	2389.852325	2.384751754	803006.8978
Sacramento	2025 Portable Equipment - Rental Pump	Aggregate	75 Diesel	0.000163089	0.000197338	0.000234848	0.003810927	0.003060969	0.594497951	7.92E-05	7.28E-05	5.51E-06	4.86E-06	19337.03848	16728.96628	16.69326228	1209304.418
Sacramento	2025 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	120 Gasoline	0.003516624	0.00355179	0.003869829	0.077696057	0.003852757	1.441408358	0.000183173	0.000138398	1.78E-05	2.08E-05	58772.73755	0	1790.359774	0
Sacramento	2025 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	15 Gasoline	0.002120403	0.002141608	0.002333375	0.025213266	0.000510364	0.361398946	5.94E-05	4.49E-05	5.08E-06	5.48E-06	15233.07656	0	716.3165844	0
Sacramento	2025 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	25 Gasoline	0.001364669	0.001378113	0.001501514	0.011291774	0.000207719	0.149878003	2.90E-05	2.19E-05	2.24E-06	2.33E-06	6429.499415	0	374.7632244	0
Sacramento	2025 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	50 Gasoline	0.009230166	0.009322467	0.010157233	0.172000165	0.003733328	2.970278522	0.000377905	0.000285529	3.66E-05	4.37E-05	122066.9166	0	4957.19688	0
Sacramento	2025 Recreational - Golf Carts	Aggregate	120 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Recreational - Golf Carts	Aggregate	15 Gasoline	0.001863001	0.001881632	0.002050119	0.051334702	0.001437348	0.622787372	0.000139019	0.000105037	5.28E-06	9.32E-06	26479.77086	0	704.7405673	0
Sacramento	2025 Recreational - Golf Carts	Aggregate	25 Gasoline	0.000552001	0.00055752	0.000607444	0.015210282	0.000425881	0.184529591	4.12E-05	3.11E-05	1.57E-06	2.76E-06	7845.858024	0	117.4567612	0
Sacramento	2025 Recreational - Golf Carts	Aggregate	5 Gasoline	4.26E-05	4.31E-05	4.69E-05	0.001194051	3.33E-05	0.006590343	3.20E-06	2.42E-06	1.68E-07	1.14E-07	321.3390645	0	16.77953732	0
Sacramento	2025 Recreational - Golf Carts	Aggregate	50 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Recreational - Minibikes	Aggregate	120 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Recreational - Minibikes	Aggregate	15 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Recreational - Minibikes	Aggregate	25 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Recreational - Minibikes	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Recreational - Minibikes	Aggregate	50 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Recreational - Off-Road Motorcycles Active	Aggregate	120 Gasoline	0.006589725	0.006655622	0.00725159	0.033921971	0.000235024	0.257182446	9.52E-05	7.19E-05	4.59E-06	4.83E-06	12438.09296	0	419.4569619	0
Sacramento	2025 Recreational - Off-Road Motorcycles Active	Aggregate	15 Gasoline	0.000683617	0.000690454	0.000752279	0.00745665	8.98E-05	0.052153391	1.64E-05	1.24E-05	1.60E-06	1.10E-06	2471.208115	0	120.9870528	0
Sacramento	2025 Recreational - Off-Road Motorcycles Active	Aggregate	25 Gasoline	0.001847722	0.001866199	0.002033305	0.004534989	2.36E-05	0.021490386	2.25E-05	1.70E-05	8.57E-07	5.74E-07	1307.802656	0	55.98760952	0
Sacramento	2025 Recreational - Off-Road Motorcycles Active	Aggregate	5 Gasoline	0.002011521	0.002031637	0.002213556	0.013822038	6.39E-05	0.075502497	5.67E-05	4.29E-05	2.23E-06	1.74E-06	3887.968784	0	187.0848225	0
Sacramento	2025 Recreational - Off-Road Motorcycles Active	Aggregate	50 Gasoline	0.009334906	0.009428254	0.010272493	0.031084678	0.000253449	0.226195733	0.000118318	8.94E-05	6.11E-06	4.81E-06	11473.31749	0	405.1437403	0
Sacramento	2025 Recreational - Snowmobiles Active	Aggregate	120 Gasoline	0	0	0	0	0	0	0	0	0	1.25E-08	0	0	0	0
Sacramento	2025 Recreational - Snowmobiles Active	Aggregate	15 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Recreational - Snowmobiles Active	Aggregate	25 Gasoline	0	0	0	0	0	0	0	0	0	1.04E-08	0	0	0	0
Sacramento	2025 Recreational - Snowmobiles Active	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2025 Recreational - Snowmobiles Active	Aggregate	50 Gasoline	0	0	0	0	0	0	0	0	0	8.15E-08	0	0	0	0
Sacramento	2025 Transport Refrigeration Unit - Instate Genset	Aggregate	25 Diesel	0.000192014	0.001959983	0.000276421	0.000213296	0.003227375	0.51556148	0.000103214	9.50E-05	809.28	1.15E-08	16769.55	35625.86	45.561	0
Sacramento	2025 Transport Refrigeration Unit - Instate Genset	Aggregate	50 Diesel	0.000018642	0.0019045	0.00026858	0.0002071	0.0013775	0.337769573	0.000040789	0.000037518	529.4	7.56E-09	10970.29	20911.2	26.7	0
Sacramento	2025 Transport Refrigeration Unit - Instate Trailer	Aggregate	25 Diesel	0.00403076	0.0411912	0.00580793	0.00448089	0.0432581	6.910854218	0.001370809	0.001261174	10849.13	1.55E-07	224787.77	342587.67	192.17	0
Sacramento	2025 Transport Refrigeration Unit - Instate Trailer	Aggregate	50 Diesel	0.00710709	0.07162222	0.010234771	0.007896771	0.06488474	11.75732489	0.00103408	0.000951758	18457.51	2.64E-07	382427.81	506232.31	284.03	0
Sacramento	2025 Transport Refrigeration Unit - Instate Truck	Aggregate	23 Diesel	0.0007955	0.0081176	0.00114512	0.0008834	0.0103144	1.653834349	0.000553607	0.000489818	2596.2	3.71E-08	53793.24	97100.17	101.91	0
Sacramento	2025 Transport Refrigeration Unit - Out-Of-State Genset	Aggregate	25 Diesel	0.000178969	0.001827391	0.000257843	0.00019896	0.002864163	0.45754865	9.37E-05	9.16E-05	718.26	1.03E-08	14882.58	31617.13	254.89558	0
Sacramento	2025 Transport Refrigeration Unit - Out-Of-State Genset	Aggregate	50 Diesel	0.00014185	0.0014496	0.00020431	0.00015759	0.0013646	0.223670529	0.000038675	0.000035574	351.05	5.02E-09	7275.28	13697.08	110.39	0
Sacramento	2025 Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	25 Diesel	0.004204785	0.04292511	0.006051608	0.004670019	0.044551188	7.120268183	0.001514064	0.001394014	11577.89	1.60E-07	231599.33	352968.84	1297.59	0
Sacramento	2025 Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	50 Diesel	0.0022453	0.022934	0.0032343	0.0024961	0.018678	3.170810013	0.00043239	0.00039784	4977.71	7.11E-08	103136.21	136842.85	503.02	0
Sacramento	2025 Transport Refrigeration Unit - Railcar TRU	Aggregate	25 Diesel	0.000214202	0.00218584	0.00030828	0.00023792	0.002082597	0.333070569	7.88E-05	7.25E-05	522.82	7.47E-09	10833.71	16511.12	50.34276	0
Sacramento	2025 Transport Refrigeration Unit - Railcar TRU	Aggregate	50 Diesel	3.43E-05	0.000350199	0.000049473	3.81E-05	0.000326091	0.064420167	3.49E-06	3.21E-06	101.07	1.45E-09	2095.38	2836.09	8.63534	0

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		Equipment Type	Horsepower	Gas				Diesel				Natural Gas				
			HP	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	
Air Compressors25	Air Compressors25	Air Compressors	25	28372.3195	100.2377679	0	0	2619.101669	4.96362682	0	0	0	0	0	0	
Air Compressors50	Air Compressors50	Air Compressors	50	13563.4	12.36	5967.75	2.272782875	23130.05	27.85	22659.2	1.020779639	0	0	0	0	
Air Compressors75	Air Compressors75	Air Compressors	75	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors100	Air Compressors100	Air Compressors	100	73073	40.09	19385.15	3.769534928	0	0	0	0	0	0	0	0	
Air Compressors175	Air Compressors175	Air Compressors	175	8949.8	2.68	1295.75	6.907042254	0	0	0	0	0	0	0	0	
Air Compressors300	Air Compressors300	Air Compressors	300	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors600	Air Compressors600	Air Compressors	600	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors750	Air Compressors750	Air Compressors	750	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors9999	Air Compressors9999	Air Compressors	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Aerial Lifts25	Aerial Lifts25	Aerial Lifts	25	2434.61861	14.42541943	0	0	18.94689515	8.835696495	0	0	0	0	0	0	
Aerial Lifts50	Aerial Lifts50	Aerial Lifts	50	6843.75	11.85	4288.75	1.595744681	9605.074668	50.0178787	11725.48796	0.819162043	0	0	0	0	
Aerial Lifts75	Aerial Lifts75	Aerial Lifts	75	0	0	0	0	19101.06584	54.5394476	15996.00003	1.194115142	0	0	0	0	
Aerial Lifts100	Aerial Lifts100	Aerial Lifts	100	12242.1	11.85	4288.75	2.854468085	3778.81372	9.416698294	2679.362405	1.410340652	0	0	0	0	
Aerial Lifts175	Aerial Lifts175	Aerial Lifts	175	0	0	0	0	5559.172148	6.667421245	2990.501482	1.858943118	0	0	0	0	
Aerial Lifts300	Aerial Lifts300	Aerial Lifts	300	0	0	0	0	117.9789832	0.07898693	32.21313637	3.662449438	0	0	0	0	
Aerial Lifts600	Aerial Lifts600	Aerial Lifts	600	0	0	0	0	69.85402384	0.031594772	11.86862218	5.885605151	0	0	0	0	
Bore/Drill rigs25	Bore/Drill rigs25	Bore/Drill rigs	25	421.1433896	4.734349226	0	0	24.33349553	3.828467005	0	0	0	0	0	0	
Bore/Drill rigs50	Bore/Drill rigs50	Bore/Drill rigs	50	240.9	0.89	87.6	2.75	1415.679885	2.689915946	1271.123328	1.113723471	0	0	0	0	
Bore/Drill rigs75	Bore/Drill rigs75	Bore/Drill rigs	75	0	0	0	0	5467.526507	6.266018057	3043.537003	1.796438322	0	0	0	0	
Bore/Drill rigs100	Bore/Drill rigs100	Bore/Drill rigs	100	2719.25	3.96	423.4	6.422413793	4213.575624	3.313690664	1697.51883	2.482196692	0	0	0	0	
Bore/Drill rigs175	Bore/Drill rigs175	Bore/Drill rigs	175	959.95	0.95	105.85	9.068965517	29856.50487	13.13133547	8529.020449	3.500578413	0	0	0	0	
Bore/Drill rigs300	Bore/Drill rigs300	Bore/Drill rigs	300	0	0	0	0	35563.85826	10.27422449	6317.240206	5.629651098	0	0	0	0	
Bore/Drill rigs600	Bore/Drill rigs600	Bore/Drill rigs	600	0	0	0	0	51155.32802	8.827908103	5085.737886	10.05858524	0	0	0	0	
Bore/Drill rigs750	Bore/Drill rigs750	Bore/Drill rigs	750	0	0	0	0	21116.65471	2.297036085	1297.972468	16.26895426	0	0	0	0	
Bore/Drill rigs9999	Bore/Drill rigs9999	Bore/Drill rigs	9999	0	0	0	0	6998.632724	0.557665501	325.3763022	21.50934987	0	0	0	0	
Cement and Mortar Mixers25	Cement and Mortar Mixers25	Cement and Mortar Mixers	25	190.6124513	2.763127242	0	0	7.029990708	2.720879636	0	0	0	0	0	0	
Cement and Mortar Mixers50	Cement and Mortar Mixers50	Cement and Mortar Mixers	50	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers75	Cement and Mortar Mixers75	Cement and Mortar Mixers	75	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers100	Cement and Mortar Mixers100	Cement and Mortar Mixers	100	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers175	Cement and Mortar Mixers175	Cement and Mortar Mixers	175	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers300	Cement and Mortar Mixers300	Cement and Mortar Mixers	300	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers600	Cement and Mortar Mixers600	Cement and Mortar Mixers	600	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers750	Cement and Mortar Mixers750	Cement and Mortar Mixers	750	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers9999	Cement and Mortar Mixers9999	Cement and Mortar Mixers	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws25	Concrete/Industrial Saws25	Concrete/Industrial Saws	25	6333.274988	30.3561356	0	0	4.816223115	1.007258573	0	0	0	0	0	0	
Concrete/Industrial Saws50	Concrete/Industrial Saws50	Concrete/Industrial Saws	50	5482.3	3.24	1981.95	2.76611418	1679	2.09	1211.8	1.385542169	0	0	0	0	
Concrete/Industrial Saws75	Concrete/Industrial Saws75	Concrete/Industrial Saws	75	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws100	Concrete/Industrial Saws100	Concrete/Industrial Saws	100	5347.25	1.86	1135.15	4.710610932	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws175	Concrete/Industrial Saws175	Concrete/Industrial Saws	175	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws300	Concrete/Industrial Saws300	Concrete/Industrial Saws	300	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws600	Concrete/Industrial Saws600	Concrete/Industrial Saws	600	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws750	Concrete/Industrial Saws750	Concrete/Industrial Saws	750	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws9999	Concrete/Industrial Saws9999	Concrete/Industrial Saws	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Cranes25	Cranes25	Cranes	25	0	0	0	0	104.7298111	0.065607706	10.77005965	9.724162586	0	0	0	0	
Cranes50	Cranes50	Cranes	50	806.65	0.95	401.5	2.009090909	199.9270671	0.853707944	167.4267491	1.19411664	0	0	0	0	
Cranes75	Cranes75	Cranes	75	0	0	0	0	840.4617272	2.527483553	462.5795444	1.81690206	0	0	0	0	
Cranes100	Cranes100	Cranes	100	2711.95	1.97	817.6	3.316964286	2062.890388	4.95982369	960.5749314	2.14755801	0	0	0	0	
Cranes175	Cranes175	Cranes	175	182.5	0.05	32.85	5.555555556	15861.41923	22.30413794	5869.848543	2.702185434	0	0	0	0	
Cranes300	Cranes300	Cranes	300	0	0	0	0	48473.3512	50.16379842	12791.31945	3.789550514	0	0	0	0	
Cranes600	Cranes600	Cranes	600	0	0	0	0	66318.23095	40.08694627	10570.1331	6.27411503	0	0	0	0	
Cranes750	Cranes750	Cranes	750	0	0	0	0	10241.49165	4.626783327	1089.093533	9.403684201	0	0	0	0	
Cranes9999	Cranes9999	Cranes	9999	0	0	0	0	3451.372848	1.083173819	262.9460792	13.12578175	0	0	0	0	
Crawler Tractors25	Crawler Tractors25	Crawler Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0	
Crawler Tractors50	Crawler Tractors50	Crawler Tractors	50	0	0	0	0	960.3339651	2.822046002	771.607297	1.244589014	0	0	0	0	
Crawler Tractors75	Crawler Tractors75	Crawler Tractors	75	0	0	0	0	5871.089817	11.19082786	3314.189404	1.771500992	0	0	0	0	
Crawler Tractors100	Crawler Tractors100	Crawler Tractors	100	0	0	0	0	22300.36311	28.15975298	9908.404667	2.250651226	0	0	0	0	
Crawler Tractors175	Crawler Tractors175	Crawler Tractors	175	0	0	0	0	79085.66278	57.81697886	26601.99939	2.972921758	0	0	0	0	
Crawler Tractors300	Crawler Tractors300	Crawler Tractors	300	0	0	0	0	97443.4547	46.83883234	20364.97211	4.784855789	0	0	0	0	
Crawler Tractors600	Crawler Tractors600	Crawler Tractors	600	0	0	0	0	169007.1848	46.80037604	20533.12679	8.230952184	0	0	0	0	
Crawler Tractors750	Crawler Tractors750	Crawler Tractors	750	0	0	0	0	10835.60119	2.138792025	836.3823171	12.95532075	0	0	0	0	
Crawler Tractors9999	Crawler Tractors9999	Crawler Tractors	9999	0	0	0	0	17271.72974	2.530481674	1010.334949	17.09505324	0	0	0	0	
Crushing/Proc. Equipment25	Crushing/Proc. Equipment25	Crushing/Proc. Equipment	25	76.48978328	0.384968542	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment50	Crushing/Proc. Equipment50	Crushing/Proc. Equipment	50	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment75	Crushing/Proc. Equipment75	Crushing/Proc. Equipment	75	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment100	Crushing/Proc. Equipment100	Crushing/Proc. Equipment	100	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment175	Crushing/Proc. Equipment175	Crushing/Proc. Equipment	175	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment300	Crushing/Proc. Equipment300	Crushing/Proc. Equipment	300	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment600	Crushing/Proc. Equipment600	Crushing/Proc. Equipment	600	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment750	Crushing/Proc. Equipment750	Crushing/Proc. Equipment	750	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment9999	Crushing/Proc. Equipment9999	Crushing/Proc. Equipment	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Dumpers/Tenders25	Dumpers/Tenders25	Dumpers/Tenders	25	469.2584388	7.882471512	0	0	3.476188891	1.405054739	0	0	0	0	0	0	
Dumpers/Tenders100	Dumpers/Tenders100	Dumpers/Tenders	100	229.95	0.74	83.95	2.739130435	0	0	0	0	0	0	0	0	
Excavators25	Excavators25	Excavators	25	0	0	0	0	27.11090881	2.239083163	13.43917716	2.017304221	0	0	0	0	
Excavators50	Excavators50	Excavators	50	0	0	0	0	87740.46342	245.1482146	115209.2289	0.761574956	0	0	0	0	
Excavators75	Excavators75	Excavators	75	0	0	0	0	69289.01603	101.4000006	52460.47058	1.320785255	0	0	0	0	
Excavators100	Excavators100	Excavators	100	0	0	0	0	54236.87461	53.37866037	28111.24132	1.929366049	0	0	0	0	
Excavators175	Excavators175	Excavators	175	0	0	0	0	304431.0911	151.6715105	108287.4868	2.811322897	0	0	0	0	
Excavators300	Excavators300	Excavators	300	0	0	0	0	325459.9502	113.0106451	72441.55044	4.4927248	0	0	0	0	
Excavators600	Excavators600	Excavators	600	0	0	0	0	374266.4279	78.77766509	52252.53578	7.16264622	0	0	0	0	
Excavators750	Excavators750	Excavators	750	0	0	0	0	10399.29718	1.643377545	872.9206383	11.9132218	0	0	0	0	
Excavators9999	Excavators9999	Excavators	9999	0	0	0	0	52526.19865	3.053212581	1756.369239	29.90612537	0	0	0	0	
Forklifts25	Forklifts25	Forklifts	25	46.00902866	0.110365734	0	0	0.072177713	0.015797386	5.362660054	0.013459312	0	0	0	0	
Forklifts50	Forklifts50	Forklifts	50	118030.05	40.33	71631.25	1.647745223	12405.75797	36.33376927	18714.43401	0.662897845	174805.8	72.58	130775.85	1.336682576	
Forklifts75	Forklifts75	Forklifts	75	0	0	0	0	125838.165	247.1586429	98291.09714	1.280260051	0	0	0	0	
Forklifts100	Forklifts100	Forklifts	100	554566.4	150.09	254879.5	2.175798367	73423.84679	126.7816465	54440.35087	1.348702674	1095762.85	254.78	458998.45	2.387290959	
Forklifts175	Forklifts175	Forklifts	175	38233.75	5.41	9260.05	4.128892393	280768.7346	274.9684761	146802.5398	1.91256047	82157.85	9.34	16793.65	4.892197348	
Forklifts300	Forklifts300	Forklifts	300	0	0	0	0	9055.880225	7.703283235	3820.008831	2.370643793	0	0	0	0	
Forklifts600	Forklifts600	Forklifts	600	0	0	0	0	2708.390917	1.428429785	705.7355211	3.837685416	0	0	0	0	
Forklifts750	Forklifts750	Forklifts	750	0	0	0	0	326.8621346	0.080208112	35.48303496	9.21178628	0	0	0	0	
Forklifts9999	Forklifts9999	Forklifts	9999	0	0	0	0	3082.906574	0.316163712	155.8370002	19.78289219	0	0	0	0	
Generator Sets25	Generator Sets25	Generator Sets	25	42701.38624	420.9935901	0	0	48134.94624	180.232404	0	0	0	0	0	0	
Generator Sets50	Generator Sets50	Generator Sets	50	104068.8	406.85	46730.95	2.226978052	63721.7	135.15	45617.7	1.396863498	0	0	0	0	
Generator Sets75	Generator Sets75	Generator Sets	75	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets100	Generator Sets100	Generator Sets	100	46855.05	78.6	9030.1	5.188763137	0	0	0	0	4201.15	5.84	671.6	6.255434783	
Generator Sets175	Generator Sets175	Generator Sets	175	7668.65	7.39	854.1	8.978632479	0	0	0	0	6069.95	4.86	558.45	10.86928105	
Generator Sets300	Generator Sets300	Generator Sets	300	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets600	Generator Sets600	Generator Sets	600	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets750	Generator Sets750	Generator Sets	750	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets9999	Generator Sets9999	Generator Sets	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Graders25	Graders25	Graders	25	0	0	0	0	0	0	0	0	0	0	0	0	
Graders50	Graders50	Graders	50	0	0	0	0	300.0901555	1.213835114	312.7343098	0.959569021	0	0	0	0	
Graders75	Graders75	Graders	75	0	0	0	0	1053.141032	2.331553097	574.7499483	1.832346458	0	0	0	0	
Graders100	Graders100	Graders	100	0	0	0	0	2510.960834	4.036904333	1075.386716	2.334937559	0	0	0	0	
Graders175	Graders175	Graders	175	0	0	0	0	37247.83877	34.39723206	11306.54007	3.294362249	0	0	0	0	
Graders300	Graders300	Graders	300	0	0	0	0	118671.0684	64.33582977	24995.01102	4.747790201	0	0	0	0	
Graders600	Graders600	Graders	600	0	0	0	0	28512.8496	9.516497878	4011.474781	7.107822224	0	0	0	0	
Graders750	Graders750	Graders	750	0	0	0	0	1083.275788	0.196823118	74.18975001	14.60142119	0	0	0	0	
Graders9999	Graders9999	Graders	9999	0	0	0	0	775.189987	0.131215412	49.90761896	15.53249791	0	0	0	0	
Off-Highway Tractors25	Off-Highway Tractors25	Off-Highway Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0	
Off-Highway Tractors50	Off-Highway Tractors50	Off-Highway Tractors	50	0	0	0	0	14990.48355	26.37972668	16067.27066	0.932982575	0	0	0	0	
Off-Highway Tractors75	Off-Highway Tractors75	Off-Highway Tractors	75	0	0	0	0	13061.15235	14.24466499	8703.417807	1.50069233	0	0	0	0	
Off-Highway Tractors100	Off-Highway Tractors100	Off-Highway Tractors	100	0	0	0	0	12363.65883	9.415613717	5951.454745	2.077417936	0	0	0	0	
Off-Highway Tractors175	Off-Highway Tractors175	Off-Highway Tractors	175	0	0	0	0	66935.40853	20.8324	21067.66753	3.177162751	0	0	0	0	
Off-Highway Tractors300	Off-Highway Tractors300	Off-Highway Tractors	300	0	0	0	0	29842.83417	8.139512637	6423.269904	4.646050161	0	0	0	0	
Off-Highway Tractors600	Off-Highway Tractors600	Off-Highway Tractors	600	0	0	0	0	79073.0226	10.57005621	9700.817746	8.151170826	0	0	0	0	
Off-Highway Tractors750	Off-Highway Tractors750	Off-Highway Tractors	750	0	0	0	0	6403.705683	0.689073025	505.6864938	12.66339078	0	0	0	0	
Off-Highway Tractors9999	Off-Highway Tractors9999	Off-Highway Tractors	9999	0	0	0	0	5775.840492	0.230275426	181.4152027	31.83768728	0	0	0	0	
Off-Highway Trucks25	Off-Highway Trucks25	Off-Highway Trucks	25	0	0	0	0	0	0	0	0	0	0	0	0	
Off-Highway Trucks50	Off-Highway Trucks50	Off-Highway Trucks	50	0	0	0	0	633.3402548	1.705800356	1057.047191	0.599159867	0	0	0	0	
Off-Highway Trucks75	Off-Highway Trucks75	Off-Highway Trucks	75	0	0	0	0	791.3443756	0.853242161	463.3852729	1.707746063	0	0	0	0	
Off-Highway Trucks100	Off-Highway Trucks100	Off-Highway Trucks	100	0	0	0	0	337.4751123	0.295234677	185.5025915	1.819247427	0	0	0	0	
Off-Highway Trucks175	Off-Highway Trucks175	Off-Highway Trucks	175	0	0	0	0	17295.26677	6.365191941	5740.555228	3.012821249	0	0	0	0	
Off-Highway Trucks300	Off-Highway Trucks300	Off-Highway Trucks	300	0	0	0	0	40299.03368	12.6374387	9287.75607	4.338941869	0	0	0	0	
Off-Highway Trucks600	Off-Highway Trucks600	Off-Highway Trucks	600	0	0	0	0	295968.5856	43.34866752	35998.1879	8.221763452	0	0	0	0	
Off-Highway Trucks750	Off-Highway Trucks750	Off-Highway Trucks	750	0	0	0	0	36311.87754	5.631183202	3244.654181	11.19129359	0	0	0	0	
Off-Highway Trucks9999	Off-Highway Trucks9999	Off-Highway Trucks	9999	0	0	0	0	138899.7263	9.824923029	6567.847349	21.14844011	0	0	0	0	
Pavers25	Pavers25	Pavers	25	1385.881612	4.754729216	0	0	6.546590782	0.871807404	0	0	0	0	0	0	
Pavers50	Pavers50	Pavers	50	2569.6	2.81	1091.35	2.35451505	1446.067791	4.36340109	1554.611473	0.930179544	0	0	0	0	
Pavers75	Pavers75	Pavers	75	0	0	0	0	7053.567537	11.31865667	4407.886915	1.600215176	0	0	0	0	
Pavers100	Pavers100	Pavers	100	2299.5	1.52	605.9	3.795180723	7621.591104	8.694729156	3786.864928	2.012638752	0	0	0	0	
Pavers175	Pavers175	Pavers	175	0	0	0	0	25333.8609	15.39023679	8524.12926	2.972017449	0	0	0	0	
Pavers300	Pavers300	Pavers	300	0	0	0	0	30659.19119	11.38452155	6358.690033	4.821620653	0	0	0	0	
Pavers600	Pavers600	Pavers	600	0	0	0	0	5369.58294	1.181974421	685.4457126	7.83371001	0	0	0	0	
Pavers750	Pavers750	Pavers	750	0	0	0	0	222.3551104	0.032803853	16.65864853	13.34772806	0	0	0	0	
Pavers9999	Pavers9999	Pavers	9999	0	0	0	0	5097.514442	0.229626971	123.8297213	41.16551655	0	0	0	0	
Paving Equipment25	Paving Equipment25	Paving Equipment	25	1367.754388	10.34547655	0	0	11.06935269	2.157196314	0	0	0	0	0	0	
Paving Equipment50	Paving Equipment50	Paving Equipment	50	3007.6	7.63	1339.55	2.245231608	3553.99202	12.07252499	4656.560522	0.763222555	0	0	0	0	
Paving Equipment75	Paving Equipment75	Paving Equipment	75	0	0	0	0	2627.221444	4.756711741	1940.573396	1.353837711	0	0	0	0	
Paving Equipment100	Paving Equipment100	Paving Equipment	100	1241	1.98	335.8	3.695652174	4406.718598	5.416925336	2320.235068	1.899255234	0	0	0	0	
Paving Equipment175	Paving Equipment175	Paving Equipment	175	0	0	0	0	28121.30699	17.48912563	11401.35736	2.466487638	0	0	0	0	
Paving Equipment300	Paving Equipment300	Paving Equipment	300	0	0	0	0	12647.55252	5.54703802	2976.743997	4.248787445	0	0	0	0	
Paving Equipment600	Paving Equipment600	Paving Equipment	600	0	0	0	0	29850.43886	8.008096801	4645.546365	6.425603474	0	0	0	0	
Paving Equipment750	Paving Equipment750	Paving Equipment	750	0	0	0	0	6471.496016	1.082527149	560.131665	11.55352647	0	0	0	0	
Paving Equipment9999	Paving Equipment9999	Paving Equipment	9999	0	0	0	0	4056.041998	0.426450089	223.5936627	18.14023684	0	0	0	0	
Rollers25	Rollers25	Rollers	25	4196.038182	22.64756814	0	0	77.79631724	17.11528173	0	0	0	0	0	0	
Rollers50	Rollers50	Rollers	50	3387.2	1.97	1230.05	2.753709199	36110.3284	122.7084321	44367.50619	0.813891325	0	0	0	0	
Rollers75	Rollers75	Rollers	75	0	0	0	0	14305.94555	24.93583964	9340.64484	1.531580078	0	0	0	0	
Rollers100	Rollers100	Rollers	100	10464.55	3.7	2306.8	4.536392405	22047.96969	29.60306688	11219.5269	1.965142549	0	0	0	0	
Rollers175	Rollers175	Rollers	175	0	0	0	0	122112.1799	80.19958658	47572.41744	2.566869343	0	0	0	0	
Rollers300	Rollers300	Rollers	300	0	0	0	0	10549.92631	5.324387327	2413.902388	4.370485883	0	0	0	0	
Rollers600	Rollers600	Rollers	600	0	0	0	0	8353.994774	2.30047826	1140.107873	7.327372235	0	0	0	0	
Rollers750	Rollers750	Rollers	750	0	0	0	0	205.1057432	0.032803853	14.92304879	13.7442252	0	0	0	0	
Rollers9999	Rollers9999	Rollers	9999	0	0	0	0	9130.574512	0.426450089	203.9334697	44.77231974	0	0	0	0	
Rough Terrain Forklifts25	Rough Terrain Forklifts25	Rough Terrain Forklifts	25	0	0	0	0	0	0	0	0	0	0	0	0	
Rough Terrain Forklifts50	Rough Terrain Forklifts50	Rough Terrain Forklifts	50	1095	0.74	313.9	3.488372093	1083.557534	4.067677772	1093.957577	0.990493194	0	0	0	0	
Rough Terrain Forklifts75	Rough Terrain Forklifts75	Rough Terrain Forklifts	75	0	0	0	0	43334.27623	83.09806968	27065.53856	1.601086789	0	0	0	0	
Rough Terrain Forklifts100	Rough Terrain Forklifts100	Rough Terrain Forklifts	100	23666.6	11.2	4613.6	5.129746835	31124.22192	47.58463689	15185.5981	2.04958815	0	0	0	0	
Rough Terrain Forklifts175	Rough Terrain Forklifts175	Rough Terrain Forklifts	175	1350.5	0.32	116.8	11.5625	194749.6887	166.9217493	79409.88108	2.452461659	0	0	0	0	
Rough Terrain Forklifts300	Rough Terrain Forklifts300	Rough Terrain Forklifts	300	0	0	0	0	1671.609969	1.017339316	388.3618765	4.304258657	0	0	0	0	
Rough Terrain Forklifts600	Rough Terrain Forklifts600	Rough Terrain Forklifts	600	0	0	0	0	472.6620646	0.164031366	69.40086347	6.810607836	0	0	0	0	
Rough Terrain Forklifts750	Rough Terrain Forklifts750	Rough Terrain Forklifts	750	0	0	0	0	155.5470204	0.032815954	12.3279303	12.61744807	0	0	0	0	
Rough Terrain Forklifts9999	Rough Terrain Forklifts9999	Rough Terrain Forklifts	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Rubber Tired Dozers25	Rubber Tired Dozers25	Rubber Tired Dozers	25	0	0	0	0	0	0	0	0	0	0	0	0	
Rubber Tired Dozers50	Rubber Tired Dozers50	Rubber Tired Dozers	50	0	0	0	0	423.6685545	0.592721399	227.2665844	1.864192026	0	0	0	0	
Rubber Tired Dozers75	Rubber Tired Dozers75	Rubber Tired Dozers	75	0	0	0	0	776.7743416	0.985800231	458.042412	1.695856806	0	0	0	0	
Rubber Tired Dozers100	Rubber Tired Dozers100	Rubber Tired Dozers	100	0	0	0	0	1520.593175	1.64136057	727.1990892	2.091027337	0	0	0	0	
Rubber Tired Dozers175	Rubber Tired Dozers175	Rubber Tired Dozers	175	0	0	0	0	4614.30981	2.723931954	1593.937871	2.894911962	0	0	0	0	
Rubber Tired Dozers300	Rubber Tired Dozers300	Rubber Tired Dozers	300	0	0	0	0	5729.434402	2.19969969	1253.557911	4.570538267	0	0	0	0	
Rubber Tired Dozers600	Rubber Tired Dozers600	Rubber Tired Dozers	600	0	0	0	0	30265.07137	8.034519312	4349.294938	6.958615546	0	0	0	0	
Rubber Tired Dozers750	Rubber Tired Dozers750	Rubber Tired Dozers	750	0	0	0	0	909.3641994	0.164435803	84.30728144	10.78630676	0	0	0	0	
Rubber Tired Dozers9999	Rubber Tired Dozers9999	Rubber Tired Dozers	9999	0	0	0	0	2555.614329	0.164019265	96.88605332	26.37752537	0	0	0	0	
Scrapers25	Scrapers25	Scrapers	25	0	0	0	0	0	0	0	0	0	0	0	0	
Scrapers50	Scrapers50	Scrapers	50	0	0	0	0	85.41333577	0.164393037	39.96806853	2.137039364	0	0	0	0	
Scrapers75	Scrapers75	Scrapers	75	0	0	0	0	644.6305898	1.279940926	336.4207854	1.916143763	0	0	0	0	
Scrapers100	Scrapers100	Scrapers	100	0	0	0	0	794.8201157	1.017915655	316.0034327	2.515226208	0	0	0	0	
Scrapers175	Scrapers175	Scrapers	175	0	0	0	0	6768.301751	6.169819696	1764.899321	3.834950623	0	0	0	0	
Scrapers300	Scrapers300	Scrapers	300	0	0	0	0	94504.14476	48.73136473	15728.17815	6.008588144	0	0	0	0	
Scrapers600	Scrapers600	Scrapers	600	0	0	0	0	331794.9638	101.7581132	33470.05064	9.913189776	0	0	0	0	
Scrapers750	Scrapers750	Scrapers	750	0	0	0	0	52320.04649	15.3664285	4149.520248	12.60869772	0	0	0	0	
Scrapers9999	Scrapers9999	Scrapers	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Skid Steer Loaders25	Skid Steer Loaders25	Skid Steer Loaders	25	10490.30284	58.48364498	0	0	1273.843282	225.856402	0	0	0	0	0	0	
Skid Steer Loaders50	Skid Steer Loaders50	Skid Steer Loaders	50	15987	26.96	8354.85	1.913499345	33891.95185	96.52187023	37276.21474	0.909211198	0	0	0	0	
Skid Steer Loaders75	Skid Steer Loaders75	Skid Steer Loaders	75	0	0	0	0	236481.722	376.0207401	168440.4423	1.403948593	0	0	0	0	
Skid Steer Loaders100	Skid Steer Loaders100	Skid Steer Loaders	100	21356.15	16.1	4993.2	4.277046784	120484.6148	146.743708	68748.69538	1.752536745	0	0	0	0	
Skid Steer Loaders175	Skid Steer Loaders175	Skid Steer Loaders	175	0	0	0	0	35043.61679	25.42507604	16704.84333	2.09781176	0	0	0	0	
Skid Steer Loaders300	Skid Steer Loaders300	Skid Steer Loaders	300	0	0	0	0	2863.172258	1.377761826	740.1200935	3.868523883	0	0	0	0	
Skid Steer Loaders600	Skid Steer Loaders600	Skid Steer Loaders	600	0	0	0	0	1989.486466	0.393646236	225.5606996	8.820182193	0	0	0	0	
Skid Steer Loaders750	Skid Steer Loaders750	Skid Steer Loaders	750	0	0	0	0	194.6987937	0.032803853	16.24834001	11.9826883	0	0	0	0	
Skid Steer Loaders9999	Skid Steer Loaders9999	Skid Steer Loaders	9999	0	0	0	0	14632.08664	0.721684766	344.5818827	42.46330807	0	0	0	0	
Surfacing Equipment25	Surfacing Equipment25	Surfacing Equipment	25	493.5812922	2.046859924	0	0	0	0	0	0	0	0	0	0	
Surfacing Equipment50	Surfacing Equipment50	Surfacing Equipment	50	0	0	0	0	380.9671474	1.115829108	527.3197797	0.72245943	0	0	0	0	
Surfacing Equipment75	Surfacing Equipment75	Surfacing Equipment	75	0	0	0	0	659.9772278	1.083474369	531.3291928	1.242124914	0	0	0	0	
Surfacing Equipment100	Surfacing Equipment100	Surfacing Equipment	100	0	0	0	0	913.5164094	1.019074418	486.206887	1.878863574	0	0	0	0	
Surfacing Equipment175	Surfacing Equipment175	Surfacing Equipment	175	0	0	0	0	3236.673083	2.461341596	1583.525851	2.043966053	0	0	0	0	
Surfacing Equipment300	Surfacing Equipment300	Surfacing Equipment	300	0	0	0	0	3756.290108	1.873122224	1026.346402	3.659865812	0	0	0	0	
Surfacing Equipment600	Surfacing Equipment600	Surfacing Equipment	600	0	0	0	0	21340.10459	5.611838387	3636.525013	5.868268337	0	0	0	0	
Surfacing Equipment750	Surfacing Equipment750	Surfacing Equipment	750	0	0	0	0	9025.736868	1.673172776	941.696352	9.584551165	0	0	0	0	
Surfacing Equipment9999	Surfacing Equipment9999	Surfacing Equipment	9999	0	0	0	0	3966.492843	0.658718385	328.9413477	12.05835895	0	0	0	0	
Sweepers/Scrubbers25	Sweepers/Scrubbers25	Sweepers/Scrubbers	25	1524.839018	6.604296522	0	0	3.389203438	0.542374143	0	0	0	0	0	0	FALSE
Sweepers/Scrubbers50	Sweepers/Scrubbers50	Sweepers/Scrubbers	50	15092.75	11.03	5701.3	2.647247119	2651.553375	11.07794397	2927.365697	0.905781392	0	0	0	0	FALSE
Sweepers/Scrubbers75	Sweepers/Scrubbers75	Sweepers/Scrubbers	75	0	0	0	0	2346.795259	4.28306693	1305.372353	1.797797581	0	0	0	0	FALSE
Sweepers/Scrubbers100	Sweepers/Scrubbers100	Sweepers/Scrubbers	100	21378.05	9.2	4755.95	4.495011512	3045.621622	4.601426279	1403.02649	2.170751332	0	0	0	0	FALSE
Sweepers/Scrubbers175	Sweepers/Scrubbers175	Sweepers/Scrubbers	175	251.85	0.07	29.2	8.625	689.4247713	0.632209982	251.418696	2.742138044	0	0	0	0	FALSE
Sweepers/Scrubbers300	Sweepers/Scrubbers300	Sweepers/Scrubbers	300	0	0	0	0	943.0219713	0.458124194	187.2371241	5.036511727	0	0	0	0	FALSE
Sweepers/Scrubbers600	Sweepers/Scrubbers600	Sweepers/Scrubbers	600	0	0	0	0	151.3559625	0.047392158	20.26048281	7.470501267	0	0	0	0	FALSE
Sweepers/Scrubbers750	Sweepers/Scrubbers750	Sweepers/Scrubbers	750	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
Sweepers/Scrubbers9999	Sweepers/Scrubbers9999	Sweepers/Scrubbers	9999	0	0	0	0	298.865556	0.015797386	5.854338681	51.05026755	0	0	0	0	FALSE
Tractors/Loaders/Backhoes25	Tractors/Loaders/Backhoes25	Tractors/Loaders/Backhoes	25	0	0.1626367	0	0	126.518978	16.27559489	16.31373733	7.755364415	0	0	0	0	
Tractors/Loaders/Backhoes50	Tractors/Loaders/Backhoes50	Tractors/Loaders/Backhoes	50	0	0	0	0	35621.12342	105.978413	42004.27893	0.848035589	0	0	0	0	
Tractors/Loaders/Backhoes75	Tractors/Loaders/Backhoes75	Tractors/Loaders/Backhoes	75	0	0	0	0	158030.0009	250.3120878	110963.3004	1.424164569	0	0	0	0	
Tractors/Loaders/Backhoes100	Tractors/Loaders/Backhoes100	Tractors/Loaders/Backhoes	100	8858.55	3.46	3025.85	2.927623643	369646.399	415.5871596	199361.6581	1.854149903	0	0	0	0	
Tractors/Loaders/Backhoes175	Tractors/Loaders/Backhoes175	Tractors/Loaders/Backhoes	175	0	0	0	0	385938.8365	246.5474219	162328.6711	2.377514914	0	0	0	0	
Tractors/Loaders/Backhoes300	Tractors/Loaders/Backhoes300	Tractors/Loaders/Backhoes	300	0	0	0	0	180137.4918	67.8635423	41966.98331	4.292362176	0	0	0	0	
Tractors/Loaders/Backhoes600	Tractors/Loaders/Backhoes600	Tractors/Loaders/Backhoes	600	0	0	0	0	123464.4943	28.91472313	17189.6663	7.182483484	0	0	0	0	
Tractors/Loaders/Backhoes750	Tractors/Loaders/Backhoes750	Tractors/Loaders/Backhoes	750	0	0	0	0	5700.708939	0.853398284	444.521579	12.82436941	0	0	0	0	
Tractors/Loaders/Backhoes9999	Tractors/Loaders/Backhoes9999	Tractors/Loaders/Backhoes	9999	0	0	0	0	22603.03319	1.14850471	628.735938	35.94996218	0	0	0	0	
Trenchers25	Trenchers25	Trenchers	25	8538.032374	27.96090872	0	0	115.6382314	11.59671825	0	0	0	0	0	0	
Trenchers50	Trenchers50	Trenchers	50	16092.85	17.96	7223.35	2.227892875	10853.05417	28.47704907	8867.838749	1.223866883	0	0	0	0	
Trenchers75	Trenchers75	Trenchers	75	0	0	0	0	3572.03532	6.235553187	1867.889299	1.912337804	0	0	0	0	
Trenchers100	Trenchers100	Trenchers	100	9938.95	5.96	2401.7	4.138297872	4222.909551	5.118949143	1649.747176	2.559731341	0	0	0	0	
Trenchers175	Trenchers175	Trenchers	175	0	0	0	0	6808.886943	5.119202905	2116.404022	3.217196184	0	0	0	0	
Trenchers300	Trenchers300	Trenchers	300	0	0	0	0	3983.651067	1.969892402	709.6141384	5.613827081	0	0	0	0	
Trenchers600	Trenchers600	Trenchers	600	0	0	0	0	6473.098352	1.740349013	594.2164193	10.89350301	0	0	0	0	
Trenchers750	Trenchers750	Trenchers	750	0	0	0	0	258.3744316	0.098846191	19.4222855	13.30298803	0	0	0	0	
Trenchers9999	Trenchers9999	Trenchers	9999	0	0	0	0	8257.730356	0.885704031	382.2129893	21.60504898	0	0	0	0	
Welders25	Welders25	Welders	25	0	0	0	0	23951.3698	73.64126779	0	0	0	0	0	0	
Welders50	Welders50	Welders	50	32525.15	64.6	13424.7	2.422784122	106160.25	139.18	89381.2	1.1877246	0	0	0	0	
Welders75	Welders75	Welders	75	0	0	0	0	0	0	0	0	0	0	0	0	
Welders100	Welders100	Welders	100	45508.2	65.94	13694.8	3.323027719	0	0	0	0	0	0	0	0	
Welders175	Welders175	Welders	175	5683.05	4.55	945.35	6.011583012	0	0	0	0	0	0	0	0	
Welders300	Welders300	Welders	300	0	0	0	0	0	0	0	0	0	0	0	0	
Welders600	Welders600	Welders	600	0	0	0	0	0	0	0	0	0	0	0	0	
Welders750	Welders750	Welders	750	0	0	0	0	0	0	0	0	0	0	0	0	
Welders9999	Welders9999	Welders	9999	0	0	0	0	0	0	0	0	0	0	0	0	

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2026
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bi	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consumptior	Total_Activity	Total_Population	Horsepower_Hours_hhpy
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	100	Gasoline	2.47E-07	2.99E-07	3.56E-07	3.74E-06	9.10E-07	0.000119569	8.99E-09	8.28E-09	1.08E-09	9.75E-10	3.875120313	22.00453089	0.01170541	103.416608
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	100	Diesel	0.010698769	0.01294551	0.015406227	0.098499121	0.093623042	15.98211885	0.006864079	0.006314952	0.000145866	0.000130777	519846.7139	31029.32522	269.6107463	18581122.7
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	175	Gasoline	6.85E-07	8.29E-07	9.86E-07	1.10E-05	5.08E-06	0.000629716	4.74E-08	4.36E-08	5.72E-09	5.13E-09	20.40844931	60.83352097	0.047419706	544.6469806
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	175	Diesel	0.007525012	0.009105264	0.010836017	0.088497462	0.072214016	14.91887989	0.003413065	0.00314002	0.000136236	0.000122077	485262.9843	40320.86247	174.1735426	19282701.87
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	25	Gasoline	5.68E-06	6.87E-06	8.17E-06	6.91E-05	1.14E-06	0.000185918	1.23E-07	1.13E-07	1.52E-09	1.52E-09	6.025398194	225.1258603	0.084430457	160.8017767
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	25	Diesel	0.000581445	0.000703548	0.00083728	0.002289436	0.0016726	0.213674417	9.89E-05	9.10E-05	1.94E-06	1.75E-06	6950.138739	4876.028428	18.0048119	248422.0384
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	300	Diesel	0.003976453	0.004811508	0.005726093	0.027197001	0.031439231	12.47953815	0.001432041	0.001317478	0.00011403	0.000102116	405919.0749	26440.14113	58.44932259	16129844.56
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	50	Gasoline	4.92E-06	5.96E-06	7.09E-06	0.000163384	1.33E-05	0.003687716	2.77E-07	2.55E-07	3.35E-08	3.01E-08	119.5151093	423.437794	0.421109338	3189.538935
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	50	Diesel	0.011975722	0.014490624	0.01724504	0.050007781	0.038459139	4.825341996	0.003082748	0.002836128	4.38E-05	3.95E-05	156952.7923	26334.36445	207.9291692	5610036.6
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	600	Diesel	0.005277722	0.006386043	0.00759992	0.04155557	0.042365895	16.62024662	0.001884626	0.001733856	0.000151866	0.000135999	540602.9495	22133.15481	45.07728072	21481724.09
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	75	Gasoline	1.89E-07	2.28E-07	2.72E-07	3.04E-06	6.97E-07	9.40E-05	7.07E-09	6.50E-09	8.51E-10	7.66E-10	3.045054626	67.26494752	0.013448061	81.26437131
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	75	Diesel	0.007980494	0.009656398	0.011491912	0.044548133	0.067126545	6.400886337	0.004149128	0.003817198	5.83E-05	5.24E-05	208200.1617	30649.4379	183.3653208	7441795.134
Sacramento	2026	Agricultural - Agricultural Tractors	Aggregate	750	Diesel	0.000165756	0.000200564	0.000238688	0.001465193	0.001634811	0.373537244	7.51E-05	6.91E-05	3.41E-06	3.06E-06	12149.96026	284.4286146	0.773015067	482798.1303
Sacramento	2026	Agricultural - ATVs	Aggregate	100	Gasoline	6.09E-05	7.37E-05	8.77E-05	0.002606558	0.000241141	0.17508204	1.32E-05	1.21E-05	1.59E-06	1.43E-06	5674.229914	300.3358069	7.028665204	181716.0422
Sacramento	2026	Agricultural - ATVs	Aggregate	175	Gasoline	6.34E-05	7.67E-05	9.13E-05	0.0031539	0.000337574	0.244424654	1.84E-05	1.69E-05	2.23E-06	1.99E-06	7921.553199	479.6611056	5.978029752	253686.1039
Sacramento	2026	Agricultural - ATVs	Aggregate	175	Diesel	7.13E-06	8.62E-06	1.03E-05	0.000152682	6.68E-05	0.027774603	2.68E-06	2.47E-06	2.54E-07	2.27E-07	903.4181433	789.931751	0.434901792	43078.51986
Sacramento	2026	Agricultural - ATVs	Aggregate	25	Gasoline	0.009245373	0.011186901	0.013313337	0.1192038	0.004678574	0.439757009	0.000381897	0.000351345	3.73E-06	3.59E-06	14252.07509	3382.543091	80.14489058	456419.7622
Sacramento	2026	Agricultural - ATVs	Aggregate	25	Diesel	0.000242223	0.00029309	0.000348801	0.001561343	0.001340449	0.197817539	6.08E-05	5.59E-05	1.80E-06	1.62E-06	6434.365706	8590.150755	17.92046332	275983.8283
Sacramento	2026	Agricultural - ATVs	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	508.5561865	10.32436496	60602.94163
Sacramento	2026	Agricultural - ATVs	Aggregate	50	Gasoline	0.000185021	0.000223876	0.000266431	0.010160594	0.000479467	0.336306472	2.53E-05	2.33E-05	3.06E-06	2.74E-06	10899.34893	2818.168425	37.48661289	349049.4007
Sacramento	2026	Agricultural - ATVs	Aggregate	50	Diesel	0.000366814	0.000443844	0.000528211	0.003079026	0.002588385	0.441438899	0.000101092	9.30E-05	4.03E-06	3.61E-06	14358.58183	8107.851153	26.40565394	615870.557
Sacramento	2026	Agricultural - ATVs	Aggregate	75	Gasoline	5.97E-05	7.22E-05	8.59E-05	0.003216228	0.000164529	0.122447026	9.21E-06	8.47E-06	1.11E-06	9.98E-07	3968.382928	1109.662904	7.376364457	127086.6447
Sacramento	2026	Agricultural - Bale Wagons (Self Propelled)	Aggregate	175	Diesel	0.000224571	0.000271731	0.000323382	0.002131693	0.002218762	0.350448809	0.000107756	9.91E-05	3.20E-06	2.87E-06	11398.96803	5913.451475	3.291764327	434838.001
Sacramento	2026	Agricultural - Bale Wagons (Self Propelled)	Aggregate	300	Diesel	2.62E-05	3.17E-05	3.77E-05	0.000146132	0.000270063	0.056134352	1.19E-05	1.09E-05	5.13E-07	4.59E-07	1825.869194	2304.672363	0.459518541	69651.68365
Sacramento	2026	Agricultural - Balers (Self Propelled)	Aggregate	75	Diesel	9.91E-06	1.20E-05	1.43E-05	7.54E-05	9.11E-05	0.012232506	4.46E-06	4.10E-06	1.12E-07	1.00E-07	397.8839103	397.8204426	0.227962439	13652.87946
Sacramento	2026	Agricultural - Combine Harvesters	Aggregate	175	Diesel	0.000106866	0.000129308	0.000153888	0.001079591	0.00103116	0.18399733	4.74E-05	4.36E-05	1.68E-06	1.51E-06	5984.838942	655.8268889	2.227248604	257255.9261
Sacramento	2026	Agricultural - Combine Harvesters	Aggregate	300	Diesel	0.000160122	0.000193747	0.000230575	0.000892351	0.001511357	0.334926059	7.11E-05	6.55E-05	3.06E-06	2.74E-06	10894.06309	3281.941075	2.029837446	468276.9698
Sacramento	2026	Agricultural - Combine Harvesters	Aggregate	600	Diesel	0.000442323	0.000535211	0.000636945	0.003540798	0.004522255	1.018584436	0.000187352	0.000172364	9.30E-06	8.33E-06	33131.26232	8620.268382	4.03627126	1424134.152
Sacramento	2026	Agricultural - Combine Harvesters	Aggregate	750	Diesel	0.000594331	0.000719141	0.000855837	0.004537002	0.006493309	1.377654606	0.000266968	0.00024561	1.26E-05	1.13E-05	44810.65536	2216.794169	3.752149122	1926168.214
Sacramento	2026	Agricultural - Combine Harvesters	Aggregate	9999	Diesel	1.41E-05	1.70E-05	2.02E-05	0.000107828	0.000200937	0.027360364	6.22E-06	5.72E-06	2.50E-07	2.24E-07	889.9442964	1642.70999	0.051787546	38253.90197
Sacramento	2026	Agricultural - Construction Equipment	Aggregate	100	Diesel	0.000247658	0.000299666	0.000356628	0.002032948	0.002154068	0.320236173	0.000160133	0.000147322	2.92E-06	2.62E-06	10416.24856	5438.703411	6.886431384	446775.3745
Sacramento	2026	Agricultural - Construction Equipment	Aggregate	175	Diesel	0.000643107	0.000778159	0.000926074	0.007479701	0.007121115	1.304183571	0.000305479	0.000281041	1.19E-05	1.07E-05	42420.87987	7878.290638	27.27642993	2022793.898
Sacramento	2026	Agricultural - Construction Equipment	Aggregate	300	Diesel	0.000177778	0.000215111	0.000256	0.000909756	0.001776926	0.310007111	8.47E-05	7.79E-05	2.83E-06	2.54E-06	10083.53019	4533.909839	2.442215583	480822.2675
Sacramento	2026	Agricultural - Construction Equipment	Aggregate	50	Diesel	3.93E-05	4.76E-05	5.66E-05	0.000190612	0.000149439	0.022204937	9.13E-06	8.40E-06	2.02E-07	1.82E-07	722.2548955	1178.538732	0.724161563	30979.07101
Sacramento	2026	Agricultural - Construction Equipment	Aggregate	600	Diesel	0.000123545	0.000149489	0.000177904	0.001013622	0.00123083	0.21953106	5.69E-05	5.23E-05	2.00E-06	1.80E-06	7140.636433	3615.11617	1.138814661	340493.553
Sacramento	2026	Agricultural - Construction Equipment	Aggregate	75	Diesel	7.82E-05	9.46E-05	0.000112604	0.00059506	0.000719248	0.096534773	3.52E-05	3.24E-05	8.81E-07	7.90E-07	3139.964413	2986.289672	2.613209563	134679.848
Sacramento	2026	Agricultural - Cotton Pickers	Aggregate	600	Diesel	5.09E-05	6.16E-05	7.33E-05	0.00039065	0.000536687	0.117821903	2.17E-05	2.00E-05	1.08E-06	9.64E-07	3832.366001	2795.361297	0.519623813	164732.731
Sacramento	2026	Agricultural - Forage & Silage Harvesters	Aggregate	600	Diesel	0.00010257	0.000124109	0.0001477	0.000909414	0.000961925	0.231846784	4.27E-05	3.93E-05	2.12E-06	1.90E-06	7541.227176	285.9205438	0.612928295	324156.6522
Sacramento	2026	Agricultural - Forage & Silage Harvesters	Aggregate	750	Diesel	0.000291821	0.000353103	0.000420222	0.002371112	0.00305907	0.534792982	0.000141978	0.00013062	4.88E-06	4.38E-06	17395.08867	4678.726355	1.328818415	747720.9754
Sacramento	2026	Agricultural - Forage & Silage Harvesters	Aggregate	9999	Diesel	0.000170098	0.000205818	0.000244941	0.001376974	0.002319702	0.280454658	7.95E-05	7.31E-05	2.56E-06	2.29E-06	9122.284343	2277.055876	0.520104126	392117.7654
Sacramento	2026	Agricultural - Forklifts	Aggregate	100	Diesel	0.000315266	0.000381472	0.000453983	0.002665872	0.002463478	0.431122037	0.000181062	0.000166577	3.93E-06	3.53E-06	14023.00759	10441.17566	8.734954889	601477.0505
Sacramento	2026	Agricultural - Forklifts	Aggregate	175	Diesel	7.14E-05	8.63E-05	0.000102755	0.000724665	0.000685181	0.123072465	3.17E-05	2.92E-05	1.12E-06	1.01E-06	4003.14985	3117.444948	1.941052915	190885.8841
Sacramento	2026	Agricultural - Forklifts	Aggregate	50	Diesel	0.000358859	0.00043422	0.000516757	0.00180568	0.001448967	0.210610751	8.83E-05	8.13E-05	1.92E-06	1.72E-06	6850.487577	9158.226735	8.969232592	293832.1949
Sacramento	2026	Agricultural - Forklifts	Aggregate	75	Diesel	0.000988768	0.00119641	0.001423826	0.00757822	0.009130164	1.229314515	0.000448664	0.00041277	1.12E-05	1.01E-05	39985.63125	15340.78922	31.35147767	1715069.994
Sacramento	2026	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	175	Diesel	4.75E-05	5.74E-05	6.84E-05	0.000495413	0.000443978	0.082616718	2.13E-05	1.96E-05	7.54E-07	6.76E-07	2687.255045	2590.592893	1.098268146	122037.009
Sacramento	2026	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	300	Diesel	0.000114185	0.000138164	0.000164427	0.000637358	0.001177886	0.24483109	5.19E-05	4.77E-05	2.24E-06	2.00E-06	7963.564704	1926.341689	2.049093072	361651.4239
Sacramento	2026	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	600	Diesel	6.62E-06	8.01E-06	9.53E-06	5.07E-05	6.99E-05	0.015404563	2.82E-06	2.59E-06	1.41E-07	1.26E-07	501.0607002	397.8204426	0.075987481	22754.79952
Sacramento	2026	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	75	Diesel	3.97E-06	4.80E-06	5.72E-06	3.02E-05	3.65E-05	0.004900751	1.79E-06	1.64E-06	4.47E-08	4.01E-08	159.4056043	1505.1932	0.108725448	6511.666932
Sacramento	2026	Agricultural - Nut Harvester	Aggregate	100	Diesel	0.001253321	0.001516519	0.001804782	0.009917918	0.010094188	1.557649885	0.000768765	0.000707264	1.42E-05	1.27E-05	50665.32053	17574.93768	26.16506385	1958978.353
Sacramento	2026	Agricultural - Nut Harvester	Aggregate	175	Diesel	0.000743465	0.000899593	0.00107059	0.007247066	0.007279894	1.210075853	0.000345841	0.000318174	1.10E-05	9.90E-06	39359.8597	13291.20333	16.19307108	1691867.928
Sacramento	2026	Agricultural - Nut Harvester	Aggregate	25	Diesel	8.34E-05	0.000100966	0.000120157	0.000404587	0.000342022	0.047131568	1.72E-05	1.58E-05	4.29E-07	3.86E-07	1533.037701	311.7318315	3.778916678	59275.01549
Sacramento	2026	Agricultural - Nut Harvester	Aggregate	300	Diesel	0.00041085	0.000497128	0.000591624	0.002066401	0.003977507	0.667641142	0.000197024	0.000181262	6.09E-06	5.46E-06	21716.21027	3521.647921	4.329158747	933462.6756
Sacramento	2026	Agricultural - Nut Harvester	Aggregate	50	Diesel	0.00048639	0.000588532	0.000700402	0.002319208	0.001792349	0.253547836	0.000119796	0.000110213	2.30E-06	2.07E-06	8247.092309	5534.703164	9.506281831	318874.4318
Sacramento	2026	Agricultural - Nut Harvester	Aggregate	75	Diesel	0.000132301	0.000160084	0.000190513	0.001033204	0.001229142	0.166350282	6.04E-05	5.56E-05	1.52E-06	1.36E-06	5410.837482	3729.383196	3.328854812	209210.4284
Sacramento	2026	Agricultural - Other Harvesters	Aggregate	100	Diesel	0.000619579	0.000749691	0.000892194	0.004992052	0.004872358	0.795440538	0.000365287	0.000336064	7.26E-06	6.51E-06	25873.11193	10989.66893	12.75967584	1000385.779
Sacramento	2026	Agricultural - Other Harvesters	Aggregate	175	Diesel	0.000726881	0.000879526	0.001046708	0.007151288	0.0070966	1.200299538	0.000334459	0.000307702	1.10E-05	9.82E-06	39041.86777	12952.40973	15.69496756	1678199.174
Sacramento	2026	Agricultural - Other Harvesters	Aggregate	300	Diesel	0.000193981	0.000234717	0.000279333	0.001081944	0.001919751	0.411063368	8.72E-05	8.02E-05	3.75E-06	3.36E-06	13370.56387	2585.26268	2.456159925	574728.3776
Sacramento	2026	Agricultural - Other Harvesters	Aggregate	600	Diesel	0.000205981	0.000249237	0.000296613	0.001578748	0.002174988	0.479384692	8.77E-05	8.07E-05	4.38E-06	3.92E-06	15592.83591	2300.834063	1.929866424	670251.8551
Sacramento	2026	Agricultural - Other Harvesters	Aggregate	75	Diesel	9.91E-05	0.000119895	0.000142686	0.000754025	0.000911389	0.122323218	4.46E-05	4.10E-05	1.12E-06	1.00E-06	3978.779259	3410.490809	2.560859298	153839.7932
Sacramento	2026	Agricultural - Other Harvesters	Aggregate	750	Diesel	1.77E-05	2.14E-05	2.54E-05	0.000134755	0.00019286	0.040918093	7.93E-06	7.29E-06	3.74E-07	3.35E-07	1330.933411	1505.193179	0.108725449	57209.64383
Sacramento	2026	Agricultural - Sprayers/Spray Rigs	Aggregate	100	Diesel	9.51E-05	0.000115119	0.000137001	0.000764548	0.000750018	0.121635556	5.63E-05	5.18E-05	1.11E-06	9.95E-07	3956.411821	1628.280497	2.178563216	161618.1332
Sacramento	2026	Agricultural - Sprayers/Spray Rigs	Aggregate	175	Diesel	0.000394339	0.00047715	0.000567848	0.003878338	0.003844895	0.651101495	0.000181184	0.000166689	5.94E-06	5.33E-06	21178.22898	11247.92584	8.188118969	961772.4003
Sacramento	2026	Agricultural - Sprayers/Spray Rigs	Aggregate	25	Diesel	3.36E-06	4.06E-06	4.83E-06	1.63E-05	1.38E-05	0.001895776	6.92E-07	6.36E-07	1.72E-08	1.55E-08	61.66348596	995.3980017	0.183035874	2518.933311
Sacramento	2026	Agricultural - Sprayers/Spray Rigs	Aggregate	300	Diesel	0.000466851	0.00056489	0.000672266	0.002388593	0.004566228	0.796744783	0.00022204	0.000204277	7.27E-06	6.52E-06	25915.53482	9038.014874	5.685439838	1176908.885
Sacramento	2026	Agricultural - Sprayers/Spray Rigs	Aggregate	50	Diesel	0.000156305	0.000189129	0.000225079	0.000764667	0.00060105	0.088992402	3.67E-05	3.38E-05	8.09E-07	7.28E-07	2894.635445	6388.714605	3.80561547	118244.9144
Sacramento	2026	Agricultural - Sprayers/Spray Rigs	Aggregate	600	Diesel	0.00058877	0.000712411	0.000847829	0.004877161	0.005824474	1.079724706	0.000268071	0.000246626	9.86E-06	8.84E-06	35119.95787	3829.536926	5.102173776	1594911.731
Sacramento	2026	Agricultural - Sprayers/Spray Rigs	Aggregate	75	Diesel	0.001592397	0.0019268	0.002293052	0.011028221	0.014048028	1.677241439	0.00083715	0.000770178	1.53E-05	1.37E-05	54555.24759	5964.180686	48.92382563	2228564.067
Sacramento	2026	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	100	Diesel	0.000225737	0.000273142	0.000325061	0.001910209	0.001740293	0.308037518	0.000129269	0.000118927	2.81E-06	2.52E-06	10019.46568	3270.305206	4.439835944	358130.4186
Sacramento	2026	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	175	Diesel	5.58E-05	6.76E-05	8.04E-05	0.000542898	0.000546656	0.090548543	2.60E-05	2.39E-05	8.27E-07	7.41E-07	2945.251697	2634.093649	0.974549535	117034.2932
Sacramento	2026	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	300	Diesel	0.000105625	0.000127806	0.0001521	0.00058862	0.001038369	0.223023728	4.74E-05	4.36E-05	2.04E-06	1.82E-06	7254.241658	2698.81581	1.449690648	288258.9113
Sacramento	2026	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	50	Diesel	0.000130582	0.000158004	0.000188038	0.000633151	0.000496386	0.073757559	3.03E-05	2.79E-05	6.71E-07	6.04E-07	2399.095202	655.8268889	2.227248603	85751.97481
Sacramento	2026	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	75	Diesel	8.44E-05	0.000102178	0.0001216	0.000644926	0.000777639	0.104447047	3.81E-05	3.50E-05	9.53E-07	8.55E-07	3397.325142	1966.841059	2.355327479	121432.1707
Sacramento	2026	Airport Ground Support - A/C Tug Narrow Body	Aggregate	100	Diesel	2.72E-05	3.29E-05	3.91E-05	0.000490746	0.000271279	0.085390332	2.09E-05	1.93E-05	8.09E-07	0	2774.773722	1053.65743	2.083849918	48167.10624
Sacramento	2026	Airport Ground Support - A/C Tug Narrow Body	Aggregate	175	Diesel	7.40E-05	8.95E-05	0.000106494	0.001498748	0.00054	0.260249909	2.75E-05	2.53E-05	2.47E-06	0	8456.866195	2588.968526	3.517752902	177766.0209
Sacramento	2026	Airport Ground Support - A/C Tug Narrow Body	Aggregate	300	Diesel	2.42E-05	2.93E-05	3.49E-05	0.000237278	0.000122393	0.108904817	5.42E-06	4.98E-06	1.03E-06	0	3538.88104	636.3252866	1.058887393	77107.17777
Sacramento	2026	Airport Ground Support - A/C Tug Narrow Body	Aggregate	50	Diesel	1.27E-05	1.53E-05	1.82E-05	0.000141251	0.000108362	0.022117595	3.93E-06	3.61E-06	2.10E-07	0	718.715102	551.5683743	1.306489733	9795.738219
Sacramento	2026	Airport Ground Support - A/C Tug Narrow Body	Aggregate	600	Diesel	2.46E-05	2.98E-05	3.54E-05	0.000208446	0.0001245	0.101976566	6.04E-06	5.56E-06	9.66E-07	0	3313.746289	368.5128767	0.559680677	69443.93367
Sacramento	2026	Airport Ground Support - A/C Tug Narrow Body	Aggregate	75	Diesel	7.60E-05	9.19E-05	0.000109388	0.001179388	0.001024307	0.197293425	1.42E-05	1.31E-05	1.87E-06	0	6411.08426	3073.63542	5.991055269	114253.5014
Sacramento	2026	Airport Ground Support - A/C Tug Wide Body	Aggregate	100	Diesel	2.93E-06	3.55E-06	4.22E-06	4.36E-05	3.39E-05	0.007253588	2.93E-06	2.69E-06	6.87E-08	0	235.7066019	96.4619836	0.217287	4203.007238
Sacramento	2026	Airport Ground Support - A/C Tug Wide Body	Aggregate	175	Diesel	3.94E-05	4.76E-05	5.67E-05	0.000836255	0.00028299	0.13918083	1.24E-05	1.15E-05	1.32E-06	0	4522.705365	1166.77831	1.491193618	91257.96086
Sacramento	2026	Airport Ground Support - A/C Tug Wide Body	Aggregate	300	Diesel	8.80E-05	0.000106512	0.000126758	0.000709897	0.000567114	0.330512303	2.54E-05	2.34E-05	3.13E-06	0	10740.05496	1694.561265	2.797926384	222161.1057
Sacramento	2026	Airport Ground Support - A/C Tug Wide Body	Aggregate	50	Diesel	1.06E-06	1.29E-06	1.53E-06	1.23E-05	1.16E-05	0.001654101	5.03E-07	4.63E-07	1.57E-08	0	53.75028526	53.83801523	0.155205	958.4493443
Sacramento	2026	Airport Ground Support - A/C Tug Wide Body	Aggregate	600	Diesel	8.76E-05	0.000105944	0.000126082	0.000673927	0.000562398	0.305544481	2.75E-05	2.53E-05	2.89E-06	0	9928.721212	974.4714612	1.490276271	198510.9738
Sacramento	2026	Airport Ground Support - A/C Tug Wide Body	Aggregate	75	Diesel	3.22E-06	3.90E-06	4.64E-06	4.73E-05	4.21E-05	0.007921649	7.70E-07	7.08E-07	7.50E-08	0	257.4153818	125.9004775	0.248328	4590.107805
Sacramento	2026	Airport Ground Support - A/C Tug Wide Body	Aggregate	750	Diesel	2.82E-06	3.41E-06	4.06E-06	2.20E-05	1.57E-05	0.010766911	1.01E-06	9.31E-07	1.02E-07	0	349.8726458	18.42747969	0.031041	6935.734806
Sacramento	2026	Airport Ground Support - AirCraft Tractor	Aggregate	75	Diesel	1.70E-06	2.05E-06	2.44E-06	2.70E-05	2.30E-05	0.004500641	4.15E-07	3.82E-07	4.26E-08	0	146.2491181	113.3535532	0.217287	2607.844231
Sacramento	2026	Airport Ground Support - Baggage Tug	Aggregate	100	Diesel	4.87E-05	5.90E-05	7.02E-05	0.001151298	0.000427489	0.214960139	3.03E-05	2.79E-05	2.04E-06	0	6985.16723	3266.596455	6.697944626	110643.9995
Sacramento	2026	Airport Ground Support - Baggage Tug	Aggregate	300	Diesel	4.04E-06	4.88E-06	5.81E-06	2.68E-05	4.74E-05	0.011892266	1.81E-06	1.66E-06	1.13E-07	0	386.4412569	111.1570668	0.186246	7660.656267
Sacramento	2026	Airport Ground Support - Baggage Tug	Aggregate	50	Diesel	3.22E-05	3.90E-05	4.64E-05	0.000426563	0.000361169	0.066088115	1.10E-05	1.01E-05	6.26E-07	0	2147.544813	2110.774222	5.002792124	32331.9201
Sacramento	2026	Airport Ground Support - Baggage Tug	Aggregate	75	Diesel	5.21E-05	6.31E-05	7.51E-05	0.000812039	0.000721357	0.144500271	1.56E-05	1.44E-05	1.37E-06	0	4695.561506	3262.225953	6.558963888	76077.57204
Sacramento	2026	Airport Ground Support - Belt Loader	Aggregate	100	Diesel	1.67E-05	2.03E-05	2.41E-05	0.000482369	0.00015523	0.092148724	1.05E-05	9.65E-06	8.73E-07	0	2994.388879	1534.072237	3.147615369	44817.79677
Sacramento	2026	Airport Ground Support - Belt Loader	Aggregate	175	Diesel	1.74E-06	2.10E-06	2.50E-06	2.75E-05	1.58E-05	0.004878908	7.21E-07	6.63E-07	4.62E-08	0	158.5409572	79.48243327	0.12431475	3169.72928
Sacramento	2026	Airport Ground Support - Belt Loader	Aggregate	300	Diesel	4.55E-07	5.50E-07	6.55E-07	4.36E-06	5.38E-07	0.002148046	4.62E-08	4.25E-08	2.03E-08	0	69.80114082	20.34867324	0.031041	1383.709781
Sacramento	2026	Airport Ground Support - Belt Loader	Aggregate	50	Diesel	3.53E-05	4.27E-05	5.09E-05	0.000473183	0.000393214	0.071334385	1.06E-05	9.75E-06	6.76E-07	0	2318.023302	2796.914215	6.643873169	39961.28162
Sacramento	2026	Airport Ground Support - Belt Loader	Aggregate	75	Diesel	3.06E-05	3.70E-05	4.40E-05	0.000472625	0.000419179	0.085959347	1.00E-05	9.21E-06	8.14E-07	0	2793.26397	2097.610974	4.260380208	42892.80577
Sacramento	2026	Airport Ground Support - Belt Loader	Aggregate	750	Diesel	2.65E-06	3.21E-06	3.82E-06	3.89E-05	3.77E-05	0.001741215	1.93E-06	1.78E-06	1.65E-08	0	56.58109575	5.278310197	0.031041	1121.640917
Sacramento	2026	Airport Ground Support - Bobtail	Aggregate	100	Diesel	4.88E-07	5.90E-07	7.03E-07	5.36E-06	3.22E-06	0.000897206	1.99E-07	1.83E-07	8.50E-09	0	29.15486301	17.56336332	0.031041	519.8755541
Sacramento	2026	Airport Ground Support - Bobtail	Aggregate	175	Diesel	1.73E-06	2.10E-06	2.49E-06	1.85E-05	1.94E-05	0.003214376	1.05E-06	9.64E-07	3.04E-08	0	104.4516994	41.14026987	0.093123	2070.608537
Sacramento	2026	Airport Ground Support - Bobtail	Aggregate	50	Diesel	7.66E-08	9.26E-08	1.10E-07	1.19E-06	1.25E-06	0.000161782	4.79E-08	4.41E-08	1.53E-09	0	5.257139237	5.278310197	0.031041	93.74278909
Sacramento	2026	Airport Ground Support - Bobtail	Aggregate	600	Diesel	1.74E-05	2.10E-05	2.50E-05	0.00014161	0.000118418	0.059533735	5.84E-06	5.37E-06	5.64E-07	0	1934.559106	261.6136748	0.434574	38349.92272
Sacramento	2026	Airport Ground Support - Bobtail	Aggregate	75	Diesel	1.30E-06	1.57E-06	1.87E-06	1.30E-05	1.40E-05	0.002121131	4.12E-07	3.79E-07	2.01E-08	0	68.92651972	55.59491977	0.124164	1229.064689
Sacramento	2026	Airport Ground Support - Cargo Loader	Aggregate	100	Diesel	1.41E-05	1.71E-05	2.03E-05	0.000334981	0.000141102	0.061163648	1.00E-05	9.24E-06	5.79E-07	0	1987.523405	1064.57806	2.210038726	31013.4153
Sacramento	2026	Airport Ground Support - Cargo Loader	Aggregate	175	Diesel	0.000107975	0.00013065	0.000155484	0.002419957	0.00068079	0.416979518	3.21E-05	2.96E-05	3.95E-06	0	13549.82219	6308.270857	7.932212391	271755.9461
Sacramento	2026	Airport Ground Support - Cargo Loader	Aggregate	300	Diesel	1.25E-05	1.51E-05	1.80E-05	9.23E-05	0.000113083	0.034179361	5.62E-06	5.17E-06	3.24E-07	0	1110.664284	345.1050312	0.590622599	22849.36943
Sacramento	2026	Airport Ground Support - Cargo Loader	Aggregate	50	Diesel	3.34E-06	4.04E-06	4.81E-06	1.74E-05	1.42E-05	0.001703815	1.18E-06	1.09E-06	1.61E-08	0	55.36575887	96.25664359	0.217287	987.255696
Sacramento	2026	Airport Ground Support - Cargo Loader	Aggregate	600	Diesel	1.76E-05	2.12E-05	2.53E-05	0.000130492	0.000112763	0.06525406	4.62E-06	4.25E-06	6.18E-07	0	2120.442049	355.0564692	0.4968228	42438.71938
Sacramento	2026	Airport Ground Support - Cargo Loader	Aggregate	75	Diesel	2.53E-05	3.06E-05	3.64E-05	0.000395173	0.000335065	0.067097757	3.81E-06	3.50E-06	6.36E-07	0	2180.353311	1527.402254	2.981890043	37278.49388
Sacramento	2026	Airport Ground Support - Cargo Tractor	Aggregate	100	Diesel	1.16E-05	1.40E-05	1.67E-05	0.000331377	0.000124533	0.060260344	9.48E-06	8.72E-06	5.71E-07	0	1958.1704	1024.951559	2.054187682	31454.48269
Sacramento	2026	Airport Ground Support - Cargo Tractor	Aggregate	175	Diesel	5.64E-06	6.82E-06	8.12E-06	0.000103263	5.03E-05	0.017876926	2.42E-06	2.22E-06	1.69E-07	0	580.9138378	228.4145324	0.310551471	11583.52393
Sacramento	2026	Airport Ground Support - Cargo Tractor	Aggregate	300	Diesel	1.29E-05	1.56E-05	1.85E-05	7.88E-05	0.000121643	0.032982516	5.82E-06	5.36E-06	3.12E-07	0	1071.772609	276.9543864	0.496656	21246.38974
Sacramento	2026	Airport Ground Support - Cargo Tractor	Aggregate	50	Diesel	2.46E-05	2.98E-05	3.55E-05	0.000382428	0.000324504	0.059636301	6.67E-06	6.14E-06	5.65E-07	0	1937.892016	2406.027589	5.990913	34555.56231
Sacramento	2026	Airport Ground Support - Cargo Tractor	Aggregate	600	Diesel	2.78E-06	3.37E-06	4.01E-06	1.80E-05	3.44E-05	0.009522235	9.97E-07	9.17E-07	9.02E-08	0	309.426687	39.14080173	0.062082	6133.950365
Sacramento	2026	Airport Ground Support - Cargo Tractor	Aggregate	75	Diesel	4.02E-05	4.86E-05	5.79E-05	0.000716165	0.000576735	0.132513756	1.18E-05	1.09E-05	1.26E-06	0	4306.057609	3129.060397	6.254368041	62723.36757
Sacramento	2026	Airport Ground Support - Forklift	Aggregate	100	Diesel	2.33E-05	2.82E-05	3.35E-05	0.000364045	0.000250385	0.061058334	1.70E-05	1.57E-05	5.78E-07	0	1984.101216	1993.833496	3.446321521	34078.08923
Sacramento	2026	Airport Ground Support - Forklift	Aggregate	175	Diesel	5.10E-05	6.17E-05	7.34E-05	0.000859662	0.000423729	0.146698694	1.66E-05	1.53E-05	1.39E-06	0	4766.999658	3779.838229	5.495021734	93726.45294
Sacramento	2026	Airport Ground Support - Forklift	Aggregate	300	Diesel	9.46E-06	1.15E-05	1.36E-05	6.81E-05	9.04E-05	0.020769077	5.02E-06	4.62E-06	1.97E-07	0	674.89479	294.4421138	0.528816216	13087.15478
Sacramento	2026	Airport Ground Support - Forklift	Aggregate	50	Diesel	4.32E-06	5.23E-06	6.22E-06	4.47E-05	3.35E-05	0.007188805	1.32E-06	1.21E-06	6.81E-08	0	233.6014834	360.6870016	0.777185292	2681.412738
Sacramento	2026	Airport Ground Support - Forklift	Aggregate	600	Diesel	4.31E-06	5.22E-06	6.21E-06	4.61E-05	4.19E-05	0.011537893	1.98E-06	1.82E-06	1.09E-07	0	374.9258513	111.7817087	0.217485367	7561.468883
Sacramento	2026	Airport Ground Support - Forklift	Aggregate	75	Diesel	1.53E-05	1.85E-05	2.20E-05	0.000218259	0.000196945	0.036709656	4.27E-06	3.93E-06	3.48E-07	0	1192.886667	1552.81326	3.104681999	20476.09952
Sacramento	2026	Airport Ground Support - Forklift	Aggregate	750	Diesel	8.22E-07	9.94E-07	1.18E-06	6.67E-06	5.88E-06	0.003577752	3.63E-07	3.34E-07	3.39E-08	0	116.2596855	17.72834854	0.031041	2304.68531
Sacramento	2026	Airport Ground Support - Fuel Truck	Aggregate	300	Diesel	3.16E-06	3.83E-06	4.55E-06	1.79E-05	3.13E-05	0.008610829	1.17E-06	1.08E-06	8.16E-08	0	279.8103806	62.55844287	0.093123	5546.848601
Sacramento	2026	Airport Ground Support - Fuel Truck	Aggregate	600	Diesel	8.69E-07	1.05E-06	1.25E-06	5.16E-06	6.31E-06	0.002779825	2.58E-07	2.37E-07	2.63E-08	0	90.3308903	15.70774815	0.031041	1790.683289
Sacramento	2026	Airport Ground Support - Generator	Aggregate	100	Diesel	8.91E-08	1.08E-07	1.28E-07	1.50E-06	1.18E-06	0.000259617	5.39E-08	4.96E-08	2.46E-09	0	8.436287627	5.278310197	0.031041	150.4318406
Sacramento	2026	Airport Ground Support - Generator	Aggregate	175	Diesel	7.41E-07	8.96E-07	1.07E-06	1.09E-05	8.42E-06	0.001872295	4.03E-07	3.71E-07	1.77E-08	0	60.84054269	21.15927162	0.031041	1206.078482
Sacramento	2026	Airport Ground Support - Lift	Aggregate	100	Diesel	1.35E-05	1.63E-05	1.94E-05	0.000304605	0.000131293	0.057706973	8.53E-06	7.85E-06	5.47E-07	0	1875.198165	934.7131103	2.057536584	26755.46227
Sacramento	2026	Airport Ground Support - Lift	Aggregate	175	Diesel	1.61E-05	1.94E-05	2.31E-05	0.000310784	0.000122529	0.052791287	5.18E-06	4.77E-06	5.00E-07	0	1715.462088	876.8541953	1.242545832	33922.28034
Sacramento	2026	Airport Ground Support - Lift	Aggregate	300	Diesel	3.74E-06	4.53E-06	5.39E-06	2.64E-05	3.57E-05	0.013526243	1.33E-06	1.22E-06	1.28E-07	0	439.537627	116.4868634	0.186246	8713.217381
Sacramento	2026	Airport Ground Support - Lift	Aggregate	50	Diesel	1.43E-05	1.73E-05	2.06E-05	0.00021854	0.000186702	0.034812531	4.89E-06	4.50E-06	3.30E-07	0	1131.239254	1128.293952	2.857687851	17941.46354
Sacramento	2026	Airport Ground Support - Lift	Aggregate	75	Diesel	1.66E-05	2.01E-05	2.39E-05	0.000251478	0.000224284	0.044063422	5.47E-06	5.03E-06	4.17E-07	0	1431.848582	1110.974073	2.298625779	24195.06452
Sacramento	2026	Airport Ground Support - Misc - A/C Tug Narrow Body	Aggregate	175	Gasoline	0.000343365	0.000315827	0.000377853	0.022678083	0.002230172	0.579069393	4.15E-05	3.14E-05	5.75E-06	8.16E-06	23301.6	2452.8	3.35	318864
Sacramento	2026	Airport Ground Support - Misc - A/C Tug Wide Body	Aggregate	600	Gasoline	0.000167273	0.000153858	0.000184074	0.017699634	0.001593417	0.505202326	3.73E-05	2.82E-05	5.16E-06	7.07E-06	20184.5	569.4	1.09	284700
Sacramento	2026	Airport Ground Support - Misc - Air Conditioner	Aggregate	175	Gasoline	1.35E-07	1.24E-07	1.49E-07	1.63E-05	1.64E-06	0.000518731	3.72E-08	2.81E-08	5.15E-09	1.28E-09	3.65	0	0.1	0
Sacramento	2026	Airport Ground Support - Misc - Air Conditioner	Aggregate	175	Nat Gas	0	0	6.41E-08	6.88E-05	7.22E-06	0.002787655	0	0	0	0	142.35	0	0.65	0
Sacramento	2026	Airport Ground Support - Misc - Air Start Unit	Aggregate	175	Gasoline	1.40E-05	1.29E-05	1.55E-05	0.001571359	0.000157571	0.049068157	3.52E-06	2.66E-06	4.87E-07	6.82E-07	1945.45	182.5	2.43	23725
Sacramento	2026	Airport Ground Support - Misc - Baggage Tug	Aggregate	100	Gasoline	0.002831055	0.002604005	0.003115404	0.211280692	0.016805817	5.112361169	0.000356446	0.000269315	4.94E-05	7.23E-05	206363.7	39741.2	45.29	3974120
Sacramento	2026	Airport Ground Support - Misc - Baggage Tug	Aggregate	100	Nat Gas	0	0	8.68E-05	0.036879736	0.00395305	0.839756927	0	0	0	0	46650.65	7489.8	9.01	748980
Sacramento	2026	Airport Ground Support - Misc - Belt Loader	Aggregate	100	Gasoline	0.000687135	0.000632027	0.00075615	0.052001634	0.00404807	1.219081574	8.50E-05	6.42E-05	1.18E-05	1.73E-05	49307.85	17374	21.39	1042440
Sacramento	2026	Airport Ground Support - Misc - Belt Loader	Aggregate	100	Nat Gas	0	0	6.24E-06	0.003156325	0.000323067	0.08095585	0	0	0	0	4460.3	1317.65	2.41	79059
Sacramento	2026	Airport Ground Support - Misc - Bobtail	Aggregate	100	Gasoline	0.000455003	0.000418511	0.000500703	0.033956655	0.002701004	0.821650948	5.73E-05	4.33E-05	7.94E-06	1.16E-05	33171.2	6391.15	7.27	639115
Sacramento	2026	Airport Ground Support - Misc - Bobtail	Aggregate	100	Nat Gas	0	0	1.08E-06	0.000730735	6.65E-05	0.02025659	0	0	0	0	1109.6	178.85	0.21	17885
Sacramento	2026	Airport Ground Support - Misc - Cargo Loader	Aggregate	100	Gasoline	0.000188963	0.000173808	0.000207942	0.014270438	0.001114752	0.336336037	2.35E-05	1.77E-05	3.25E-06	4.76E-06	13599.9	4098.95	5.72	286926.5
Sacramento	2026	Airport Ground Support - Misc - Cargo Loader	Aggregate	100	Nat Gas	0	0	8.74E-06	0.003391083	0.000373263	0.071388475	0	0	0	0	3993.1	1000.1	0.97	70007
Sacramento	2026	Airport Ground Support - Misc - Cargo Tractor	Aggregate	100	Gasoline	0.005062975	0.004656924	0.005571495	0.487136903	0.025158273	5.714481744	0.000398427	0.000301034	4.72E-05	8.61E-05	245896.85	47628.85	35.24	4524740.75
Sacramento	2026	Airport Ground Support - Misc - Cargo Tractor	Aggregate	175	Nat Gas	0	0	3.01E-06	0.002669679	0.000276327	0.101954282	0	0	0	0	5507.85	591.3	3.83	92006.28
Sacramento	2026	Airport Ground Support - Misc - Cart	Aggregate	15	Gasoline	2.41E-05	2.44E-05	0.000026568	0.00136446	1.48E-05	5.25E-07	5.28E-08	3.99E-08	2.12E-08	2.92E-08	83.13353898	0	1.93303492	0
Sacramento	2026	Airport Ground Support - Misc - Catering Truck	Aggregate	300	Gasoline	0.00069252	0.00063698	0.000762076	0.040179993	0.003921249	0.920166866	6.79E-05	5.13E-05	8.04E-06	1.31E-05	37295.7	3931.05	3.87	801541.095
Sacramento	2026	Airport Ground Support - Misc - Catering Truck	Aggregate	300	Nat Gas	0	0	3.09E-06	0.002082872	0.000209658	0.07046864	0	0	0	0	3817.9	328.5	0.71	67342.5
Sacramento	2026	Airport Ground Support - Misc - Deicer	Aggregate	100	Gasoline	5.12E-06	4.71E-06	5.64E-06	0.000196017	3.59E-05	0.01258425	8.77E-07	6.63E-07	1.22E-07	1.69E-07	481.8	62.05	2.76	5770.65
Sacramento	2026	Airport Ground Support - Misc - Forklift	Aggregate	50	Gasoline	0.000198444	0.000182529	0.000218376	0.018588704	0.000444835	0.139150379	9.59E-06	7.25E-06	1.69E-06	2.24E-06	6398.45	3923.75	5.39	196187.5
Sacramento	2026	Airport Ground Support - Misc - Forklift	Aggregate	50	Nat Gas	0	0	1.30E-05	0.003482075	0.000941191	0.280451048	2.49E-05	0	0	0	14829.95	9183.4	12.61	459170
Sacramento	2026	Airport Ground Support - Misc - Fuel Truck	Aggregate	175	Gasoline	1.41E-06	1.30E-06	1.56E-06	0.00017074	1.72E-05	0.00543041	3.89E-07	2.94E-07	5.39E-08	7.29E-08	208.05	62.05	3.35	8066.5
Sacramento	2026	Airport Ground Support - Misc - Fuel Truck	Aggregate	175	Nat Gas	0	0	8.41E-07	0.00052618	5.25E-05	0.017060823	0	0	0	0	919.8	244.55	0.39	34237
Sacramento	2026	Airport Ground Support - Misc - Generator	Aggregate	100	Gasoline	5.11E-05	4.70E-05	5.63E-05	0.003788493	0.000220392	0.047980995	3.35E-06	2.53E-06	3.96E-07	7.15E-07	2040.35	244.55	0.26	26166.85
Sacramento	2026	Airport Ground Support - Misc - Ground Power Unit	Aggregate	175	Gasoline	0.00029154	0.000268158	0.000320822	0.029854759	0.002678124	0.865899823	6.21E-05	4.69E-05	8.60E-06	1.21E-05	34572.8	3390.85	4.23	508627.5
Sacramento	2026	Airport Ground Support - Misc - Hydrant Truck	Aggregate	175	Gasoline	0.000938004	0.000862777	0.001032217	0.046349583	0.004463503	0.957478578	6.86E-05	5.19E-05	8.13E-06	1.37E-05	39113.4	4938.45	3.21	600021.675
Sacramento	2026	Airport Ground Support - Misc - Lav Cart	Aggregate	15	Gasoline	2.08E-06	2.10E-06	2.29E-06	0.000117676	1.28E-06	4.53E-08	4.56E-09	3.44E-09	1.83E-09	2.52E-09	7.169487298	0	0.16671191	0
Sacramento	2026	Airport Ground Support - Misc - Lav Truck	Aggregate	175	Gasoline	0.000245806	0.000226092	0.000270495	0.018462474	0.001601723	0.465778995	3.34E-05	2.52E-05	4.63E-06	6.57E-06	18750.05	6299.9	5.17	818987
Sacramento	2026	Airport Ground Support - Misc - Lav Truck	Aggregate	175	Nat Gas	0	0	3.96E-07	0.000280337	2.84E-05	0.00972938	0	0	0	0	514.65	138.7	0.36	18031
Sacramento	2026	Airport Ground Support - Misc - Lift	Aggregate	100	Gasoline	0.000279896	0.000257448	0.000308008	0.017097939	0.001480496	0.416828606	2.91E-05	2.20E-05	4.03E-06	5.89E-06	16815.55	3566.05	9.51	356605
Sacramento	2026	Airport Ground Support - Misc - Lift	Aggregate	100	Nat Gas	0	0	7.05E-07	0.000435075	4.26E-05	0.012337769	0	0	0	0	667.95	105.85	0.31	10585
Sacramento	2026	Airport Ground Support - Misc - Maint. Truck	Aggregate	175	Gasoline	0.000171951	0.000158161	0.000189222	0.015635845	0.001426984	0.44198846	3.17E-05	2.39E-05	4.39E-06	6.19E-06	17680.6	2982.05	6.64	387666.5
Sacramento	2026	Airport Ground Support - Misc - Other	Aggregate	50	Gasoline	0.000139503	0.000128315	0.000153514	0.010713166	0.000300168	0.106401717	7.34E-06	5.54E-06	1.29E-06	1.64E-06	4679.3	1806.75	9.82	90337.5
Sacramento	2026	Airport Ground Support - Misc - Other	Aggregate	50	Nat Gas	0	0	1.16E-05	0.001615449	0.000468878	0.09621095	0	0	0	0	5139.2	1890.7	1.84	94535
Sacramento	2026	Airport Ground Support - Misc - Passenger Stand	Aggregate	175	Gasoline	4.83E-05	4.45E-05	5.32E-05	0.004744576	0.000474193	0.142719968	1.02E-05	7.73E-06	1.26E-06	2.00E-06	5697.65	850.45	4.52	106391.295
Sacramento	2026	Airport Ground Support - Misc - Passenger Stand	Aggregate	175	Nat Gas	0	0	8.78E-09	9.57E-06	1.01E-06	0.000390014	0	0	0	0	3.65	0	0.17	0
Sacramento	2026	Airport Ground Support - Misc - Service Truck	Aggregate	300	Gasoline	0.000854215	0.000785707	0.000940012	0.053390164	0.005232234	1.282278053	9.46E-05	7.15E-05	1.31E-05	1.81E-05	51808.1	16107.45	19.14	2899341
Sacramento	2026	Airport Ground Support - Misc - Service Truck	Aggregate	300	Nat Gas	0	0	1.07E-05	0.006286108	0.000536683	0.179032567	0	0	0	0	9803.9	2438.2	1.88	438876
Sacramento	2026	Airport Ground Support - Misc - Sweeper	Aggregate	100	Gasoline	6.64E-06	6.11E-06	7.31E-06	0.000401848	3.54E-05	0.010048801	7.01E-07	5.29E-07	8.30E-08	1.39E-07	397.85	153.3	0.42	8170.89
Sacramento	2026	Airport Ground Support - Misc - Sweeper	Aggregate	50	Nat Gas	0	0	9.13E-08	2.55E-05	7.20E-06	0.002130054	0	0	0	0	105.85	51.1	0.15	2299.5
Sacramento	2026	Airport Ground Support - Misc - Water Truck	Aggregate	175	Gasoline	1.41E-05	1.30E-05	1.56E-05	0.001232581	0.00012272	0.035646482	2.56E-06	1.93E-06	3.54E-07	4.99E-07	1423.5	511	1.65	76650
Sacramento	2026	Airport Ground Support - Other	Aggregate	100	Diesel	7.27E-06	8.80E-06	1.05E-05	0.000106945	7.45E-05	0.017983637	5.41E-06	4.98E-06	1.70E-07	0	584.3814298	349.5032892	0.713943	10420.40978
Sacramento	2026	Airport Ground Support - Other	Aggregate	175	Diesel	2.20E-05	2.67E-05	3.17E-05	0.000427302	0.000167725	0.072867378	7.10E-06	6.54E-06	6.90E-07	0	2367.838158	1076.208405	1.522296742	47238.82005
Sacramento	2026	Airport Ground Support - Other	Aggregate	300	Diesel	4.21E-05	5.09E-05	6.06E-05	0.000307156	0.000342387	0.132025686	1.55E-05	1.42E-05	1.25E-06	0	4290.19771	1108.523988	1.833234465	86674.78299
Sacramento	2026	Airport Ground Support - Other	Aggregate	50	Diesel	2.82E-05	3.42E-05	4.06E-05	0.000247545	0.000215791	0.031510743	9.67E-06	8.89E-06	2.98E-07	0	1023.947103	1590.520682	3.600905591	18075.38997
Sacramento	2026	Airport Ground Support - Other	Aggregate	600	Diesel	2.98E-05	3.61E-05	4.29E-05	0.000220963	0.000183132	0.113538241	8.29E-06	7.63E-06	1.08E-06	0	3689.444942	622.5981206	0.93123	73138.0747
Sacramento	2026	Airport Ground Support - Other	Aggregate	75	Diesel	2.48E-05	3.00E-05	3.57E-05	0.000295202	0.000293788	0.050498611	1.05E-05	9.67E-06	4.78E-07	0	1640.96116	1290.786618	2.795553823	27411.72489
Sacramento	2026	Airport Ground Support - Other	Aggregate	750	Diesel	3.15E-06	3.81E-06	4.54E-06	2.19E-05	2.83E-05	0.011620094	1.14E-06	1.05E-06	1.10E-07	0	377.5969902	34.94552323	0.062082	7485.331076
Sacramento	2026	Airport Ground Support - Other	Aggregate	9999	Diesel	1.65E-05	2.00E-05	2.38E-05	0.00015421	0.000344705	0.078437557	7.78E-06	7.16E-06	7.43E-07	0	2548.842088	54.36932049	0.093123	50527.22184
Sacramento	2026	Airport Ground Support - Passenger Stand	Aggregate	175	Diesel	8.24E-07	9.97E-07	1.19E-06	1.47E-05	6.27E-06	0.002324816	3.10E-07	2.85E-07	2.20E-08	0	75.54529209	32.69824297	0.062082	1497.579528
Sacramento	2026	Airport Ground Support - Passenger Stand	Aggregate	300	Diesel	4.76E-07	5.76E-07	6.86E-07	6.31E-06	1.26E-06	0.00286969	6.98E-08	6.43E-08	2.72E-08	0	93.25108333	19.39325232	0.031182471	2133.257756
Sacramento	2026	Airport Ground Support - Passenger Stand	Aggregate	50	Diesel	3.53E-06	4.27E-06	5.08E-06	4.04E-05	3.21E-05	0.006399885	1.05E-06	9.68E-07	6.06E-08	0	207.9653821	187.2265131	0.46635435	2905.77587
Sacramento	2026	Airport Ground Support - Passenger Stand	Aggregate	75	Diesel	6.10E-06	7.38E-06	8.78E-06	7.68E-05	7.01E-05	0.013943753	1.73E-06	1.59E-06	1.32E-07	0	453.1047015	323.6937348	0.622098025	6992.276733
Sacramento	2026	Cargo Handling Equipment - Port Forklift	Aggregate	175	Diesel	0.0001752	0.000212	0.0002524	0.00173076	0.00148848	0.256284383	0.0001187	0.0001091	2.43E-06	5.76E-09	8336.103344	3628.964676	0	0
Sacramento	2026	Cargo Handling Equipment - Port Tractors/Loaders/Backhoes	Aggregate	300	Diesel	0.0001722	0.000208242	0.000247826	0.001216838	0.0001334	0.528954816	0.00001216	0.0000112	0.00000502	1.19E-08	17205.19197	2124.856496	0	0
Sacramento	2026	Commercial Harbor Craft - AE - Commercial Fishing	Aggregate	75	Diesel	0.000145191	0.000175681	0.000209075	0.000482613	0.001283114	0.085292859	5.72E-05	5.47E-05	0	0	2905.276687	1880.540818	1.583453988	49420.61304
Sacramento	2026	Commercial Harbor Craft - AE - Excursion	Aggregate	75	Diesel	8.54E-06	1.03E-05	1.23E-05	4.82E-05	0.000212346	0.034862017	5.19E-06	4.96E-06	0	0	1187.482813	963.4008189	5.102426052	20965.52788
Sacramento	2026	Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	100	Diesel	7.35E-06	8.89E-06	1.06E-05	2.56E-05	0.000143353	0.0125824	6.94E-06	6.64E-06	0	0	428.586323	235.4687796	1.541667	7579.740389
Sacramento	2026	Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	175	Diesel	6.95E-06	8.41E-06	1.00E-05	2.85E-05	0.000144411	0.014495273	4.99E-06	4.77E-06	0	0	492.6273393	235.4687797	1.541667001	8712.344959
Sacramento	2026	Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	50	Diesel	0.000148623	0.000179834	0.000214017	0.000517767	0.002485555	0.215843109	0.00013338	0.000127511	0	0	7295.312267	8882.677052	7.708333039	113826.989
Sacramento	2026	Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	300	Diesel	0.000230506	0.000278912	0.000331929	0.000917781	0.002617925	0.169754837	8.72E-05	8.33E-05	0	0	5782.251586	1578.696567	1.58345398	106562.0231
Sacramento	2026	Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	50	Diesel	7.41E-06	8.97E-06	1.07E-05	7.08E-05	0.000142287	0.020404793	6.10E-06	5.83E-06	0	0	695.0355483	1578.696655	1.583454013	11508.69924
Sacramento	2026	Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	600	Diesel	0.000107164	0.000129668	0.000154316	0.000540324	0.00301034	0.288910434	5.21E-05	4.98E-05	0	0	9840.973289	1578.696655	1.583454013	181155.4378
Sacramento	2026	Commercial Harbor Craft - ME - Excursion	Aggregate	600	Diesel	3.17E-05	3.83E-05	4.56E-05	0.000134951	0.000852073	0.130694565	9.88E-06	9.44E-06	0	0	4451.766257	1054.630963	5.102425878	82707.39844
Sacramento	2026	Commercial Harbor Craft - ME - Excursion	Aggregate	800	Diesel	0.00036566	0.000442448	0.00052655	0.001563435	0.009467197	1.454991659	0.00011948	0.000114223	0	0	49560.4603	5461.563942	5.102426	914812.0001
Sacramento	2026	Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	600	Diesel	0.00094457	0.00114293	0.001360181	0.002370798	0.018943362	1.480856246	0.000393586	0.000376268	0	0	50077.70094	7876.983971	9.250000088	924362.312
Sacramento	2026	Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	800	Diesel	5.28E-05	6.39E-05	7.61E-05	0.000258616	0.001085543	0.181951542	3.36E-05	3.21E-05	0	0	6184.69853	471.446439	3.083333047	114160.7526
Sacramento	2026	Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	9999	Diesel	0.000266238	0.000322148	0.000383382	0.002274385	0.005755076	1.61136196	0.000236031	0.000225645	0	0	54886.80282	2489.793787	3.083333042	1081068.467
Sacramento	2026	Commercial Harbor Craft - ME - Work Boat	Aggregate	300	Diesel	0.000183885	0.000222501	0.000264795	0.000582164	0.003225313	0.235459987	7.00E-05	6.69E-05	0	0	8156.262284	1960.344748	3.068023	150142.7988
Sacramento	2026	Commercial Harbor Craft - ME - Work Boat	Aggregate	600	Diesel	0.000641388	0.00077608	0.000923599	0.001939068	0.010588942	0.726854736	0.000242179	0.000231524	0	0	25178.02652	3920.688978	6.136045	463484.2839
Sacramento	2026	Commercial Harbor Craft - ME - Work Boat	Aggregate	9999	Diesel	0.005885175	0.007121062	0.008474653	0.02537894	0.051696671	8.611050529	0.002176663	0.002080889	0	0	298284.1661	11762.0696	18.40813972	5816402.496
Sacramento	2026	Construction and Mining - Bore/Drill Rigs	Aggregate	100	Diesel	6.11E-05	7.39E-05	8.79E-05	0.000783694	0.000619737	0.129667734	4.64E-05	4.27E-05	1.23E-06	0	4213.575624	1697.51883	3.313690664	74532.11286
Sacramento	2026	Construction and Mining - Bore/Drill Rigs	Aggregate	175	Diesel	0.000327371	0.000396119	0.000471415	0.00537846	0.002863515	0.91879811	0.000133701	0.000123005	8.70E-06	0	29856.50487	8529.020449	13.13133547	596853.5455
Sacramento	2026	Construction and Mining - Bore/Drill Rigs	Aggregate	300	Diesel	0.000394877	0.000477801	0.000568622	0.002531193	0.003763818	1.094435061	0.000165425	0.000152191	1.04E-05	0	35563.85826	6317.240206	10.27422449	714030.1599
Sacramento	2026	Construction and Mining - Bore/Drill Rigs	Aggregate	50	Diesel	4.30E-05	5.20E-05	6.19E-05	0.000369929	0.000303214	0.04356585	1.52E-05	1.40E-05	4.13E-07	0	1415.679885	1271.123328	2.689915946	25243.7257
Sacramento	2026	Construction and Mining - Bore/Drill Rigs	Aggregate	600	Diesel	0.000535786	0.000648301	0.000771532	0.004236792	0.004769503	1.574243834	0.000214097	0.00019697	1.49E-05	0	51155.32802	5085.737886	8.827908103	1032733.61
Sacramento	2026	Construction and Mining - Bore/Drill Rigs	Aggregate	75	Diesel	7.75E-05	9.38E-05	0.000111607	0.001011646	0.000961479	0.168256567	2.92E-05	2.69E-05	1.59E-06	0	5467.526507	3043.537003	6.266018057	96843.32753
Sacramento	2026	Construction and Mining - Bore/Drill Rigs	Aggregate	750	Diesel	0.00019296	0.000233482	0.000277863	0.001266808	0.00172769	0.649839709	7.42E-05	6.83E-05	6.16E-06	0	21116.65471	1297.972468	2.297036085	424074.8186
Sacramento	2026	Construction and Mining - Bore/Drill Rigs	Aggregate	9999	Diesel	6.31E-05	7.64E-05	9.09E-05	0.000405345	0.001037622	0.215374524	2.27E-05	2.09E-05	2.04E-06	0	6998.632724	325.3763022	0.557665501	138738.0842
Sacramento	2026	Construction and Mining - Bucket	Aggregate	100	Diesel	4.93E-06	5.96E-06	7.10E-06	6.06E-05	4.75E-05	0.009967388	3.59E-06	3.31E-06	9.44E-08	0	323.892	185.1169725	0.360842383	5775.487024
Sacramento	2026	Construction and Mining - Bucket	Aggregate	175	Diesel	5.34E-06	6.46E-06	7.69E-06	9.68E-05	4.16E-05	0.01604712	1.70E-06	1.57E-06	1.52E-07	0	521.4539673	211.8086744	0.360842383	10337.09401
Sacramento	2026	Construction and Mining - Bucket	Aggregate	300	Diesel	1.31E-05	1.59E-05	1.89E-05	9.17E-05	7.08E-05	0.041739719	3.51E-06	3.23E-06	3.95E-07	0	1356.339444	287.7168799	0.426450089	26887.52837
Sacramento	2026	Construction and Mining - Bucket	Aggregate	50	Diesel	2.56E-06	3.09E-06	3.68E-06	2.62E-05	2.28E-05	0.003422367	8.62E-07	7.93E-07	3.24E-08	0	111.2104178	128.2611478	0.295234677	1983.050909
Sacramento	2026	Construction and Mining - Bucket	Aggregate	75	Diesel	3.98E-06	4.82E-06	5.73E-06	5.81E-05	5.31E-05	0.009700014	1.09E-06	1.00E-06	9.19E-08	0	315.203636	217.2607638	0.426450089	5620.560278
Sacramento	2026	Construction and Mining - Bucket	Aggregate	750	Diesel	7.51E-06	9.09E-06	1.08E-05	6.50E-05	4.62E-05	0.033173936	2.69E-06	2.47E-06	3.14E-07	0	1077.992852	75.38343918	0.131215412	21369.69734
Sacramento	2026	Construction and Mining - Compactor	Aggregate	100	Diesel	1.10E-06	1.33E-06	1.58E-06	2.76E-05	1.55E-05	0.004684162	1.26E-06	1.16E-06	4.44E-08	0	152.2126724	88.93069653	0.196823118	2714.183476
Sacramento	2026	Construction and Mining - Compactor	Aggregate	175	Diesel	2.21E-05	2.67E-05	3.18E-05	0.000481476	0.000154064	0.080944638	6.10E-06	5.61E-06	7.67E-07	0	2630.310143	1061.681479	1.574584944	52142.21183
Sacramento	2026	Construction and Mining - Compactor	Aggregate	300	Diesel	5.53E-06	6.70E-06	7.97E-06	4.17E-05	3.24E-05	0.020659708	1.51E-06	1.39E-06	1.96E-07	0	671.3408113	156.7309391	0.262430824	13308.3906
Sacramento	2026	Construction and Mining - Compactor	Aggregate	50	Diesel	3.12E-06	3.78E-06	4.50E-06	3.52E-05	2.91E-05	0.004989419	7.24E-07	6.67E-07	4.73E-08	0	162.1320405	239.2977117	0.557665501	2891.060898
Sacramento	2026	Construction and Mining - Compactor	Aggregate	600	Diesel	1.23E-05	1.49E-05	1.77E-05	0.000102196	7.37E-05	0.052884334	2.89E-06	2.66E-06	5.01E-07	0	1718.485672	217.1642419	0.36100047	34456.30417
Sacramento	2026	Construction and Mining - Compactor	Aggregate	75	Diesel	2.01E-06	2.44E-06	2.90E-06	3.15E-05	2.78E-05	0.005362057	4.28E-07	3.94E-07	5.08E-08	0	174.2409847	128.0583239	0.295234677	3106.981791
Sacramento	2026	Construction and Mining - Compactor	Aggregate	9999	Diesel	2.82E-06	3.41E-06	4.06E-06	2.97E-05	5.11E-05	0.015435041	9.24E-07	8.50E-07	1.46E-07	0	501.564357	17.54250361	0.032803853	9942.810365
Sacramento	2026	Construction and Mining - Concrete Mixer	Aggregate	175	Diesel	1.31E-06	1.59E-06	1.89E-06	2.85E-05	9.00E-06	0.004590015	4.18E-07	3.84E-07	4.35E-08	0	149.1533312	62.42673036	0.098411559	2956.755732
Sacramento	2026	Construction and Mining - Concrete Mixer	Aggregate	300	Diesel	1.24E-06	1.50E-06	1.79E-06	1.13E-05	6.10E-06	0.005485915	2.70E-07	2.48E-07	5.20E-08	0	178.265768	42.49481706	0.065607706	3533.868987
Sacramento	2026	Construction and Mining - Concrete Mixer	Aggregate	50	Diesel	8.42E-07	1.02E-06	1.21E-06	1.39E-05	1.16E-05	0.002282407	1.22E-07	1.12E-07	2.16E-08	0	74.16721726	134.5659643	0.32803853	1322.514297
Sacramento	2026	Construction and Mining - Concrete Mixer	Aggregate	600	Diesel	1.13E-06	1.37E-06	1.63E-06	7.99E-06	1.13E-05	0.004203333	3.58E-07	3.29E-07	3.98E-08	0	136.5880457	22.45162985	0.032803853	2707.666559
Sacramento	2026	Construction and Mining - Concrete Mixer	Aggregate	75	Diesel	3.70E-07	4.48E-07	5.33E-07	4.23E-06	3.28E-06	0.000634653	6.25E-08	5.75E-08	6.01E-09	0	20.62316031	17.31366844	0.032803853	367.7423177
Sacramento	2026	Construction and Mining - Concrete Pump	Aggregate	100	Diesel	1.47E-06	1.78E-06	2.12E-06	2.53E-05	1.66E-05	0.004403734	1.13E-06	1.04E-06	4.17E-08	0	143.1000952	70.49308716	0.131364917	2341.35522
Sacramento	2026	Construction and Mining - Concrete Pump	Aggregate	175	Diesel	1.97E-05	2.38E-05	2.83E-05	0.000426111	0.000128188	0.070325251	4.63E-06	4.26E-06	6.66E-07	0	2285.231289	838.9979857	1.049723296	45301.50724
Sacramento	2026	Construction and Mining - Concrete Pump	Aggregate	300	Diesel	7.01E-06	8.49E-06	1.01E-05	6.14E-05	2.54E-05	0.028213309	1.56E-06	1.43E-06	2.67E-07	0	916.7964011	243.8735619	0.393646236	18174.20363

Sacramento	2026 Construction and Mining - Concrete Pump	Aggregate	50	Diesel	2.97E-07	3.59E-07	4.27E-07	2.67E-06	2.30E-06	0.000386586	7.16E-08	6.58E-08	3.66E-09	0	12.56217437	12.69856446	0.032803853	224.002677
Sacramento	2026 Construction and Mining - Concrete Pump	Aggregate	600	Diesel	2.03E-05	2.46E-05	2.93E-05	0.000125263	0.000253629	0.066480561	7.74E-06	7.12E-06	6.30E-07	0	2160.297434	307.7825835	0.590469354	42824.86867
Sacramento	2026 Construction and Mining - Concrete Pump	Aggregate	75	Diesel	2.37E-06	2.87E-06	3.42E-06	2.83E-05	2.71E-05	0.004642716	8.52E-07	7.84E-07	4.40E-08	0	150.8658642	113.3263013	0.229626971	2690.167836
Sacramento	2026 Construction and Mining - Crane less than 35ton	Aggregate	100	Diesel	1.84E-06	2.22E-06	2.65E-06	3.59E-05	2.43E-05	0.006538141	1.70E-06	1.56E-06	6.19E-08	0	212.4580425	144.1490347	0.688880913	3788.450063
Sacramento	2026 Construction and Mining - Crane less than 35ton	Aggregate	175	Diesel	1.50E-05	1.81E-05	2.16E-05	0.000252642	0.000167098	0.046781895	7.75E-06	7.13E-06	4.43E-07	0	1520.18584	685.4889985	2.462255403	26702.93803
Sacramento	2026 Construction and Mining - Crane less than 35ton	Aggregate	300	Diesel	2.93E-06	3.55E-06	4.23E-06	2.28E-05	3.55E-05	0.012346066	1.25E-06	1.15E-06	1.17E-07	0	401.1875777	118.0480451	0.426450089	7952.981407
Sacramento	2026 Construction and Mining - Crane less than 35ton	Aggregate	50	Diesel	1.05E-06	1.27E-06	1.51E-06	1.99E-05	1.91E-05	0.003549048	4.37E-07	4.02E-07	3.36E-08	0	115.3269257	187.9649371	1.115331002	2056.454506
Sacramento	2026 Construction and Mining - Crane less than 35ton	Aggregate	600	Diesel	2.66E-06	3.21E-06	3.82E-06	3.08E-05	2.89E-05	0.009527301	1.32E-06	1.22E-06	9.03E-08	0	309.5913189	57.14700374	0.229626971	6137.213962
Sacramento	2026 Construction and Mining - Crane less than 35ton	Aggregate	75	Diesel	1.97E-06	2.38E-06	2.84E-06	3.62E-05	3.27E-05	0.006790958	6.89E-07	6.34E-07	6.43E-08	0	220.6733758	168.7987218	0.787550923	3443.760281
Sacramento	2026 Construction and Mining - Crane less than 35ton	Aggregate	750	Diesel	3.21E-07	3.88E-07	4.62E-07	3.72E-06	3.27E-06	0.002115568	1.86E-07	1.71E-07	2.00E-08	0	68.74574245	7.793149124	0.032803853	1362.787987
Sacramento	2026 Construction and Mining - Crane less than 35ton	Aggregate	9999	Diesel	3.98E-06	4.82E-06	5.73E-06	5.42E-05	5.70E-05	0.002511197	2.86E-06	2.63E-06	2.38E-08	0	81.6017684	5.578071318	0.032803853	1617.640682
Sacramento	2026 Construction and Mining - Cranes	Aggregate	100	Diesel	2.83E-05	3.43E-05	4.08E-05	0.000323691	0.000290737	0.063482976	2.02E-05	1.86E-05	6.01E-07	0	2062.890388	960.5749314	4.95982369	23839.94496
Sacramento	2026 Construction and Mining - Cranes	Aggregate	175	Diesel	0.00018051	0.000218417	0.000259934	0.002546612	0.00199847	0.488116143	0.000102145	9.40E-05	4.62E-06	0	15861.41923	5869.848543	22.30413794	247446.7518
Sacramento	2026 Construction and Mining - Cranes	Aggregate	25	Diesel	1.11E-06	1.35E-06	1.60E-06	1.35E-05	8.75E-06	0.003222934	5.55E-07	5.11E-07	3.05E-08	0	104.7298111	10.77005965	0.065607706	67.93215126
Sacramento	2026 Construction and Mining - Cranes	Aggregate	300	Diesel	0.000420859	0.000509239	0.000606036	0.003734649	0.004243314	1.491709215	0.000207306	0.000190721	1.41E-05	0	48473.3512	12791.31945	50.16379842	885698.9155
Sacramento	2026 Construction and Mining - Cranes	Aggregate	50	Diesel	4.03E-06	4.88E-06	5.81E-06	3.33E-05	2.65E-05	0.006152516	1.31E-06	1.21E-06	5.83E-08	0	199.9270671	167.4267491	0.853707944	1942.579276
Sacramento	2026 Construction and Mining - Cranes	Aggregate	600	Diesel	0.000459658	0.000556186	0.000661907	0.005148545	0.004531369	2.040863976	0.000194457	0.0001789	1.93E-05	0	66318.23095	10570.1331	40.08694627	1279603.275
Sacramento	2026 Construction and Mining - Cranes	Aggregate	75	Diesel	1.47E-05	1.77E-05	2.11E-05	0.00013161	0.000161024	0.025864201	9.33E-06	8.59E-06	2.45E-07	0	840.4617272	462.5795444	2.527483553	8227.674212
Sacramento	2026 Construction and Mining - Cranes	Aggregate	750	Diesel	6.19E-05	7.49E-05	8.92E-05	0.000641652	0.000677157	0.315169616	2.88E-05	2.65E-05	2.99E-06	0	10241.49165	1089.093533	4.626783327	202832.3251
Sacramento	2026 Construction and Mining - Cranes	Aggregate	9999	Diesel	2.00E-05	2.42E-05	2.89E-05	0.000194649	0.000469459	0.106211858	9.75E-06	8.97E-06	1.01E-06	0	3451.372848	262.9460792	1.083173819	69031.85954
Sacramento	2026 Construction and Mining - Crawler Tractors	Aggregate	100	Diesel	0.000346762	0.000419582	0.000499337	0.00399585	0.003455212	0.686266914	0.000258656	0.000237963	6.50E-06	0	22300.36311	9908.404667	28.15975298	374448.3384
Sacramento	2026 Construction and Mining - Crawler Tractors	Aggregate	175	Diesel	0.000883529	0.00106907	0.001272281	0.014268745	0.008647064	2.433766369	0.000415331	0.000382105	2.31E-05	0	79085.66278	26601.99939	57.81697886	1548299.503
Sacramento	2026 Construction and Mining - Crawler Tractors	Aggregate	300	Diesel	0.000928181	0.001123099	0.00133658	0.007116802	0.008212662	2.998705386	0.000395767	0.000364106	2.84E-05	0	97443.4547	20364.97211	46.83883234	1922963.154
Sacramento	2026 Construction and Mining - Crawler Tractors	Aggregate	50	Diesel	3.51E-05	4.25E-05	5.05E-05	0.000218932	0.000176754	0.029553125	1.19E-05	1.10E-05	2.80E-07	0	960.3339651	771.607297	2.822046002	12993.86076
Sacramento	2026 Construction and Mining - Crawler Tractors	Aggregate	600	Diesel	0.001445285	0.001748795	0.002081211	0.013402199	0.012578248	5.200993304	0.000547572	0.000503766	4.93E-05	0	169007.1848	20533.12679	46.80037604	3441149.138
Sacramento	2026 Construction and Mining - Crawler Tractors	Aggregate	75	Diesel	0.000138478	0.000167559	0.000199409	0.001102944	0.001552398	0.180675744	8.73E-05	8.03E-05	1.71E-06	0	5871.089817	3314.189404	11.19082786	94889.04235
Sacramento	2026 Construction and Mining - Crawler Tractors	Aggregate	750	Diesel	8.32E-05	0.000100649	0.00011978	0.000789359	0.000751015	0.333452624	3.41E-05	3.13E-05	3.16E-06	0	10835.60119	836.3823171	2.138792025	232092.6236
Sacramento	2026 Construction and Mining - Crawler Tractors	Aggregate	9999	Diesel	0.000114981	0.000139127	0.000165573	0.001061724	0.002171778	0.531516757	4.98E-05	4.58E-05	5.03E-06	0	17271.72974	1010.334949	2.530481674	370152.242
Sacramento	2026 Construction and Mining - Crushing/Processing Equipment	Aggregate	100	Diesel	2.17E-06	2.62E-06	3.12E-06	5.25E-05	2.68E-05	0.00896768	1.88E-06	1.73E-06	8.49E-08	0	291.4063297	168.0857315	0.32803853	5196.218109
Sacramento	2026 Construction and Mining - Crushing/Processing Equipment	Aggregate	175	Diesel	3.12E-05	3.78E-05	4.50E-05	0.000767271	0.000197432	0.128155141	6.98E-06	6.42E-06	1.21E-06	0	4164.423652	1758.956308	2.591504387	82553.86188
Sacramento	2026 Construction and Mining - Crushing/Processing Equipment	Aggregate	300	Diesel	1.57E-05	1.89E-05	2.25E-05	0.000127226	7.96E-05	0.062812039	3.71E-06	3.41E-06	5.95E-07	0	2041.088176	509.0119738	0.885704031	40461.71221
Sacramento	2026 Construction and Mining - Crushing/Processing Equipment	Aggregate	50	Diesel	1.14E-06	1.37E-06	1.64E-06	1.76E-05	1.57E-05	0.002808389	3.44E-07	3.16E-07	2.66E-08	0	91.25907659	109.112605	0.295234677	1627.288147
Sacramento	2026 Construction and Mining - Crushing/Processing Equipment	Aggregate	600	Diesel	7.79E-05	9.42E-05	0.000112163	0.000676519	0.000274598	0.346346708	1.60E-05	1.47E-05	3.28E-06	0	11254.5967	1623.387019	2.788327505	223106.6047
Sacramento	2026 Construction and Mining - Crushing/Processing Equipment	Aggregate	75	Diesel	4.76E-06	5.76E-06	6.86E-06	8.19E-05	7.06E-05	0.013971292	6.98E-07	6.42E-07	1.32E-07	0	453.9995673	330.8366837	0.754488619	8095.502851
Sacramento	2026 Construction and Mining - Crushing/Processing Equipment	Aggregate	750	Diesel	8.21E-06	9.93E-06	1.18E-05	6.36E-05	5.80E-05	0.032752965	2.70E-06	2.48E-06	3.10E-07	0	1064.313315	84.54390117	0.164019265	21098.51968
Sacramento	2026 Construction and Mining - Crushing/Processing Equipment	Aggregate	9999	Diesel	1.37E-05	1.65E-05	1.97E-05	0.000137315	0.000245157	0.070836936	5.70E-06	5.25E-06	6.71E-07	0	2301.858602	136.3415979	0.262430824	45631.1204
Sacramento	2026 Construction and Mining - Excavators	Aggregate	100	Diesel	0.000549296	0.000664648	0.000790986	0.00995145	0.006055935	1.669074732	0.000447654	0.000411841	1.58E-05	0	54236.87461	28111.24132	53.37866037	957144.8713
Sacramento	2026 Construction and Mining - Excavators	Aggregate	175	Diesel	0.003030997	0.003667506	0.004364636	0.056318302	0.023582387	9.36850151	0.001002843	0.000922616	8.87E-05	0	304431.0911	108287.4868	151.6715105	6030587.846
Sacramento	2026 Construction and Mining - Excavators	Aggregate	25	Diesel	3.01E-07	3.65E-07	4.34E-07	9.77E-07	7.81E-07	7.05E-05	6.69E-08	6.15E-08	6.68E-10	0	2.291172941	13.43917716	0.032803853	40.85509858
Sacramento	2026 Construction and Mining - Excavators	Aggregate	300	Diesel	0.002967317	0.003590453	0.004272936	0.021313432	0.022400697	10.01563942	0.000931975	0.000857417	9.49E-05	0	325459.9502	72441.55044	113.0106451	6469911.083
Sacramento	2026 Construction and Mining - Excavators	Aggregate	50	Diesel	0.001754106	0.002122468	0.002525912	0.020256911	0.016470611	2.700107473	0.000569714	0.000524137	2.56E-05	0	87740.46342	115209.2289	245.1482146	1554043.713
Sacramento	2026 Construction and Mining - Excavators	Aggregate	600	Diesel	0.003016088	0.003649466	0.004343166	0.023306992	0.017598484	11.5176002	0.000764042	0.000702918	0.000109104	0	374266.4279	52252.53578	78.77766509	7476895.77
Sacramento	2026 Construction and Mining - Excavators	Aggregate	75	Diesel	0.000895847	0.001083974	0.001290019	0.012820716	0.011420269	2.132286321	0.000220245	0.000202625	2.02E-05	0	69289.01603	52460.47058	101.4000006	1229995.569
Sacramento	2026 Construction and Mining - Excavators	Aggregate	750	Diesel	7.43E-05	9.00E-05	0.000107061	0.000641002	0.000522502	0.320025892	2.41E-05	2.21E-05	3.03E-06	0	10399.29718	872.9206383	1.643377545	222154.466
Sacramento	2026 Construction and Mining - Excavators	Aggregate	9999	Diesel	0.000413947	0.000500876	0.000596084	0.003146589	0.007218841	1.616430732	0.000166789	0.000153446	1.53E-05	0	52526.19865	1756.369239	3.053212581	1075032.458
Sacramento	2026 Construction and Mining - Graders	Aggregate	100	Diesel	5.80E-05	7.01E-05	8.35E-05	0.000461441	0.000557237	0.077271807	4.32E-05	3.97E-05	7.32E-07	0	2510.960834	1075.386716	4.036904333	37489.51179
Sacramento	2026 Construction and Mining - Graders	Aggregate	175	Diesel	0.000558776	0.000676119	0.000804637	0.006405078	0.006271859	1.146257541	0.00033355	0.000306866	1.09E-05	0	37247.83877	11306.54007	34.39723206	670029.3187
Sacramento	2026 Construction and Mining - Graders	Aggregate	300	Diesel	0.000925368	0.001119695	0.00133253	0.007718962	0.008371994	3.651959726	0.000348484	0.000320605	3.46E-05	0	118671.0684	24995.01102	64.33582977	2324117.199
Sacramento	2026 Construction and Mining - Graders	Aggregate	50	Diesel	1.32E-05	1.60E-05	1.90E-05	7.31E-05	6.07E-05	0.009234914	4.30E-06	3.96E-06	8.75E-08	0	300.0901555	312.7343098	1.213835114	4635.100067
Sacramento	2026 Construction and Mining - Graders	Aggregate	600	Diesel	0.000196418	0.000237666	0.000282843	0.001726882	0.001386595	0.877448731	6.24E-05	5.74E-05	8.31E-06	0	28512.8496	4011.474781	9.516497878	565464.238
Sacramento	2026 Construction and Mining - Graders	Aggregate	75	Diesel	2.53E-05	3.06E-05	3.64E-05	0.000186692	0.000273095	0.032409151	1.68E-05	1.55E-05	3.07E-07	0	1053.141032	574.7499483	2.331553097	14382.9452
Sacramento	2026 Construction and Mining - Graders	Aggregate	750	Diesel	6.17E-06	7.47E-06	8.89E-06	6.21E-05	3.98E-05	0.033336512	2.34E-06	2.16E-06	3.16E-07	0	1083.275788	74.18975001	0.196823118	21474.42414
Sacramento	2026 Construction and Mining - Graders	Aggregate	9999	Diesel	5.60E-06	6.77E-06	8.06E-06	4.33E-05	0.000105176	0.023855542	2.14E-06	1.97E-06	2.26E-07	0	775.189987	49.90761896	0.131215412	15367.05495
Sacramento	2026 Construction and Mining - Hopper Tractor Trailer	Aggregate	300	Diesel	1.29E-06	1.56E-06	1.86E-06	1.23E-05	1.51E-06	0.006026416	1.30E-07	1.20E-07	5.71E-08	0	195.829431	45.74680224	0.065607706	3882.043987
Sacramento	2026 Construction and Mining - Hopper Tractor Trailer	Aggregate	600	Diesel	1.36E-06	1.65E-06	1.96E-06	1.03E-05	7.76E-06	0.005244117	3.74E-07	3.44E-07	4.97E-08	0	170.4085069	28.86163018	0.065607706	3378.109798
Sacramento	2026 Construction and Mining - Misc - Asphalt Pavers	Aggregate	100	Gasoline	4.25E-05	3.91E-05	4.68E-05	0.002353857	0.000110727	0.056918359	3.97E-06	3.00E-06	5.50E-07	8.06E-07	2299.5	605.9	1.52	36959.9
Sacramento	2026 Construction and Mining - Misc - Asphalt Pavers	Aggregate	15	Gasoline	0.00015083	0.000152338	0.000165979	0.004991102	0.000112524	1.97E-07	6.39E-05	4.83E-05	7.97E-08	1.10E-07	312.1682618	0	2.777923658	0
Sacramento	2026 Construction and Mining - Misc - Asphalt Pavers	Aggregate	25	Gasoline	0.000666456	0.00067312	0.000733394	0.02216521	0.000435314	8.25E-07	0.000267272	0.00020194	3.52E-07	4.86E-07	1385.881612	0	4.754729216	0
Sacramento	2026 Construction and Mining - Misc - Asphalt Pavers	Aggregate	50	Gasoline	9.45E-05	8.70E-05	0.000104042	0.008107954	0.000134308	0.054975976	3.79E-06	2.86E-06	6.68E-07	9.00E-07	2569.6	1091.35	2.81	34923.2
Sacramento	2026 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	100	Gasoline	4.18E-05	3.84E-05	4.60E-05	0.001608044	0.000128581	0.069477283	4.84E-06	3.66E-06	6.71E-07	9.53E-07	2719.25	423.4	3.96	37259.2
Sacramento	2026 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	15	Gasoline	1.97E-05	1.99E-05	2.17E-05	0.000708754	1.47E-05	2.80E-08	9.07E-06	6.85E-06	1.13E-08	1.55E-08	44.10610484	0	0.947223178	0
Sacramento	2026 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	15	Diesel	1.11E-05	1.34E-05	1.60E-05	7.02E-05	8.38E-05	0.000160611	2.95E-06	2.23E-06	1.52E-09	1.31E-09	5.224144099	0	1.001764647	0
Sacramento	2026 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	175	Gasoline	9.97E-06	9.17E-06	1.10E-05	0.000778025	4.96E-05	0.023947881	1.72E-06	1.30E-06	2.38E-07	3.36E-07	959.95	105.85	0.95	13337.1
Sacramento	2026 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	25	Gasoline	0.000187888	0.000189767	0.00020676	0.006768086	0.000122742	2.52E-07	8.16E-05	6.17E-05	1.07E-07	1.48E-07	421.1433896	0	4.734349226	0
Sacramento	2026 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	25	Diesel	6.81E-05	8.19E-05	9.79E-05	0.000279507	0.00051749	0.000748107	1.74E-05	1.31E-05	7.10E-09	6.12E-09	24.33349553	0	3.828467005	0
Sacramento	2026 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	50	Gasoline	7.43E-06	6.83E-06	8.17E-06	0.000471337	1.27E-05	0.005565679	3.84E-07	2.90E-07	6.77E-08	8.44E-08	240.9	87.6	0.89	2803.2
Sacramento	2026 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	15	Gasoline	0.006905014	0.006974064	0.007598548	0.219863106	0.005089814	8.67E-06	0.002807788	0.00212144	3.56E-06	4.91E-06	13785.26994	0	661.4060614	0
Sacramento	2026 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	15	Diesel	7.67E-05	9.22E-05	0.000110254	0.00048389	0.000577706	0.001107464	2.03E-05	1.54E-05	1.05E-08	9.05E-09	36.02222443	0	30.56638509	0
Sacramento	2026 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	25	Gasoline	9.44E-05	9.54E-05	0.000103933	0.003042394	6.13E-05	1.13E-07	3.67E-05	2.77E-05	4.86E-08	6.71E-08	190.6124513	0	2.763127242	0
Sacramento	2026 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	25	Diesel	1.97E-05	2.37E-05	2.83E-05	8.07E-05	0.000149843	0.000216129	5.14E-06	3.88E-06	2.05E-09	1.77E-09	7.029990708	0	2.720879636	0
Sacramento	2026 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	5	Gasoline	0.003141092	0.003172504	0.00345658	0.084925896	0.001421996	3.20E-06	4.03E-05	3.04E-05	1.40E-06	1.94E-06	5386.465666	0	390.3669232	0
Sacramento	2026 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	100	Gasoline	5.86E-05	5.39E-05	6.45E-05	0.002888921	0.000148313	0.136487879	9.52E-06	7.19E-06	1.32E-06	1.87E-06	5347.25	1135.15	1.86	74919.9
Sacramento	2026 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	15	Gasoline	0.004971034	0.005020744	0.00547032	0.161277356	0.00370836	6.37E-06	0.002064168	0.001559594	2.57E-06	3.55E-06	10099.74505	0	97.02420314	0
Sacramento	2026 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	25	Gasoline	0.003102092	0.003133114	0.003413664	0.101166328	0.002026154	3.77E-06	0.001219882	0.00092169	1.61E-06	2.22E-06	6333.274988	0	30.3561356	0
Sacramento	2026 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	25	Diesel	1.35E-05	1.62E-05	1.94E-05	5.53E-05	0.000102425	0.00014807	3.44E-06	2.60E-06	1.41E-09	1.21E-09	4.816223115	0	1.007258573	0
Sacramento	2026 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	5	Gasoline	0.000264238	0.00026688	0.000290778	0.007027474	0.000119624	2.65E-07	3.33E-06	2.52E-06	1.16E-07	1.60E-07	446.282806	0	21.6144398	0
Sacramento	2026 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	50	Gasoline	0.00014268	0.000131237	0.000157011	0.01059928	0.000231702	0.127714705	8.80E-06	6.65E-06	1.55E-06	1.92E-06	5482.3	1981.95	3.24	69368.25
Sacramento	2026 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	50	Diesel	3.04E-05	3.62E-05	4.38E-05	0.00037766	0.000308547	0.051619019	7.45E-06	6.86E-06	6.50E-07	4.22E-07	1679	1211.8	2.09	39989.4
Sacramento	2026 Construction and Mining - Misc - Cranes	Aggregate	100	Gasoline	6.49E-05	5.97E-05	7.14E-05	0.003113158	0.000168238	0.066738364	4.65E-06	3.52E-06	6.45E-07	9.50E-07	2711.95	817.6	1.97	60502.4
Sacramento	2026 Construction and Mining - Misc - Cranes	Aggregate	175	Gasoline	3.32E-06	3.05E-06	3.65E-06	0.000158716	1.22E-05	0.004385626	3.14E-07	2.38E-07	4.36E-08	6.39E-08	182.5	32.85	0.05	4106.25
Sacramento	2026 Construction and Mining - Misc - Cranes	Aggregate	50	Gasoline	3.46E-05	3.18E-05	3.81E-05	0.002711028	4.84E-05	0.016874164	1.16E-06	8.79E-07	2.05E-07	2.83E-07	806.65	401.5	0.95	14855.5
Sacramento	2026 Construction and Mining - Misc - Crushing/Proc. Equipment	Aggregate	15	Gasoline	0.00002876	2.90E-05	3.16E-05	0.00099495	2.15E-05	3.93E-08	1.27E-05	9.62E-06	1.58E-08	2.18E-08	62.0590285	0	0.5891797	0
Sacramento	2026 Construction and Mining - Misc - Crushing/Proc. Equipment	Aggregate	25	Gasoline	3.53E-05	0.000035615	0.000038804	0.001226722	2.30E-05	4.57E-08	1.48E-05	1.12E-05	1.94E-08	2.68E-08	76.48978328	0	0.384968542	0
Sacramento	2026 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	100	Gasoline	3.58E-06	3.29E-06	3.94E-06	0.000141121	1.08E-05	0.005720473	3.99E-07	3.01E-07	5.53E-08	8.06E-08	229.95	83.95	0.74	5540.7
Sacramento	2026 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	15	Gasoline	0.000642592	0.000649018	0.000707134	0.017882716	0.000479182	7.06E-07	0.000228878	0.000172931	2.91E-07	4.02E-07	1131.771549	0	42.5820278	0
Sacramento	2026 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	25	Gasoline	0.000265026	0.000267676	0.000291646	0.00741772	0.000173062	2.76E-07	8.94E-05	6.76E-05	1.20E-07	1.65E-07	469.2584388	0	7.882471512	0
Sacramento	2026 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	25	Diesel	9.73E-06	1.17E-05	1.40E-05	3.99E-05	7.39E-05	0.000106872	2.49E-06	1.88E-06	1.01E-09	8.74E-10	3.476188891	0	1.405054739	0
Sacramento	2026 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	5	Gasoline	0.000173899	0.000175638	0.000191365	0.003911042	7.87E-05	1.47E-07	1.85E-06	1.40E-06	6.67E-08	9.21E-08	251.8654228	0	19.96664076	0
Sacramento	2026 Construction and Mining - Misc - Excavators	Aggregate	25	Diesel	6.94E-05	8.35E-05	9.98E-05	0.000285092	0.00052783	0.000763056	1.78E-05	1.34E-05	7.24E-09	6.24E-09	24.81973587	0	2.20627931	0
Sacramento	2026 Construction and Mining - Misc - Other	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.478154576	0
Sacramento	2026 Construction and Mining - Misc - Other	Aggregate	15	Diesel	0.000169112	0.000203405	0.000243101	0.001066944	0.001273802	0.002441881	4.48E-05	3.38E-05	2.32E-08	2.00E-08	79.4265019	0	18.32342514	0
Sacramento	2026 Construction and Mining - Misc - Other	Aggregate	175	Gasoline	5.48E-05	5.04E-05	6.03E-05	0.004663603	0.000181927	0.141263301	1.01E-05	7.65E-06	1.40E-06	1.97E-06	5624.65	1029.3	2.78	129691.8
Sacramento	2026 Construction and Mining - Misc - Other	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.478154576	0
Sacramento	2026 Construction and Mining - Misc - Other	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.478154576	0
Sacramento	2026 Construction and Mining - Misc - Other	Aggregate	25	Diesel	3.63E-05	4.37E-05	5.22E-05	0.00014913	0.000276104	0.000399148	9.29E-06	7.02E-06	3.79E-09	3.26E-09	12.9830051	0	2.904269858	0
Sacramento	2026 Construction and Mining - Misc - Other	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.478154576	0
Sacramento	2026 Construction and Mining - Misc - Pavers	Aggregate	25	Diesel	1.83E-05	2.20E-05	2.63E-05	7.52E-05	0.000139223	0.000201268	4.68E-06	3.54E-06	1.91E-09	1.65E-09	6.546590782	0	0.871807404	0
Sacramento	2026 Construction and Mining - Misc - Paving Equipment	Aggregate	100	Gasoline	1.40E-05	1.29E-05	1.54E-05	0.000712109	3.57E-05	0.031508803	2.20E-06	1.66E-06	3.04E-07	4.35E-07	1241	335.8	1.98	22162.8
Sacramento	2026 Construction and Mining - Misc - Paving Equipment	Aggregate	15	Gasoline	0.013631288	0.0137676	0.0150004	0.419748822	0.010167432	1.66E-05	0.005372312	0.00405908	6.74E-06	9.31E-06	26376.36122	0	465.7072386	0
Sacramento	2026 Construction and Mining - Misc - Paving Equipment	Aggregate	25	Gasoline	0.00070333	0.000710364	0.000773972	0.021774062	0.000459346	8.10E-07	0.000262556	0.000198375	3.48E-07	4.81E-07	1367.754388	0	10.34547655	0
Sacramento	2026 Construction and Mining - Misc - Paving Equipment	Aggregate	25	Diesel	0.000030972	3.73E-05	4.45E-05	0.000127148	0.000235407	0.000340315	7.92E-06	5.98E-06	3.23E-09	2.78E-09	11.06935269	0	2.157196314	0
Sacramento	2026 Construction and Mining - Misc - Paving Equipment	Aggregate	5	Gasoline	0.00368113	0.003717942	0.00405086	0.088587938	0.001666664	3.33E-06	4.20E-05	0.000031745	1.48E-06	2.04E-06	5671.385626	0	275.4586316	0
Sacramento	2026 Construction and Mining - Misc - Paving Equipment	Aggregate	50	Gasoline	7.98E-05	7.34E-05	8.78E-05	0.006082233	0.000128016	0.069315139	4.78E-06	3.61E-06	8.43E-07	1.05E-06	3007.6	1339.55	7.63	49563.35
Sacramento	2026 Construction and Mining - Misc - Plate Compactors	Aggregate	15	Gasoline	0.004815468	0.004863623	0.005299128	0.147196792	0.003594302	5.83E-06	0.001888909	0.001427175	2.37E-06	3.28E-06	9254.20763	0	218.1388449	0
Sacramento	2026 Construction and Mining - Misc - Plate Compactors	Aggregate	15	Diesel	6.60E-05	7.94E-05	9.48E-05	0.000416245	0.000496946	0.000952647	1.75E-05	1.32E-05	9.04E-09	7.79E-09	30.98652912	0	19.26143261	0
Sacramento	2026 Construction and Mining - Misc - Plate Compactors	Aggregate	5	Gasoline	0.00265085	0.002677358	0.002917098	0.062312544	0.001200222	2.35E-06	2.96E-05	2.23E-05	1.05E-06	1.44E-06	3997.249404	0	196.3012236	0
Sacramento	2026 Construction and Mining - Misc - Rollers	Aggregate	100	Gasoline	0.000306527	0.000281943	0.000337314	0.015661872	0.000745372	0.251015341	1.75E-05	1.32E-05	2.43E-06	3.67E-06	10464.55	2306.8	3.7	173010
Sacramento	2026 Construction and Mining - Misc - Rollers	Aggregate	15	Gasoline	0.001356946	0.001370514	0.001493236	0.04430524	0.00101229	1.75E-06	0.000567058	0.000428444	7.08E-07	9.78E-07	2773.418746	0	33.5324044	0
Sacramento	2026 Construction and Mining - Misc - Rollers	Aggregate	15	Diesel	0.000239223	0.000287733	0.000343887	0.001509279	0.001801897	0.00345424	6.34E-05	4.79E-05	3.28E-08	2.82E-08	112.3552838	0	41.15319039	0
Sacramento	2026 Construction and Mining - Misc - Rollers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.041419822	0
Sacramento	2026 Construction and Mining - Misc - Rollers	Aggregate	25	Gasoline	0.00204373	0.002064168	0.002249002	0.06705217	0.001334892	2.50E-06	0.000808528	0.000610888	1.07E-06	1.47E-06	4196.038182	0	22.64756814	0
Sacramento	2026 Construction and Mining - Misc - Rollers	Aggregate	25	Diesel	0.000217674	0.000261814	0.00031291	0.000893609	0.00165446	0.002391763	5.56E-05	4.20E-05	2.27E-08	1.96E-08	77.79631724	0	17.11528173	0
Sacramento	2026 Construction and Mining - Misc - Rollers	Aggregate	5	Gasoline	0.00015244	0.000153964	0.000167751	0.004277642	0.000069008	1.61E-07	2.03E-06	1.53E-06	7.05E-08	9.73E-08	270.5600414	0	20.73993106	0
Sacramento	2026 Construction and Mining - Misc - Rollers	Aggregate	50	Gasoline	0.000168603	0.000155081	0.000185537	0.014094185	0.000217205	0.066617698	4.59E-06	3.47E-06	8.10E-07	1.19E-06	3387.2	1230.05	1.97	45511.85
Sacramento	2026 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	100	Gasoline	0.000563519	0.000518324	0.000620118	0.0270057	0.001461682	0.580839001	4.05E-05	3.06E-05	5.61E-06	8.29E-06	23666.6	4613.6	11.2	392156
Sacramento	2026 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	175	Gasoline	2.51E-05	2.30E-05	2.76E-05	0.001201775	9.22E-05	0.033229555	2.38E-06	1.80E-06	3.30E-07	4.73E-07	1350.5	116.8	0.32	16585.6
Sacramento	2026 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	50	Gasoline	4.68E-05	4.31E-05	5.15E-05	0.003663755	6.56E-05	0.022874575	1.58E-06	1.19E-06	2.78E-07	3.84E-07	1095	313.9	0.74	14753.3
Sacramento	2026 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	100	Gasoline	0.000299934	0.000275879	0.000330059	0.016063737	0.000758376	0.305585142	2.13E-05	1.61E-05	2.95E-06	4.41E-06	12574.25	3358	6.56	241776
Sacramento	2026 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.063361108	0
Sacramento	2026 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.063361108	0
Sacramento	2026 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.063361108	0
Sacramento	2026 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25	Diesel	0.000012716	1.53E-05	1.83E-05	5.22E-05	9.66E-05	0.000139721	3.25E-06	2.46E-06	1.33E-09	1.14E-09	4.544688166	0	0.572281658	0
Sacramento	2026 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.063361108	0
Sacramento	2026 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	50	Gasoline	5.51E-05	5.06E-05	6.06E-05	0.004705874	7.39E-05	0.025858201	1.78E-06	1.35E-06	3.14E-07	4.45E-07	1270.2	507.35	0.98	20294
Sacramento	2026 Construction and Mining - Misc - Signal Boards	Aggregate	15	Gasoline	0.000169892	0.000171591	0.000186956	0.005755554	0.000126754	2.27E-07	7.37E-05	5.57E-05	9.18E-08	1.27E-07	359.4552634	0	4.36385955	0
Sacramento	2026 Construction and Mining - Misc - Signal Boards	Aggregate	15	Diesel	0.00103139	0.001240535	0.00148264	0.006507134	0.007768731	0.014892675	0.00027321	0.000206425	1.41E-07	1.22E-07	484.4106327	0	168.4273596	0
Sacramento	2026 Construction and Mining - Misc - Signal Boards	Aggregate	5	Gasoline	9.17E-06	9.26E-06	1.01E-05	0.000244266	0.00000415	9.19E-09	1.16E-07	8.75E-08	4.01E-09	5.54E-09	15.50992683	0	0.616849052	0
Sacramento	2026 Construction and Mining - Misc - Signal Boards	Aggregate	50	Diesel	1.33E-05	1.58E-05	1.91E-05	0.000163807	0.00013536	0.022891913	3.27E-06	3.00E-06	2.87E-07	1.87E-07	744.6	445.3	0.84	16476.1
Sacramento	2026 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	100	Gasoline	0.000251592	0.000231414	0.000276862	0.013205896	0.000638504	0.542709903	3.78E-05	2.86E-05	5.24E-06	7.48E-06	21356.15	4993.2	16.1	399456
Sacramento	2026 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	15	Gasoline	6.42E-05	6.48E-05	7.06E-05	0.00186502	4.79E-05	7.37E-08	2.39E-05	1.80E-05	3.00E-08	4.14E-08	117.6646068	0	0.942632628	0
Sacramento	2026 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.071294874	0
Sacramento	2026 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	25	Gasoline	0.005537678	0.005593056	0.006093878	0.166682878	0.003616504	6.20E-06	0.002009894	0.001518586	2.67E-06	3.68E-06	10490.30284	0	58.48364498	0
Sacramento	2026 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	25	Diesel	0.003565101	0.004288032	0.00512489	0.01462946	0.027110536	0.039162919	0.000919734	0.00069491	3.72E-07	3.20E-07	1273.843282	0	225.856402	0
Sacramento	2026 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.071294874	0
Sacramento	2026 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	50	Gasoline	0.000437692	0.000402589	0.000481653	0.034317431	0.000688221	0.366993684	2.53E-05	1.91E-05	4.46E-06	5.60E-06	15987	8354.85	26.96	267355.2
Sacramento	2026 Construction and Mining - Misc - Surfacing Equipment	Aggregate	15	Gasoline	0.008533416	0.008618752	0.009390504	0.225370642	0.006362622	8.90E-06	0.00288449	0.002179394	3.66E-06	5.06E-06	14319.99777	0	149.6403757	0
Sacramento	2026 Construction and Mining - Misc - Surfacing Equipment	Aggregate	25	Gasoline	0.000292708	0.000295636	0.000322108	0.007771236	0.000191125	2.89E-07	0.000093707	7.08E-05	1.26E-07	1.73E-07	493.5812922	0	2.046859924	0
Sacramento	2026 Construction and Mining - Misc - Surfacing Equipment	Aggregate	5	Gasoline	0.000879738	0.000888536	0.000968098	0.01979261	0.000398334	7.45E-07	9.39E-06	7.09E-06	3.32E-07	4.59E-07	1274.575203	0	50.39061976	0
Sacramento	2026 Construction and Mining - Misc - Tampers/Rammers	Aggregate	15	Gasoline	0.000905483	0.000914539	0.000996428	0.03512473	0.000702343	1.55E-06	0.000500597	0.000378229	5.68E-07	7.84E-07	2176.582011	0	121.211257	0
Sacramento	2026 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	100	Gasoline	0.000177136	0.000162929	0.000194927	0.012446258	0.000456053	0.214097502	1.49E-05	1.13E-05	2.07E-06	3.10E-06	8858.55	3025.85	3.46	190628.55
Sacramento	2026 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.1626367	0
Sacramento	2026 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.1626367	0
Sacramento	2026 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.1626367	0
Sacramento	2026 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25	Diesel	0.000332216	0.000399582	0.000477565	0.001363833	0.00252505	0.003650326	8.49E-05	6.42E-05	3.46E-08	2.98E-08	118.7333323	0	16.20998718	0
Sacramento	2026 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.1626367	0
Sacramento	2026 Construction and Mining - Misc - Trenchers	Aggregate	100	Gasoline	0.000233985	0.000215219	0.000257486	0.011163261	0.000609483	0.244522508	1.70E-05	1.29E-05	2.36E-06	3.48E-06	9938.95	2401.7	5.96	158512.2
Sacramento	2026 Construction and Mining - Misc - Trenchers	Aggregate	15	Gasoline	0.002438914	0.002463302	0.002683876	0.078925134	0.001819402	3.12E-06	0.001010152	0.000763226	1.26E-06	1.74E-06	4943.37302	0	36.07340772	0
Sacramento	2026 Construction and Mining - Misc - Trenchers	Aggregate	15	Diesel	9.45E-05	0.000113707	0.000135898	0.000596439	0.000712076	0.001365052	2.50E-05	1.89E-05	1.30E-08	1.12E-08	44.40073111	0	13.65599123	0
Sacramento	2026 Construction and Mining - Misc - Trenchers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.042593216	0
Sacramento	2026 Construction and Mining - Misc - Trenchers	Aggregate	25	Gasoline	0.004192878	0.004234806	0.004614006	0.136360484	0.002738596	5.07E-06	0.00164426	0.00124233	2.17E-06	3.00E-06	8538.032374	0	27.96090872	0
Sacramento	2026 Construction and Mining - Misc - Trenchers	Aggregate	25	Diesel	0.000323556	0.000389166	0.000465116	0.001328281	0.002459228	0.003555171	8.27E-05	6.25E-05	3.37E-08	2.91E-08	115.6382314	0	11.59671825	0
Sacramento	2026 Construction and Mining - Misc - Trenchers	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.042593216	0
Sacramento	2026 Construction and Mining - Misc - Trenchers	Aggregate	50	Gasoline	0.000684434	0.000629542	0.000753178	0.053330425	0.000963593	0.338717225	2.34E-05	1.76E-05	4.12E-06	5.64E-06	16092.85	7223.35	17.96	216700.5
Sacramento	2026 Construction and Mining - Nurse Rig Other	Aggregate	175	Diesel	3.93E-07	4.76E-07	5.67E-07	6.00E-06	3.94E-06	0.001031598	2.98E-07	2.74E-07	9.77E-09	0	33.52194296	18.4590426	0.032803853	664.5255335
Sacramento	2026 Construction and Mining - Off-Highway Tractors	Aggregate	100	Diesel	0.000191142	0.000231281	0.000275244	0.002355138	0.001861029	0.380476764	0.000135745	0.000124885	3.60E-06	0	12363.65883	5951.454745	9.415613717	219677.6465
Sacramento	2026 Construction and Mining - Off-Highway Tractors	Aggregate	175	Diesel	0.00069628	0.000842499	0.001002644	0.012779587	0.00472023	2.059856875	0.000217251	0.000199871	1.95E-05	0	66935.40853	21067.66753	20.8324	1329284.267
Sacramento	2026 Construction and Mining - Off-Highway Tractors	Aggregate	300	Diesel	0.00032249	0.000390212	0.000464385	0.002147921	0.002503306	0.91837741	0.000114438	0.000105283	8.70E-06	0	29842.83417	6423.269904	8.139512637	600915.3859
Sacramento	2026 Construction and Mining - Off-Highway Tractors	Aggregate	50	Diesel	0.0005115	0.000618915	0.00073656	0.003921768	0.003183229	0.461314143	0.000159872	0.000147082	4.37E-06	0	14990.48355	16067.27066	26.37972668	257690.8359
Sacramento	2026 Construction and Mining - Off-Highway Tractors	Aggregate	600	Diesel	0.000735709	0.000890208	0.001059421	0.00517683	0.004009088	2.433377383	0.000187823	0.000172797	2.31E-05	0	79073.0226	9700.817746	10.57005621	1604616.416
Sacramento	2026 Construction and Mining - Off-Highway Tractors	Aggregate	75	Diesel	0.000243691	0.000294866	0.000350914	0.002438816	0.002551955	0.40194129	0.000108496	9.98E-05	3.81E-06	0	13061.15235	8703.417807	14.24466499	222560.4342
Sacramento	2026 Construction and Mining - Off-Highway Tractors	Aggregate	750	Diesel	5.96E-05	7.21E-05	8.58E-05	0.000445506	0.000335445	0.197066358	1.90E-05	1.75E-05	1.87E-06	0	6403.705683	505.6864938	0.689073025	128546.4718
Sacramento	2026 Construction and Mining - Off-Highway Tractors	Aggregate	9999	Diesel	4.73E-05	5.72E-05	6.81E-05	0.000358546	0.000733732	0.17774456	1.72E-05	1.58E-05	1.68E-06	0	5775.840492	181.4152027	0.230275426	125915.4361
Sacramento	2026 Construction and Mining - Off-Highway Trucks	Aggregate	100	Diesel	4.98E-06	6.02E-06	7.17E-06	6.29E-05	4.43E-05	0.010385392	2.96E-06	2.73E-06	9.84E-08	0	337.4751123	185.5025915	0.295234677	6017.694577
Sacramento	2026 Construction and Mining - Off-Highway Trucks	Aggregate	175	Diesel	0.000197027	0.000238403	0.000283719	0.003159275	0.001646804	0.532241081	8.67E-05	7.98E-05	5.04E-06	0	17295.26677	5740.555228	6.365191941	344199.158
Sacramento	2026 Construction and Mining - Off-Highway Trucks	Aggregate	300	Diesel	0.000472723	0.000571994	0.000680721	0.003122776	0.004057076	1.240154403	0.000201026	0.000184944	1.17E-05	0	40299.03368	9287.75607	12.6374387	810838.8347
Sacramento	2026 Construction and Mining - Off-Highway Trucks	Aggregate	50	Diesel	1.76E-05	2.12E-05	2.53E-05	0.000163657	0.000138698	0.019490286	6.25E-06	5.75E-06	1.85E-07	0	633.3402548	1057.047191	1.705800356	11293.4201
Sacramento	2026 Construction and Mining - Off-Highway Trucks	Aggregate	600	Diesel	0.002601742	0.003148108	0.003746508	0.019275318	0.014553452	9.108078059	0.000653966	0.000601649	8.63E-05	0	295968.5856	35998.1879	43.34866752	5935958.654
Sacramento	2026 Construction and Mining - Off-Highway Trucks	Aggregate	75	Diesel	1.22E-05	1.48E-05	1.76E-05	0.000140726	0.000131646	0.024352674	4.44E-06	4.08E-06	2.31E-07	0	791.3443756	463.3852729	0.853242161	11955.02441
Sacramento	2026 Construction and Mining - Off-Highway Trucks	Aggregate	750	Diesel	0.000319293	0.000386344	0.000459781	0.002566105	0.002609488	1.117454457	0.000117939	0.000108504	1.06E-05	0	36311.87754	3244.654181	5.631183202	848706.6433
Sacramento	2026 Construction and Mining - Off-Highway Trucks	Aggregate	9999	Diesel	0.001179963	0.001427755	0.001699147	0.008627323	0.019151105	4.274472397	0.000443193	0.000407738	4.05E-05	0	138899.7263	6567.847349	9.824923029	2969657.221
Sacramento	2026 Construction and Mining - Other Construction Equipment	Aggregate	100	Diesel	0.000149052	0.000180353	0.000214635	0.00210191	0.001576119	0.373398301	0.000112336	0.000103349	3.54E-06	0	12133.64294	5541.286569	17.03563424	199285.3491
Sacramento	2026 Construction and Mining - Other Construction Equipment	Aggregate	175	Diesel	0.000371207	0.00044916	0.000534538	0.006632469	0.003483803	1.173730272	0.000157886	0.000145255	1.11E-05	0	38140.56995	13374.62031	30.00057052	736530.5537
Sacramento	2026 Construction and Mining - Other Construction Equipment	Aggregate	300	Diesel	0.000334683	0.000404966	0.000481943	0.002657675	0.003190244	1.108109516	0.000146067	0.000134382	1.05E-05	0	36008.21205	7178.838492	18.65919015	700040.6299
Sacramento	2026 Construction and Mining - Other Construction Equipment	Aggregate	50	Diesel	0.000219144	0.000265164	0.000315567	0.001957849	0.001741933	0.277222017	7.59E-05	6.99E-05	2.63E-06	0	9008.377794	9272.386189	30.05263204	151732.0952
Sacramento	2026 Construction and Mining - Other Construction Equipment	Aggregate	600	Diesel	0.000868399	0.001050763	0.001250495	0.00794208	0.007063921	3.471701672	0.000312134	0.000287163	3.29E-05	0	112813.5515	13354.98002	32.11435582	2274430.278
Sacramento	2026 Construction and Mining - Other Construction Equipment	Aggregate	75	Diesel	0.00020682	0.000250252	0.000297821	0.002712627	0.002757956	0.478728016	8.88E-05	8.17E-05	4.53E-06	0	15556.35041	9434.75837	29.00799847	257214.824
Sacramento	2026 Construction and Mining - Other Construction Equipment	Aggregate	750	Diesel	0.000110888	0.000134175	0.000159679	0.001066554	0.000918757	0.547612601	4.12E-05	3.79E-05	5.19E-06	0	17794.76703	1325.059905	3.512832327	359861.3892
Sacramento	2026 Construction and Mining - Other Construction Equipment	Aggregate	9999	Diesel	0.000150084	0.000181601	0.000216121	0.001408133	0.003045934	0.720830485	6.76E-05	6.21E-05	6.83E-06	0	23423.51236	976.9223091	2.56067149	478585.8071
Sacramento	2026 Construction and Mining - Other Material Handling Equipment	Aggregate	100	Diesel	5.49E-05	6.64E-05	7.90E-05	0.000690773	0.000555379	0.117904763	4.01E-05	3.69E-05	1.12E-06	0	3831.335834	1871.023023	4.790632632	66023.18559
Sacramento	2026 Construction and Mining - Other Material Handling Equipment	Aggregate	175	Diesel	0.000165222	0.000199919	0.00023792	0.002806686	0.001552055	0.484440948	7.21E-05	6.64E-05	4.59E-06	0	15741.99313	5964.483013	11.64828875	308592.8586
Sacramento	2026 Construction and Mining - Other Material Handling Equipment	Aggregate	300	Diesel	0.000146231	0.000176939	0.000210572	0.001101287	0.001197911	0.494966772	5.50E-05	5.06E-05	4.69E-06	0	16084.0316	3413.945966	7.285249266	318928.1519
Sacramento	2026 Construction and Mining - Other Material Handling Equipment	Aggregate	50	Diesel	3.65E-05	4.41E-05	5.25E-05	0.000374344	0.000325567	0.05507352	1.28E-05	1.17E-05	5.22E-07	0	1789.623648	2112.22087	6.103113187	28645.19609
Sacramento	2026 Construction and Mining - Other Material Handling Equipment	Aggregate	600	Diesel	0.000221604	0.00026814	0.000319109	0.001849777	0.001591125	0.875994956	6.93E-05	6.37E-05	8.30E-06	0	28465.60893	3574.015357	7.021733797	566864.2709
Sacramento	2026 Construction and Mining - Other Material Handling Equipment	Aggregate	75	Diesel	2.99E-05	3.62E-05	4.31E-05	0.000387232	0.000393492	0.065734847	1.28E-05	1.18E-05	6.23E-07	0	2136.065333	1447.70092	3.838499316	37395.882
Sacramento	2026 Construction and Mining - Other Material Handling Equipment	Aggregate	750	Diesel	3.16E-05	3.83E-05	4.55E-05	0.000323928	0.000292809	0.095449582	1.61E-05	1.48E-05	9.04E-07	0	3101.650818	224.4719952	0.623273207	61485.88007
Sacramento	2026 Construction and Mining - Other Material Handling Equipment	Aggregate	9999	Diesel	7.23E-05	8.74E-05	0.000104065	0.00061749	0.001385482	0.32302218	3.20E-05	2.94E-05	3.06E-06	0	10496.66211	537.1361379	1.148134855	208081.6138
Sacramento	2026 Construction and Mining - Pavers	Aggregate	100	Diesel	0.000101422	0.000122721	0.000146048	0.001379177	0.001056965	0.23454532	7.35E-05	6.76E-05	2.22E-06	0	7621.591104	3786.864928	8.694729156	133219.0351
Sacramento	2026 Construction and Mining - Pavers	Aggregate	175	Diesel	0.000257746	0.000311872	0.000371154	0.004588586	0.002205443	0.779619169	9.71E-05	8.93E-05	7.39E-06	0	25333.8609	8524.12926	15.39023679	500948.031
Sacramento	2026 Construction and Mining - Pavers	Aggregate	300	Diesel	0.000250811	0.000303481	0.000361167	0.001902735	0.001832803	0.943499818	7.21E-05	6.63E-05	8.94E-06	0	30659.19119	6358.690033	11.38452155	608372.3569
Sacramento	2026 Construction and Mining - Pavers	Aggregate	50	Diesel	5.42E-05	6.56E-05	7.81E-05	0.000356458	0.000294042	0.044501001	1.61E-05	1.49E-05	4.22E-07	0	1446.067791	1554.611473	4.36340109	24155.0199
Sacramento	2026 Construction and Mining - Pavers	Aggregate	600	Diesel	4.06E-05	4.91E-05	5.85E-05	0.000323379	0.000257686	0.165242471	1.13E-05	1.04E-05	1.57E-06	0	5369.58294	685.4457126	1.181974421	108869.4898
Sacramento	2026 Construction and Mining - Pavers	Aggregate	75	Diesel	0.000120479	0.000145779	0.000173489	0.001292725	0.001398667	0.217065077	5.48E-05	5.04E-05	2.06E-06	0	7053.567537	4407.886915	11.31865667	122502.1915
Sacramento	2026 Construction and Mining - Pavers	Aggregate	750	Diesel	1.27E-06	1.54E-06	1.83E-06	1.32E-05	4.76E-06	0.006842712	3.51E-07	3.23E-07	6.48E-08	0	222.3551104	16.65864853	0.032803853	4407.878402
Sacramento	2026 Construction and Mining - Pavers	Aggregate	9999	Diesel	4.22E-05	5.10E-05	6.07E-05	0.000304367	0.000768988	0.15686989	1.79E-05	1.65E-05	1.49E-06	0	5097.514442	123.8297213	0.229626971	101051.0789
Sacramento	2026 Construction and Mining - Paving Equipment	Aggregate	100	Diesel	5.04E-05	6.09E-05	7.25E-05	0.000762636	0.000526946	0.135611477	3.68E-05	3.38E-05	1.28E-06	0	4406.718598	2320.235068	5.416925336	72102.15458
Sacramento	2026 Construction and Mining - Paving Equipment	Aggregate	175	Diesel	0.000249289	0.000301639	0.000358976	0.005098487	0.001861219	0.865399477	8.31E-05	7.64E-05	8.20E-06	0	28121.30699	11401.35736	17.48912563	554278.7177
Sacramento	2026 Construction and Mining - Paving Equipment	Aggregate	300	Diesel	0.000107271	0.000129798	0.00015447	0.000821901	0.000830751	0.389213252	3.52E-05	3.24E-05	3.69E-06	0	12647.55252	2976.743997	5.54703802	250339.0722
Sacramento	2026 Construction and Mining - Paving Equipment	Aggregate	50	Diesel	7.24E-05	8.76E-05	0.000104223	0.000778045	0.000650156	0.10936984	2.23E-05	2.06E-05	1.04E-06	0	3553.99202	4656.560522	12.07252499	61778.29232
Sacramento	2026 Construction and Mining - Paving Equipment	Aggregate	600	Diesel	0.000221178	0.000267625	0.000318496	0.001821932	0.001130553	0.918611435	5.82E-05	5.35E-05	8.70E-06	0	29850.43886	4645.546365	8.008096801	595519.131
Sacramento	2026 Construction and Mining - Paving Equipment	Aggregate	75	Diesel	4.04E-05	4.88E-05	5.81E-05	0.000479696	0.000496607	0.080849587	1.66E-05	1.52E-05	7.66E-07	0	2627.221444	1940.573396	4.756711741	45740.3165
Sacramento	2026 Construction and Mining - Paving Equipment	Aggregate	750	Diesel	4.29E-05	5.19E-05	6.17E-05	0.000387581	0.000277333	0.199152524	1.54E-05	1.42E-05	1.89E-06	0	6471.496016	560.131665	1.082527149	128288.3378
Sacramento	2026 Construction and Mining - Paving Equipment	Aggregate	9999	Diesel	3.32E-05	4.02E-05	4.79E-05	0.000239295	0.000562942	0.124819825	1.38E-05	1.27E-05	1.18E-06	0	4056.041998	223.5936627	0.426450089	80405.34749
Sacramento	2026 Construction and Mining - Rollers	Aggregate	100	Diesel	0.000297729	0.000360252	0.00042873	0.003898213	0.003030076	0.67849981	0.000219786	0.000202204	6.43E-06	0	22047.96969	11219.5269	29.60306688	365678.2015
Sacramento	2026 Construction and Mining - Rollers	Aggregate	175	Diesel	0.001109004	0.001341895	0.001596966	0.021850792	0.00887028	3.757855802	0.000391296	0.000359992	3.56E-05	0	122112.1799	47572.41744	80.19958658	2399571.662
Sacramento	2026 Construction and Mining - Rollers	Aggregate	300	Diesel	9.99E-05	0.000120841	0.000143811	0.000810119	0.000901339	0.324661322	4.31E-05	3.96E-05	3.08E-06	0	10549.92631	2413.902388	5.324387327	205011.8287
Sacramento	2026 Construction and Mining - Rollers	Aggregate	50	Diesel	0.000885409	0.001071345	0.001274989	0.007908504	0.006601322	1.111252024	0.00027611	0.000254022	1.05E-05	0	36110.3284	44367.50619	122.7084321	589262.4977
Sacramento	2026 Construction and Mining - Rollers	Aggregate	600	Diesel	6.73E-05	8.14E-05	9.69E-05	0.000606339	0.000513669	0.257084164	2.28E-05	2.10E-05	2.44E-06	0	8353.994774	1140.107873	2.30047826	172464.6839
Sacramento	2026 Construction and Mining - Rollers	Aggregate	75	Diesel	0.000205205	0.000248299	0.000295496	0.002552631	0.00261553	0.440248307	8.51E-05	7.82E-05	4.17E-06	0	14305.94555	9340.64484	24.93583964	239623.5432
Sacramento	2026 Construction and Mining - Rollers	Aggregate	750	Diesel	1.64E-06	1.98E-06	2.36E-06	1.17E-05	1.45E-05	0.006311883	6.05E-07	5.57E-07	5.98E-08	0	205.1057432	14.92304879	0.032803853	4065.933874
Sacramento	2026 Construction and Mining - Rollers	Aggregate	9999	Diesel	6.55E-05	7.93E-05	9.43E-05	0.000537556	0.001110533	0.280982474	2.71E-05	2.49E-05	2.66E-06	0	9130.574512	203.9334697	0.426450089	181000.8419
Sacramento	2026 Construction and Mining - Rough Terrain Forklifts	Aggregate	100	Diesel	0.000296305	0.000358529	0.000426679	0.005314571	0.003326575	0.957810581	0.000229933	0.000211538	9.07E-06	0	31124.22192	15185.5981	47.58463689	523151.4614
Sacramento	2026 Construction and Mining - Rough Terrain Forklifts	Aggregate	175	Diesel	0.001577806	0.001909145	0.00227204	0.034215043	0.013445642	5.993187971	0.000546158	0.000502465	5.68E-05	0	194749.6887	79409.88108	166.9217493	3843288.373
Sacramento	2026 Construction and Mining - Rough Terrain Forklifts	Aggregate	300	Diesel	1.24E-05	1.50E-05	1.78E-05	0.000111698	0.000104928	0.051441791	4.53E-06	4.17E-06	4.87E-07	0	1671.609969	388.3618765	1.017339316	32457.62703
Sacramento	2026 Construction and Mining - Rough Terrain Forklifts	Aggregate	50	Diesel	2.01E-05	2.44E-05	2.90E-05	0.000215863	0.000193322	0.033345183	6.34E-06	5.84E-06	3.16E-07	0	1083.557534	1093.957577	4.067677772	19321.479
Sacramento	2026 Construction and Mining - Rough Terrain Forklifts	Aggregate	600	Diesel	2.86E-06	3.46E-06	4.12E-06	2.72E-05	2.13E-05	0.014545608	7.17E-07	6.59E-07	1.38E-07	0	472.6620646	69.40086347	0.164031366	9359.517544
Sacramento	2026 Construction and Mining - Rough Terrain Forklifts	Aggregate	75	Diesel	0.000418918	0.000506891	0.000603243	0.007589235	0.006826197	1.33356035	8.91E-05	8.20E-05	1.26E-05	0	43334.27623	27065.53856	83.09806968	761798.5146
Sacramento	2026 Construction and Mining - Rough Terrain Forklifts	Aggregate	750	Diesel	6.74E-07	8.16E-07	9.71E-07	8.97E-06	1.54E-06	0.004786773	1.25E-07	1.15E-07	4.53E-08	0	155.5470204	12.3279303	0.032815954	3081.982575
Sacramento	2026 Construction and Mining - Rubber Tired Dozers	Aggregate	100	Diesel	2.36E-05	2.86E-05	3.40E-05	0.000273234	0.000223994	0.04679443	1.84E-05	1.70E-05	4.43E-07	0	1520.593175	727.1990892	1.64136057	25213.6623
Sacramento	2026 Construction and Mining - Rubber Tired Dozers	Aggregate	175	Diesel	6.00E-05	7.27E-05	8.65E-05	0.000851911	0.000581433	0.141999847	2.82E-05	2.59E-05	1.35E-06	0	4614.30981	1593.937871	2.723931954	90983.79184
Sacramento	2026 Construction and Mining - Rubber Tired Dozers	Aggregate	300	Diesel	5.93E-05	7.17E-05	8.54E-05	0.000448433	0.000448348	0.176316468	2.37E-05	2.18E-05	1.67E-06	0	5729.434402	1253.557911	2.19969969	114158.8465
Sacramento	2026 Construction and Mining - Rubber Tired Dozers	Aggregate	50	Diesel	4.53E-06	5.48E-06	6.52E-06	6.03E-05	3.99E-05	0.013037891	1.34E-06	1.23E-06	1.24E-07	0	423.6685545	227.2665844	0.592721399	3535.395523
Sacramento	2026 Construction and Mining - Rubber Tired Dozers	Aggregate	600	Diesel	0.000292305	0.00035369	0.00042092	0.002786868	0.002364361	0.931371253	0.000118327	0.000108861	8.82E-06	0	30265.07137	4349.294938	8.034519312	678120.9929
Sacramento	2026 Construction and Mining - Rubber Tired Dozers	Aggregate	75	Diesel	1.16E-05	1.40E-05	1.67E-05	0.000130675	0.000141604	0.023904298	5.59E-06	5.15E-06	2.26E-07	0	776.7743416	458.042412	0.985800231	11323.01464
Sacramento	2026 Construction and Mining - Rubber Tired Dozers	Aggregate	750	Diesel	6.74E-06	8.16E-06	9.71E-06	5.89E-05	4.40E-05	0.027984592	2.26E-06	2.08E-06	2.65E-07	0	909.3641994	84.30728144	0.164435803	22534.05931
Sacramento	2026 Construction and Mining - Rubber Tired Dozers	Aggregate	9999	Diesel	1.94E-05	2.35E-05	2.80E-05	0.000159102	0.00041038	0.078645964	1.02E-05	9.41E-06	7.45E-07	0	2555.614329	96.88605332	0.164019265	50661.47203
Sacramento	2026 Construction and Mining - Rubber Tired Loaders	Aggregate	100	Diesel	0.000336369	0.000407006	0.000484371	0.004846861	0.003364902	0.819996171	0.000248609	0.00022872	7.77E-06	0	26645.91863	14727.77974	27.37147203	457728.6775
Sacramento	2026 Construction and Mining - Rubber Tired Loaders	Aggregate	175	Diesel	0.002264463	0.00274	0.003260827	0.036547816	0.019440285	6.128887287	0.000934612	0.000859843	5.81E-05	0	199159.2617	74181.95715	102.2429763	3936192.354
Sacramento	2026 Construction and Mining - Rubber Tired Loaders	Aggregate	300	Diesel	0.003415901	0.004133241	0.004918898	0.025036449	0.023381453	11.44404181	0.001024265	0.000942324	0.000108407	0	371876.1351	91253.95099	129.419087	7405126.761
Sacramento	2026 Construction and Mining - Rubber Tired Loaders	Aggregate	50	Diesel	7.30E-05	8.83E-05	0.000105064	0.000535616	0.000421223	0.064590502	2.30E-05	2.12E-05	6.12E-07	0	2098.879642	2470.584446	5.052979408	35054.98911
Sacramento	2026 Construction and Mining - Rubber Tired Loaders	Aggregate	600	Diesel	0.002459169	0.002975595	0.003541204	0.019320681	0.014833834	8.779892251	0.000676303	0.000622199	8.32E-05	0	285304.1305	41666.96921	57.50409713	5754236.442
Sacramento	2026 Construction and Mining - Rubber Tired Loaders	Aggregate	75	Diesel	0.000267543	0.000323728	0.000385263	0.003006707	0.00305998	0.501018028	0.000110351	0.000101523	4.75E-06	0	16280.66823	11599.69229	22.54342014	277395.1418
Sacramento	2026 Construction and Mining - Rubber Tired Loaders	Aggregate	750	Diesel	6.33E-05	7.67E-05	9.12E-05	0.000609624	0.000537964	0.222840402	2.53E-05	2.33E-05	2.11E-06	0	7241.237746	774.5409573	1.58508736	189981.2365
Sacramento	2026 Construction and Mining - Rubber Tired Loaders	Aggregate	9999	Diesel	0.000178423	0.000215892	0.000256929	0.001444409	0.003117167	0.741783525	6.72E-05	6.18E-05	7.03E-06	0	24104.38506	1471.696135	2.331893317	503035.9415
Sacramento	2026 Construction and Mining - Scrapers	Aggregate	100	Diesel	8.97E-06	1.09E-05	1.29E-05	0.000133472	9.79E-05	0.024459635	6.34E-06	5.83E-06	2.32E-07	0	794.8201157	316.0034327	1.017915655	12506.34495
Sacramento	2026 Construction and Mining - Scrapers	Aggregate	175	Diesel	0.000116685	0.000141189	0.000168026	0.001283079	0.001320886	0.208286364	7.48E-05	6.88E-05	1.97E-06	0	6768.301751	1764.899321	6.169819696	126644.3004
Sacramento	2026 Construction and Mining - Scrapers	Aggregate	300	Diesel	0.000911664	0.001103113	0.001312796	0.007719455	0.0093174	2.90825165	0.00045473	0.000418352	2.75E-05	0	94504.14476	15728.17815	48.73136473	1804443.422
Sacramento	2026 Construction and Mining - Scrapers	Aggregate	50	Diesel	2.49E-06	3.01E-06	3.58E-06	1.56E-05	1.13E-05	0.002628493	6.86E-07	6.31E-07	2.49E-08	0	85.41333577	39.96806853	0.164393037	794.6163237
Sacramento	2026 Construction and Mining - Scrapers	Aggregate	600	Diesel	0.002732067	0.003305801	0.003934176	0.032124386	0.025641586	10.21059186	0.001186804	0.001091859	9.67E-05	0	331794.9638	33470.05064	101.7581132	7004343.691
Sacramento	2026 Construction and Mining - Scrapers	Aggregate	75	Diesel	1.27E-05	1.53E-05	1.82E-05	0.000113881	0.000146205	0.019837733	7.63E-06	7.02E-06	1.88E-07	0	644.6305898	336.4207854	1.279940926	10471.59035

Sacramento	2026 Construction and Mining - Scrapers	Aggregate	750	Diesel	0.000310201	0.000375344	0.00044669	0.003834166	0.00256042	1.610086647	0.000116393	0.000107082	1.53E-05	0	52320.04649	4149.520248	15.3664285	1228240.575
Sacramento	2026 Construction and Mining - Skid Steer Loaders	Aggregate	100	Diesel	0.001190738	0.001440793	0.001714663	0.021876909	0.013812631	3.707769439	0.000946888	0.000871137	3.51E-05	0	120484.6148	68748.69538	146.743708	2131128.047
Sacramento	2026 Construction and Mining - Skid Steer Loaders	Aggregate	175	Diesel	0.000272304	0.000329488	0.000392118	0.006450581	0.001764872	1.078425254	5.80E-05	5.34E-05	1.02E-05	0	35043.61679	16704.84333	25.42507604	692240.3653
Sacramento	2026 Construction and Mining - Skid Steer Loaders	Aggregate	300	Diesel	2.70E-05	3.27E-05	3.89E-05	0.000194139	0.000197593	0.08811069	8.83E-06	8.13E-06	8.35E-07	0	2863.172258	740.1200935	1.377761826	56959.91855
Sacramento	2026 Construction and Mining - Skid Steer Loaders	Aggregate	50	Diesel	0.000849971	0.001028465	0.001223958	0.007595755	0.00633942	1.042984148	0.000255984	0.000235505	9.88E-06	0	33891.95185	37276.21474	96.52187023	579039.0541
Sacramento	2026 Construction and Mining - Skid Steer Loaders	Aggregate	600	Diesel	1.57E-05	1.90E-05	2.26E-05	0.000117808	9.35E-05	0.061224059	4.21E-06	3.87E-06	5.80E-07	0	1989.486466	225.5606996	0.393646236	39438.78065
Sacramento	2026 Construction and Mining - Skid Steer Loaders	Aggregate	75	Diesel	0.002989624	0.003617445	0.004305058	0.043127332	0.039191301	7.277441216	0.000795025	0.000731423	6.89E-05	0	236481.722	168440.4423	376.0207401	4177480.937
Sacramento	2026 Construction and Mining - Skid Steer Loaders	Aggregate	750	Diesel	1.98E-06	2.40E-06	2.85E-06	1.13E-05	2.50E-05	0.005991622	7.71E-07	7.10E-07	5.68E-08	0	194.6987937	16.24834001	0.032803853	3859.630687
Sacramento	2026 Construction and Mining - Skid Steer Loaders	Aggregate	9999	Diesel	0.000105974	0.000128228	0.000152602	0.000915115	0.001847805	0.450284908	4.30E-05	3.95E-05	4.27E-06	0	14632.08664	344.5818827	0.721684766	290060.6088
Sacramento	2026 Construction and Mining - Spray Truck	Aggregate	100	Diesel	4.23E-06	5.11E-06	6.08E-06	4.41E-05	3.79E-05	0.00725936	3.12E-06	2.87E-06	6.88E-08	0	235.894161	140.1183112	0.262430824	4206.351703
Sacramento	2026 Construction and Mining - Spray Truck	Aggregate	175	Diesel	8.10E-06	9.80E-06	1.17E-05	0.000146309	6.31E-05	0.023140976	3.26E-06	3.00E-06	2.19E-07	0	751.9700459	256.0576022	0.426450089	14906.75217
Sacramento	2026 Construction and Mining - Spray Truck	Aggregate	300	Diesel	9.44E-06	1.14E-05	1.36E-05	5.43E-05	8.77E-05	0.021597895	4.37E-06	4.02E-06	2.05E-07	0	701.8273664	146.3656896	0.229797962	13794.20365
Sacramento	2026 Construction and Mining - Spray Truck	Aggregate	50	Diesel	1.16E-05	1.40E-05	1.67E-05	0.000136875	0.000118919	0.016462945	5.30E-06	4.88E-06	1.56E-07	0	534.966256	737.6110706	1.508977238	9539.262067
Sacramento	2026 Construction and Mining - Spray Truck	Aggregate	600	Diesel	2.68E-05	3.25E-05	3.86E-05	0.00022522	0.000154341	0.088051564	7.68E-06	7.06E-06	8.34E-07	0	2861.250931	360.3137832	0.524861648	56720.28927
Sacramento	2026 Construction and Mining - Spray Truck	Aggregate	75	Diesel	4.93E-06	5.96E-06	7.10E-06	6.14E-05	6.16E-05	0.010020616	1.92E-06	1.77E-06	9.49E-08	0	325.6216716	239.9112182	0.459253942	5806.329698
Sacramento	2026 Construction and Mining - Spreader Tractor Trailer	Aggregate	50	Diesel	6.97E-07	8.43E-07	1.00E-06	7.17E-06	6.19E-06	0.000952388	1.85E-07	1.70E-07	9.02E-09	0	30.94800012	57.52296054	0.131215412	551.8499163
Sacramento	2026 Construction and Mining - Spreader Tractor Trailer	Aggregate	600	Diesel	5.60E-06	6.78E-06	8.07E-06	3.84E-05	5.28E-05	0.019995358	1.79E-06	1.65E-06	1.89E-07	0	649.7526628	104.3795447	0.196823118	12880.43582
Sacramento	2026 Construction and Mining - Spreader Truck	Aggregate	100	Diesel	4.77E-06	5.77E-06	6.87E-06	6.93E-05	5.37E-05	0.01160558	4.20E-06	3.86E-06	1.10E-07	0	377.1253434	192.94756	0.426450089	6724.718509
Sacramento	2026 Construction and Mining - Spreader Truck	Aggregate	175	Diesel	3.77E-06	4.56E-06	5.42E-06	8.79E-05	1.78E-05	0.013943521	9.72E-07	8.94E-07	1.32E-07	0	453.0971455	169.2378312	0.196823118	8982.01583
Sacramento	2026 Construction and Mining - Spreader Truck	Aggregate	300	Diesel	3.14E-06	3.80E-06	4.53E-06	2.01E-05	2.25E-05	0.009813847	8.80E-07	8.09E-07	9.30E-08	0	318.9026685	64.44312477	0.098411559	6321.798417
Sacramento	2026 Construction and Mining - Spreader Truck	Aggregate	50	Diesel	2.02E-07	2.45E-07	2.91E-07	2.39E-06	1.77E-06	0.000278848	6.60E-08	6.07E-08	2.64E-09	0	9.061219779	17.00792963	0.032803853	161.5753314
Sacramento	2026 Construction and Mining - Spreader Truck	Aggregate	600	Diesel	2.73E-05	3.31E-05	3.94E-05	0.000237469	0.000185235	0.092778466	9.17E-06	8.43E-06	8.79E-07	0	3014.852428	389.1562938	0.65607706	59765.22365
Sacramento	2026 Construction and Mining - Spreader Truck	Aggregate	75	Diesel	5.26E-07	6.36E-07	7.57E-07	9.28E-06	8.21E-06	0.001624506	2.65E-07	2.44E-07	1.54E-08	0	52.78862187	33.47444606	0.065607706	941.3014233
Sacramento	2026 Construction and Mining - Surfacing Equipment	Aggregate	100	Diesel	9.10E-06	1.10E-05	1.31E-05	0.000146884	9.03E-05	0.028112371	6.78E-06	6.24E-06	2.66E-07	0	913.5164094	486.206887	1.019074418	12599.10496
Sacramento	2026 Construction and Mining - Surfacing Equipment	Aggregate	175	Diesel	3.65E-05	4.42E-05	5.26E-05	0.000581493	0.00033632	0.09960473	1.69E-05	1.56E-05	9.44E-07	0	3236.673083	1583.525851	2.461341596	63154.7872
Sacramento	2026 Construction and Mining - Surfacing Equipment	Aggregate	300	Diesel	3.81E-05	4.61E-05	5.48E-05	0.000272051	0.000339743	0.115595321	1.51E-05	1.39E-05	1.10E-06	0	3756.290108	1026.346402	1.873122224	73383.05699
Sacramento	2026 Construction and Mining - Surfacing Equipment	Aggregate	50	Diesel	1.25E-05	1.51E-05	1.80E-05	9.01E-05	7.32E-05	0.011723807	3.82E-06	3.51E-06	1.11E-07	0	380.9671474	527.3197797	1.115829108	5824.468552
Sacramento	2026 Construction and Mining - Surfacing Equipment	Aggregate	600	Diesel	0.000177295	0.000214527	0.000255304	0.00141234	0.001100833	0.656716111	5.16E-05	4.74E-05	6.22E-06	0	21340.10459	3636.525013	5.611838387	426722.8137
Sacramento	2026 Construction and Mining - Surfacing Equipment	Aggregate	75	Diesel	9.68E-06	1.17E-05	1.39E-05	0.00011734	0.000110899	0.020310007	3.53E-06	3.24E-06	1.92E-07	0	659.9772278	531.3291928	1.083474369	10188.9428
Sacramento	2026 Construction and Mining - Surfacing Equipment	Aggregate	750	Diesel	6.84E-05	8.28E-05	9.85E-05	0.000531235	0.000509647	0.277756221	2.46E-05	2.26E-05	2.63E-06	0	9025.736868	941.696352	1.673172776	179442.3308
Sacramento	2026 Construction and Mining - Surfacing Equipment	Aggregate	9999	Diesel	2.95E-05	3.57E-05	4.24E-05	0.000250488	0.000519507	0.122064057	1.16E-05	1.07E-05	1.16E-06	0	3966.492843	328.9413477	0.658718385	89725.77439
Sacramento	2026 Construction and Mining - Tank Truck	Aggregate	100	Diesel	6.40E-07	7.74E-07	9.21E-07	1.80E-05	6.89E-06	0.00285907	5.86E-07	5.39E-07	2.71E-08	0	92.90598932	51.90022263	0.065607706	1656.655106
Sacramento	2026 Construction and Mining - Tank Truck	Aggregate	175	Diesel	1.88E-06	2.27E-06	2.71E-06	2.45E-05	2.11E-05	0.004050106	1.05E-06	9.65E-07	3.84E-08	0	131.6089038	51.0966673	0.164019265	2608.962048
Sacramento	2026 Construction and Mining - Tank Truck	Aggregate	300	Diesel	6.29E-05	7.61E-05	9.06E-05	0.000420355	0.000400334	0.197715551	1.66E-05	1.52E-05	1.87E-06	0	6424.801333	1461.192424	2.066642739	127362.6812
Sacramento	2026 Construction and Mining - Tank Truck	Aggregate	600	Diesel	2.48E-05	3.00E-05	3.57E-05	0.000159109	0.000166837	0.079412948	7.89E-06	7.26E-06	7.52E-07	0	2580.537614	375.8717509	0.557665501	51155.54121
Sacramento	2026 Construction and Mining - Tanker Truck Trailer	Aggregate	100	Diesel	1.02E-06	1.23E-06	1.47E-06	2.71E-05	1.16E-05	0.004241703	9.74E-07	8.96E-07	4.02E-08	0	137.8348657	76.99891327	0.098411559	2457.805312
Sacramento	2026 Construction and Mining - Tanker Truck Trailer	Aggregate	175	Diesel	2.27E-06	2.75E-06	3.27E-06	3.60E-05	1.58E-05	0.005868783	6.50E-07	5.98E-07	5.56E-08	0	190.7071392	70.16508567	0.098411559	3780.501732
Sacramento	2026 Construction and Mining - Tanker Truck Trailer	Aggregate	300	Diesel	4.73E-07	5.72E-07	6.81E-07	4.67E-06	5.80E-07	0.002323652	4.94E-08	4.55E-08	2.20E-08	0	75.50747057	21.64299841	0.032803853	1496.82977
Sacramento	2026 Construction and Mining - Tanker Truck Trailer	Aggregate	50	Diesel	1.07E-06	1.30E-06	1.55E-06	9.43E-06	8.10E-06	0.00120766	2.69E-07	2.48E-07	1.14E-08	0	39.24310733	51.63042021	0.098411559	699.7642953
Sacramento	2026 Construction and Mining - Tanker Truck Trailer	Aggregate	600	Diesel	1.36E-06	1.65E-06	1.96E-06	1.30E-05	1.83E-06	0.006661972	1.41E-07	1.30E-07	6.31E-08	0	216.4819534	23.87588347	0.032803853	4291.451296
Sacramento	2026 Construction and Mining - Tanker Truck Trailer	Aggregate	75	Diesel	6.35E-07	7.68E-07	9.14E-07	8.83E-06	7.27E-06	0.001420887	8.36E-08	7.69E-08	1.35E-08	0	46.17197061	34.6599548	0.065607706	823.3164669
Sacramento	2026 Construction and Mining - Telescopic Handler	Aggregate	100	Diesel	1.16E-05	1.41E-05	1.68E-05	0.000334133	0.000159335	0.059027057	1.09E-05	1.00E-05	5.59E-07	0	1918.094517	1229.342737	3.674031536	34202.54279
Sacramento	2026 Construction and Mining - Telescopic Handler	Aggregate	175	Diesel	7.37E-05	8.92E-05	0.000106156	0.001881561	0.000578482	0.328147944	2.08E-05	1.92E-05	3.11E-06	0	10663.22468	4956.598762	10.16919443	211383.4833
Sacramento	2026 Construction and Mining - Telescopic Handler	Aggregate	300	Diesel	1.79E-06	2.17E-06	2.58E-06	1.87E-05	3.60E-06	0.009448184	2.35E-07	2.16E-07	8.95E-08	0	307.0203965	86.42158772	0.196823118	6086.249029
Sacramento	2026 Construction and Mining - Telescopic Handler	Aggregate	50	Diesel	1.99E-06	2.41E-06	2.87E-06	2.59E-05	2.33E-05	0.004277556	4.80E-07	4.41E-07	4.05E-08	0	138.9999155	181.7255112	0.65607706	2478.579923
Sacramento	2026 Construction and Mining - Telescopic Handler	Aggregate	600	Diesel	7.31E-07	8.84E-07	1.05E-06	8.41E-06	1.19E-06	0.00444122	8.91E-08	8.19E-08	4.21E-08	0	144.3182245	15.02576953	0.032803853	2860.906518
Sacramento	2026 Construction and Mining - Telescopic Handler	Aggregate	75	Diesel	3.47E-05	4.19E-05	4.99E-05	0.000686931	0.000603329	0.120795001	5.14E-06	4.73E-06	1.14E-06	0	3925.254623	2878.431389	8.594609486	69993.26052
Sacramento	2026 Construction and Mining - Telescopic Handler	Aggregate	750	Diesel	7.44E-07	9.01E-07	1.07E-06	9.16E-06	1.52E-06	0.004881994	1.50E-07	1.38E-07	4.62E-08	0	158.6412613	12.33270842	0.032803853	3144.840646
Sacramento	2026 Construction and Mining - Telescopic Handler	Aggregate	9999	Diesel	7.75E-06	9.37E-06	1.12E-05	6.98E-05	0.000201129	0.037320811	3.88E-06	3.57E-06	3.54E-07	0	1212.746256	23.56960265	0.065607706	24040.9947
Sacramento	2026 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	100	Diesel	0.004414479	0.00534152	0.00635685	0.066941434	0.045262331	11.37542435	0.003216652	0.00295932	0.000107757	0	369646.399	199361.6581	415.5871596	6454422.123
Sacramento	2026 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	175	Diesel	0.00372269	0.004504455	0.005360674	0.070659386	0.029241506	11.87680457	0.001248808	0.001148903	0.000112507	0	385938.8365	162328.6711	246.5474219	7596594.123
Sacramento	2026 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	25	Diesel	1.97E-07	2.39E-07	2.84E-07	2.12E-06	1.62E-06	0.000239594	1.04E-07	9.57E-08	2.27E-09	0	7.785645661	16.31373733	0.065607706	138.8299047
Sacramento	2026 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	300	Diesel	0.00145945	0.001765934	0.002101608	0.01085922	0.010782934	5.014046006	0.000466829	0.000429483	4.75E-05	0	162932.2998	39842.12681	67.8635423	3230468.629
Sacramento	2026 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	50	Diesel	0.001207645	0.00146125	0.001739008	0.008636399	0.007055638	1.096197328	0.000375658	0.000345605	1.04E-05	0	35621.12342	42004.27893	105.978413	580934.4906
Sacramento	2026 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	600	Diesel	0.001031277	0.001247845	0.001485039	0.008562556	0.00699848	3.799471653	0.00031171	0.000286774	3.60E-05	0	123464.4943	17189.6663	28.91472313	2480349.638
Sacramento	2026 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	75	Diesel	0.002508083	0.003034781	0.00361164	0.02893633	0.029920018	4.863183641	0.001017305	0.000935921	4.61E-05	0	158030.0009	110963.3004	250.3120878	2715752.106
Sacramento	2026 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	750	Diesel	4.72E-05	5.71E-05	6.79E-05	0.000427189	0.000367477	0.175432477	1.94E-05	1.78E-05	1.66E-06	0	5700.708939	444.521579	0.853398284	114827.2005
Sacramento	2026 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	9999	Diesel	0.000232937	0.000281854	0.00033543	0.002013619	0.0036871	0.695581223	0.000109525	0.000100763	6.59E-06	0	22603.03319	628.735938	1.14850471	454582.121
Sacramento	2026 Construction and Mining - Trenchers	Aggregate	100	Diesel	7.23E-05	8.75E-05	0.000104168	0.000760961	0.000645185	0.129954974	4.85E-05	4.47E-05	1.23E-06	0	4222.909551	1649.747176	5.118949143	72166.57373
Sacramento	2026 Construction and Mining - Trenchers	Aggregate	175	Diesel	7.66E-05	9.27E-05	0.000110321	0.001209066	0.000732401	0.209535325	3.53E-05	3.25E-05	1.98E-06	0	6808.886943	2116.404022	5.119202905	131886.1964
Sacramento	2026 Construction and Mining - Trenchers	Aggregate	300	Diesel	4.59E-05	5.55E-05	6.61E-05	0.00031813	0.000495165	0.122592081	2.31E-05	2.13E-05	1.16E-06	0	3983.651067	709.6141384	1.969892402	79352.84792
Sacramento	2026 Construction and Mining - Trenchers	Aggregate	50	Diesel	0.00026239	0.000317492	0.000377842	0.002311628	0.00202904	0.333989718	8.20E-05	7.54E-05	3.16E-06	0	10853.05417	8867.838749	28.47704907	184729.2664
Sacramento	2026 Construction and Mining - Trenchers	Aggregate	600	Diesel	6.21E-05	7.52E-05	8.95E-05	0.000474808	0.000644749	0.199201834	2.56E-05	2.35E-05	1.89E-06	0	6473.098352	594.2164193	1.740349013	130962.5262
Sacramento	2026 Construction and Mining - Trenchers	Aggregate	75	Diesel	7.15E-05	8.65E-05	0.00010292	0.000645481	0.000827654	0.109925101	4.21E-05	3.87E-05	1.04E-06	0	3572.03532	1867.889299	6.235553187	57775.65257
Sacramento	2026 Construction and Mining - Trenchers	Aggregate	750	Diesel	2.84E-06	3.44E-06	4.10E-06	1.78E-05	4.45E-05	0.007951163	1.34E-06	1.24E-06	7.53E-08	0	258.3744316	19.4222855	0.098846191	6207.401539
Sacramento	2026 Construction and Mining - Trenchers	Aggregate	9999	Diesel	5.49E-05	6.64E-05	7.91E-05	0.000536829	0.000943395	0.254121742	2.25E-05	2.07E-05	2.41E-06	0	8257.730356	382.2129893	0.885704031	163697.9299
Sacramento	2026 Construction and Mining - Vacuum Truck	Aggregate	100	Diesel	4.19E-06	5.07E-06	6.03E-06	7.71E-05	5.08E-05	0.012446772	3.79E-06	3.49E-06	1.18E-07	0	404.4600147	209.5064137	0.426450089	7212.137276
Sacramento	2026 Construction and Mining - Vacuum Truck	Aggregate	175	Diesel	4.36E-05	5.28E-05	6.28E-05	0.000657514	0.00041062	0.112047138	1.96E-05	1.80E-05	1.06E-06	0	3640.991288	1321.091935	2.165054298	72177.54892
Sacramento	2026 Construction and Mining - Vacuum Truck	Aggregate	300	Diesel	3.85E-05	4.66E-05	5.55E-05	0.000248628	0.000347802	0.124339013	1.32E-05	1.21E-05	1.18E-06	0	4040.417913	883.802157	1.377761826	80095.62191
Sacramento	2026 Construction and Mining - Vacuum Truck	Aggregate	50	Diesel	6.30E-06	7.62E-06	9.07E-06	4.53E-05	3.68E-05	0.005388436	1.81E-06	1.66E-06	5.10E-08	0	175.0981812	241.8687439	0.557665501	3122.266908
Sacramento	2026 Construction and Mining - Vacuum Truck	Aggregate	600	Diesel	4.92E-05	5.95E-05	7.08E-05	0.000324999	0.0004167	0.168586632	1.57E-05	1.44E-05	1.60E-06	0	5478.252024	858.9652924	1.672996503	108598.6678
Sacramento	2026 Construction and Mining - Vacuum Truck	Aggregate	75	Diesel	3.56E-06	4.31E-06	5.13E-06	4.90E-05	4.29E-05	0.008068636	1.28E-06	1.18E-06	7.64E-08	0	262.1917336	187.9079946	0.360842383	4675.277423
Sacramento	2026 Construction and Mining - Water Truck	Aggregate	175	Diesel	1.41E-05	1.71E-05	2.03E-05	0.000197336	0.000133214	0.033097693	6.52E-06	6.00E-06	3.14E-07	0	1075.515307	394.9466758	0.688880913	21189.36557
Sacramento	2026 Construction and Mining - Water Truck	Aggregate	300	Diesel	0.00010061	0.000121738	0.000144879	0.000617682	0.001062294	0.210252035	5.35E-05	4.92E-05	1.99E-06	0	6832.176569	1544.324474	2.922989759	135021.7713
Sacramento	2026 Construction and Mining - Water Truck	Aggregate	50	Diesel	1.33E-06	1.61E-06	1.91E-06	1.50E-05	1.32E-05	0.001837767	4.60E-07	4.23E-07	1.74E-08	0	59.71856696	76.7612298	0.131215412	1064.872885
Sacramento	2026 Construction and Mining - Water Truck	Aggregate	600	Diesel	0.000290279	0.000351238	0.000418002	0.002086714	0.002183865	0.959558251	9.56E-05	8.80E-05	9.09E-06	0	31181.01276	4021.779852	6.561921018	620933.3163
Sacramento	2026 Construction and Mining - Water Truck	Aggregate	75	Diesel	8.89E-06	1.08E-05	1.28E-05	6.40E-05	9.37E-05	0.010704436	6.50E-06	5.98E-06	1.01E-07	0	347.8425278	240.1249528	0.524861648	5609.667323
Sacramento	2026 Construction and Mining - Water Truck	Aggregate	750	Diesel	8.11E-06	9.82E-06	1.17E-05	7.54E-05	0.000112598	0.01568946	4.47E-06	4.11E-06	1.49E-07	0	509.8317471	42.33140256	0.098411559	10106.69978
Sacramento	2026 Construction and Mining - Water Truck	Aggregate	9999	Diesel	1.40E-05	1.70E-05	2.02E-05	0.00010397	0.000244947	0.054692647	5.55E-06	5.10E-06	5.18E-07	0	1777.247118	113.158215	0.196823118	35231.43306
Sacramento	2026 Forestry - Extraction	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Extraction	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Extraction	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Extraction	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Extraction	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Extraction	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Extraction	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Extraction	Aggregate	9999	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Maintenance & Construction	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Maintenance & Construction	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Maintenance & Construction	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Maintenance & Construction	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Maintenance & Construction	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Maintenance & Construction	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Maintenance & Construction	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Manufacturing	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Manufacturing	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Manufacturing	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Manufacturing	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Manufacturing	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Forestry - Manufacturing	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Industrial - Aerial Lifts	Aggregate	100	Diesel	2.67E-05	3.23E-05	3.85E-05	0.000643894	0.000349983	0.116288458	2.44E-05	2.24E-05	1.10E-06	0	3778.81372	2679.362405	9.416698294	66758.83816
Sacramento	2026 Industrial - Aerial Lifts	Aggregate	175	Diesel	4.24E-05	5.13E-05	6.11E-05	0.000973712	0.000373013	0.171076852	1.63E-05	1.50E-05	1.62E-06	0	5559.172148	2990.501482	6.667421245	110166.328
Sacramento	2026 Industrial - Aerial Lifts	Aggregate	300	Diesel	7.29E-07	8.82E-07	1.05E-06	6.98E-06	3.94E-06	0.003630662	1.51E-07	1.39E-07	3.44E-08	0	117.9789832	32.21313637	0.07898693	2338.767977
Sacramento	2026 Industrial - Aerial Lifts	Aggregate	50	Diesel	0.000113074	0.000136819	0.000162826	0.001738957	0.001633512	0.295584647	3.86E-05	3.55E-05	2.80E-06	0	9605.074668	11725.48796	50.0178787	169075.9736
Sacramento	2026 Industrial - Aerial Lifts	Aggregate	600	Diesel	4.54E-07	5.49E-07	6.53E-07	4.07E-06	4.05E-06	0.002149674	1.18E-07	1.09E-07	2.04E-08	0	69.85402384	11.86862218	0.031594772	1384.758112
Sacramento	2026 Industrial - Aerial Lifts	Aggregate	75	Diesel	0.000174248	0.00021084	0.000250918	0.003311515	0.002977101	0.58781238	4.70E-05	4.32E-05	5.57E-06	0	19101.06584	15996.00003	54.5394476	337213.7408
Sacramento	2026 Industrial - Boom	Aggregate	100	Diesel	1.38E-05	1.67E-05	1.99E-05	0.000342039	0.000163585	0.05865422	1.28E-05	1.18E-05	5.56E-07	0	1905.979111	1272.691911	2.559253252	33979.21126
Sacramento	2026 Industrial - Boom	Aggregate	175	Diesel	1.62E-05	1.96E-05	2.33E-05	0.000317476	0.000118486	0.053032862	4.94E-06	4.55E-06	5.02E-07	0	1723.312112	882.7952268	1.137411792	34162.24716
Sacramento	2026 Industrial - Boom	Aggregate	300	Diesel	1.95E-06	2.36E-06	2.81E-06	1.66E-05	1.01E-05	0.007835552	4.13E-07	3.80E-07	7.42E-08	0	254.6176134	71.70742638	0.110782294	5346.015454
Sacramento	2026 Industrial - Boom	Aggregate	50	Diesel	0.000162306	0.000196391	0.000233721	0.002471108	0.002077788	0.382399468	4.48E-05	4.12E-05	3.62E-06	0	12426.13744	13651.26291	33.68002695	221576.9317
Sacramento	2026 Industrial - Boom	Aggregate	600	Diesel	2.91E-06	3.52E-06	4.19E-06	1.82E-05	2.40E-05	0.007704361	1.28E-06	1.18E-06	7.30E-08	0	250.3545419	39.1703991	0.063189544	4962.927885
Sacramento	2026 Industrial - Boom	Aggregate	75	Diesel	0.000236658	0.000286356	0.000340787	0.003822172	0.003289159	0.642993255	4.08E-05	3.75E-05	6.09E-06	0	20894.17801	16208.83002	31.21593375	372520.6538
Sacramento	2026 Industrial - Boom	Aggregate	9999	Diesel	1.02E-06	1.24E-06	1.48E-06	1.01E-05	1.74E-05	0.005207023	3.21E-07	2.96E-07	4.93E-08	0	169.2031085	9.86533666	0.015797386	3354.214465
Sacramento	2026 Industrial - Forklifts	Aggregate	100	Diesel	0.000290174	0.000351111	0.000417851	0.005029235	0.003177451	0.870178965	0.000228461	0.000210184	8.24E-06	0	28276.61728	28813.57711	70.46205475	485580.2366
Sacramento	2026 Industrial - Forklifts	Aggregate	175	Diesel	0.000767691	0.000928906	0.001105475	0.014894862	0.006146077	2.52394078	0.000263784	0.000242681	2.39E-05	0	82015.896	64275.2138	106.1056739	1623515.845
Sacramento	2026 Industrial - Forklifts	Aggregate	25	Diesel	9.44E-09	1.14E-08	1.36E-08	3.07E-08	2.46E-08	2.22E-06	2.10E-09	1.93E-09	2.10E-11	0	0.072177713	5.362660054	0.015797386	1.287038413
Sacramento	2026 Industrial - Forklifts	Aggregate	300	Diesel	7.08E-05	8.56E-05	0.000101895	0.000525829	0.000566819	0.227242056	2.58E-05	2.38E-05	2.15E-06	0	7384.270256	3431.646954	6.685943919	147263.1174
Sacramento	2026 Industrial - Forklifts	Aggregate	50	Diesel	9.79E-05	0.000118478	0.000140999	0.000954915	0.000790064	0.137611597	3.00E-05	2.76E-05	1.30E-06	0	4471.712856	8462.249694	23.29685891	71652.55658
Sacramento	2026 Industrial - Forklifts	Aggregate	600	Diesel	2.10E-05	2.54E-05	3.03E-05	0.000199732	0.000178363	0.068801873	8.12E-06	7.47E-06	6.52E-07	0	2235.728852	636.3346576	1.264398419	45216.41077
Sacramento	2026 Industrial - Forklifts	Aggregate	75	Diesel	0.000501407	0.000606703	0.000722026	0.007662243	0.007001348	1.308448354	0.000138547	0.000127463	1.24E-05	0	42518.25756	55884.76936	132.7090955	742495.5779
Sacramento	2026 Industrial - Forklifts	Aggregate	750	Diesel	9.92E-07	1.20E-06	1.43E-06	1.02E-05	4.55E-06	0.005272017	3.06E-07	2.82E-07	4.99E-08	0	171.3151142	23.15510466	0.047392158	3396.082017
Sacramento	2026 Industrial - Forklifts	Aggregate	9999	Diesel	2.27E-05	2.75E-05	3.28E-05	0.000181162	0.000420206	0.09487275	9.33E-06	8.59E-06	8.99E-07	0	3082.906574	155.8370002	0.316163712	63188.67858
Sacramento	2026 Industrial - Garbage Refuse	Aggregate	175	Diesel	2.35E-07	2.84E-07	3.38E-07	3.36E-06	2.97E-06	0.0005773	1.38E-07	1.27E-07	5.47E-09	0	18.7594527	8.896647269	0.015797386	371.8798559
Sacramento	2026 Industrial - Garbage Refuse	Aggregate	300	Diesel	6.90E-07	8.35E-07	9.94E-07	5.47E-06	4.23E-06	0.002793038	1.70E-07	1.56E-07	2.65E-08	0	90.7602698	20.06239	0.031594772	1799.195135
Sacramento	2026 Industrial - Garbage Refuse	Aggregate	50	Diesel	3.77E-08	4.56E-08	5.43E-08	6.41E-07	6.26E-07	0.000100668	1.50E-08	1.38E-08	9.54E-10	0	3.271226479	6.140099358	0.015797386	58.3309439
Sacramento	2026 Industrial - Garbage Refuse	Aggregate	600	Diesel	1.03E-05	1.25E-05	1.49E-05	8.07E-05	5.44E-05	0.041541754	2.27E-06	2.09E-06	3.94E-07	0	1349.906555	144.6703331	0.205366018	26760.00537
Sacramento	2026 Industrial - Garbage Refuse	Aggregate	75	Diesel	2.13E-07	2.57E-07	3.06E-07	2.70E-06	2.23E-06	0.000420516	6.95E-08	6.39E-08	3.98E-09	0	13.66475002	8.665123681	0.015797386	243.6632779
Sacramento	2026 Industrial - Garbage Refuse	Aggregate	9999	Diesel	2.05E-06	2.48E-06	2.95E-06	2.02E-05	3.52E-05	0.010412698	7.91E-07	7.28E-07	9.86E-08	0	338.3624457	18.68869974	0.031594772	6707.561224
Sacramento	2026 Industrial - Garbage Transfer	Aggregate	300	Diesel	9.59E-07	1.16E-06	1.38E-06	6.13E-06	8.02E-06	0.002931063	2.83E-07	2.60E-07	2.78E-08	0	95.24540444	21.64540053	0.031594772	1888.106643
Sacramento	2026 Industrial - Garbage Transfer	Aggregate	600	Diesel	1.61E-06	1.95E-06	2.32E-06	1.43E-05	4.66E-06	0.007181338	2.81E-07	2.58E-07	6.80E-08	0	233.3588454	22.64877368	0.031594772	4626.012025
Sacramento	2026 Industrial - Misc - Aerial Lifts	Aggregate	100	Gasoline	0.000158365	0.000145664	0.000174271	0.00892044	0.000403234	0.309141161	2.16E-05	1.63E-05	2.99E-06	4.29E-06	12242.1	4288.75	11.85	287346.25
Sacramento	2026 Industrial - Misc - Aerial Lifts	Aggregate	15	Gasoline	0.000025955	2.62E-05	0.000028562	0.000737594	1.94E-05	2.91E-08	9.44E-06	7.13E-06	1.19E-08	1.64E-08	46.60976694	0	0.430616278	0
Sacramento	2026 Industrial - Misc - Aerial Lifts	Aggregate	15	Diesel	2.82E-05	3.40E-05	4.06E-05	0.000178135	0.000212672	0.000407693	7.48E-06	5.65E-06	3.87E-09	3.33E-09	13.26093181	0	6.179842514	0
Sacramento	2026 Industrial - Misc - Aerial Lifts	Aggregate	15	Electric	3.13E-06	2.83E-07	3.09E-06	0.000110263	3.01E-06	1.01E-08	2.81E-07	2.13E-07	2.31E-10	2.08E-09	5.934468942	0	0.149684003	0
Sacramento	2026 Industrial - Misc - Aerial Lifts	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.136287444	0
Sacramento	2026 Industrial - Misc - Aerial Lifts	Aggregate	25	Gasoline	0.001444076	0.001458516	0.001589118	0.038331466	0.000942912	1.43E-06	0.000462208	0.000349224	6.20E-07	8.55E-07	2434.61861	0	14.42541943	0
Sacramento	2026 Industrial - Misc - Aerial Lifts	Aggregate	25	Diesel	5.30E-05	6.38E-05	7.62E-05	0.000217552	0.000403585	0.000582502	1.39E-05	1.05E-05	5.53E-09	4.76E-09	18.94689515	0	8.835696495	0
Sacramento	2026 Industrial - Misc - Aerial Lifts	Aggregate	25	Electric	0.000263923	2.39E-05	0.000261256	0.006720788	0.000184738	5.91E-07	1.81E-05	1.37E-05	1.44E-08	1.29E-07	369.182042	0	5.979261634	0
Sacramento	2026 Industrial - Misc - Aerial Lifts	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.136287444	0
Sacramento	2026 Industrial - Misc - Aerial Lifts	Aggregate	50	Gasoline	0.000200345	0.000184277	0.000220467	0.016715959	0.000302256	0.153993614	1.06E-05	8.02E-06	1.87E-06	2.40E-06	6843.75	4288.75	11.85	141528.75
Sacramento	2026 Industrial - Misc - Forklifts	Aggregate	100	Gasoline	0.011102568	0.010212142	0.012217699	1.080123268	0.054859323	12.29288759	0.00085709	0.000647579	0.000118766	0.000185987	530899.8	250265.9	138.89	17518613
Sacramento	2026 Industrial - Misc - Forklifts	Aggregate	100	Nat Gas	0	0	0.002038243	0.920961494	0.093629591	19.63931511	0.001746597	0	0	0	1095762.85	458998.45	254.78	32129891.5
Sacramento	2026 Industrial - Misc - Forklifts	Aggregate	175	Gasoline	0.000581894	0.000535226	0.000640338	0.039139739	0.003325206	0.911353636	6.53E-05	4.94E-05	9.05E-06	1.29E-05	36883.25	9143.25	5.09	1334914.5
Sacramento	2026 Industrial - Misc - Forklifts	Aggregate	175	Nat Gas	0	0	9.25E-05	0.053627469	0.004524249	1.499003787	0.000133312	0	0	0	82157.85	16793.65	9.34	2451872.9
Sacramento	2026 Industrial - Misc - Forklifts	Aggregate	25	Gasoline	9.15E-06	9.24E-06	1.01E-05	0.000764542	5.12E-06	2.07E-07	1.85E-08	1.40E-08	1.17E-08	1.61E-08	46.00902866	0	0.110365734	0
Sacramento	2026 Industrial - Misc - Forklifts	Aggregate	25	Electric	4.84E-05	4.38E-06	4.79E-05	0.000695745	0.000019424	5.38E-08	2.15E-06	1.62E-06	1.57E-09	1.41E-08	40.36104105	0	0.206824921	0
Sacramento	2026 Industrial - Misc - Forklifts	Aggregate	50	Gasoline	0.005267271	0.004844836	0.00579631	0.632916909	0.012455895	2.075033519	0.000143051	0.000108083	2.52E-05	4.10E-05	116935.05	71317.35	39.59	2924011.35
Sacramento	2026 Industrial - Misc - Forklifts	Aggregate	50	Nat Gas	0	0	0.000344654	0.054625612	0.014225671	3.277506814	0.000291481	0	0	0	174805.8	130775.85	72.58	5361809.85
Sacramento	2026 Industrial - Misc - Other General Industrial Equipment	Aggregate	100	Gasoline	4.95E-05	4.55E-05	5.45E-05	0.003718533	0.00029291	0.088710836	6.19E-06	4.67E-06	8.57E-07	1.25E-06	3580.65	890.6	1.25	70357.4
Sacramento	2026 Industrial - Misc - Other General Industrial Equipment	Aggregate	15	Gasoline	0.000299311	0.000302305	0.000329374	0.01771847	0.000154771	6.96E-06	1.49E-06	1.12E-06	2.75E-07	3.80E-07	1077.703959	0	14.96416279	0
Sacramento	2026 Industrial - Misc - Other General Industrial Equipment	Aggregate	15	Diesel	1.62E-05	1.95E-05	2.33E-05	0.000114982	0.000137275	0.000254126	4.83E-06	3.65E-06	2.41E-09	2.08E-09	8.265886025	0	1.511102892	0
Sacramento	2026 Industrial - Misc - Other General Industrial Equipment	Aggregate	175	Gasoline	6.98E-06	6.42E-06	7.68E-06	0.000654594	5.83E-05	0.018389764	1.32E-06	9.96E-07	1.83E-07	2.58E-07	737.3	76.65	0.11	13337.1
Sacramento	2026 Industrial - Misc - Other General Industrial Equipment	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.013134672	0
Sacramento	2026 Industrial - Misc - Other General Industrial Equipment	Aggregate	25	Gasoline	0.000265464	0.00026812	0.000292128	0.02341527	0.000148584	6.33E-06	5.67E-07	4.28E-07	3.58E-07	4.94E-07	1407.169439	0	5.022147574	0
Sacramento	2026 Industrial - Misc - Other General Industrial Equipment	Aggregate	25	Diesel	4.69E-05	5.65E-05	6.75E-05	0.00019271	0.000356791	0.000515793	1.20E-05	9.07E-06	4.90E-09	4.22E-09	16.77707878	0	1.564845638	0
Sacramento	2026 Industrial - Misc - Other General Industrial Equipment	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.013134672	0
Sacramento	2026 Industrial - Misc - Other General Industrial Equipment	Aggregate	50	Gasoline	0.000160268	0.000147414	0.000176365	0.015759312	0.000363067	0.103676654	7.15E-06	5.40E-06	1.26E-06	1.71E-06	4883.7	2708.3	3.8	81249
Sacramento	2026 Industrial - Misc - Other Material Handling Equipment	Aggregate	100	Gasoline	9.67E-05	8.89E-05	0.000106405	0.005587777	0.000471047	0.122643209	8.55E-06	6.46E-06	1.18E-06	1.74E-06	4971.3	1832.3	4.74	98944.2
Sacramento	2026 Industrial - Misc - Other Material Handling Equipment	Aggregate	50	Gasoline	3.94E-06	3.63E-06	4.34E-06	0.000341966	8.40E-06	0.002128271	1.47E-07	1.11E-07	2.59E-08	3.58E-08	102.2	14.6	0.04	598.6
Sacramento	2026 Industrial - Misc - Sweepers/Scrubbers	Aggregate	100	Gasoline	0.000258329	0.000237611	0.000284276	0.016988766	0.001634285	0.537512692	3.75E-05	2.83E-05	5.19E-06	7.49E-06	21378.05	4755.95	9.2	323404.6
Sacramento	2026 Industrial - Misc - Sweepers/Scrubbers	Aggregate	15	Gasoline	0.000121094	0.000122305	0.000133257	0.007476212	6.10E-05	3.07E-06	3.09E-07	2.34E-07	1.16E-07	1.60E-07	454.0598896	0	6.642300886	0
Sacramento	2026 Industrial - Misc - Sweepers/Scrubbers	Aggregate	15	Diesel	6.52E-06	7.85E-06	9.38E-06	4.62E-05	5.52E-05	0.000102106	1.94E-06	1.47E-06	9.69E-10	8.35E-10	3.321194613	0	0.713072499	0
Sacramento	2026 Industrial - Misc - Sweepers/Scrubbers	Aggregate	175	Gasoline	2.01E-06	1.85E-06	2.21E-06	0.000212932	1.92E-05	0.006257446	4.49E-07	3.39E-07	6.22E-08	8.82E-08	251.85	29.2	0.07	4088
Sacramento	2026 Industrial - Misc - Sweepers/Scrubbers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.009309802	0
Sacramento	2026 Industrial - Misc - Sweepers/Scrubbers	Aggregate	25	Gasoline	0.000266078	0.00026874	0.000292804	0.025421206	0.000148926	6.88E-06	6.15E-07	4.65E-07	3.88E-07	5.35E-07	1524.839018	0	6.604296522	0
Sacramento	2026 Industrial - Misc - Sweepers/Scrubbers	Aggregate	25	Diesel	9.48E-06	1.14E-05	1.36E-05	3.89E-05	7.21E-05	0.000104197	2.42E-06	1.83E-06	9.89E-10	8.52E-10	3.389203438	0	0.542374143	0
Sacramento	2026 Industrial - Misc - Sweepers/Scrubbers	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.009309802	0
Sacramento	2026 Industrial - Misc - Sweepers/Scrubbers	Aggregate	50	Gasoline	0.000443311	0.000407758	0.000487837	0.039443985	0.000983058	0.335114528	2.31E-05	1.75E-05	4.07E-06	5.29E-06	15092.75	5701.3	11.03	199545.5
Sacramento	2026 Industrial - Mower	Aggregate	100	Diesel	2.72E-05	3.29E-05	3.92E-05	0.000518468	0.000335222	0.085612647	2.38E-05	2.19E-05	8.11E-07	0	2781.997914	1450.179892	2.622518272	49606.39087
Sacramento	2026 Industrial - Mower	Aggregate	175	Diesel	7.43E-06	8.99E-06	1.07E-05	0.000160012	5.41E-05	0.026222774	1.94E-06	1.78E-06	2.48E-07	0	852.1136073	366.231064	0.584743156	17046.06325
Sacramento	2026 Industrial - Mower	Aggregate	300	Diesel	3.93E-07	4.76E-07	5.67E-07	2.14E-06	5.29E-06	0.001082578	1.72E-07	1.58E-07	1.03E-08	0	35.17857283	10.48670524	0.015797386	697.3658987
Sacramento	2026 Industrial - Mower	Aggregate	50	Diesel	0.000202431	0.000244942	0.000291501	0.0022108	0.001797982	0.277940291	7.03E-05	6.47E-05	2.63E-06	0	9031.718253	12031.51546	25.08710594	160598.1421
Sacramento	2026 Industrial - Mower	Aggregate	75	Diesel	8.33E-05	0.000100744	0.000119893	0.001137947	0.00099009	0.185375244	2.15E-05	1.98E-05	1.76E-06	0	6023.800885	4893.818327	9.525823758	107413.5324
Sacramento	2026 Industrial - Mower	Aggregate	9999	Diesel	1.53E-05	1.86E-05	2.21E-05	9.82E-05	0.000253512	0.049477835	7.10E-06	6.54E-06	4.69E-07	0	1607.790884	58.06202495	0.126379088	31872.20073
Sacramento	2026 Industrial - Other General Industrial Equipment	Aggregate	100	Diesel	3.37E-05	4.08E-05	4.86E-05	0.000442287	0.00034635	0.074251268	2.59E-05	2.38E-05	7.03E-07	0	2412.807924	1464.683395	3.619226712	42780.37965
Sacramento	2026 Industrial - Other General Industrial Equipment	Aggregate	175	Diesel	8.03E-05	9.71E-05	0.000115584	0.001373639	0.000706088	0.231676352	3.41E-05	3.13E-05	2.19E-06	0	7528.363468	3381.886332	5.925703206	150353.1476
Sacramento	2026 Industrial - Other General Industrial Equipment	Aggregate	300	Diesel	5.47E-05	6.62E-05	7.87E-05	0.000370111	0.000492541	0.153840717	2.30E-05	2.12E-05	1.46E-06	0	4999.080931	1260.245751	2.654896852	100390.3092
Sacramento	2026 Industrial - Other General Industrial Equipment	Aggregate	50	Diesel	0.00017896	0.000216542	0.000257703	0.001499457	0.001313155	0.19136711	6.05E-05	5.57E-05	1.81E-06	0	6218.507613	9217.406466	23.25701677	108808.8547
Sacramento	2026 Industrial - Other General Industrial Equipment	Aggregate	600	Diesel	0.000137451	0.000166316	0.00019793	0.001103232	0.001085206	0.482042103	4.74E-05	4.36E-05	4.57E-06	0	15664.04225	2426.840658	4.762003255	331652.014
Sacramento	2026 Industrial - Other General Industrial Equipment	Aggregate	75	Diesel	4.93E-05	5.97E-05	7.10E-05	0.000614785	0.000625706	0.10328753	2.27E-05	2.09E-05	9.78E-07	0	3356.346313	2902.224689	6.810113802	59315.05131
Sacramento	2026 Industrial - Other General Industrial Equipment	Aggregate	750	Diesel	3.09E-05	3.74E-05	4.45E-05	0.000234407	0.000267923	0.113073763	1.20E-05	1.10E-05	1.07E-06	0	3674.351655	324.1411118	0.711029785	73614.38388
Sacramento	2026 Industrial - Other General Industrial Equipment	Aggregate	9999	Diesel	4.90E-05	5.93E-05	7.06E-05	0.000365577	0.000895176	0.18554434	2.16E-05	1.99E-05	1.76E-06	0	6029.2957	324.9090565	0.63189544	119522.3363
Sacramento	2026 Industrial - Other Truck	Aggregate	100	Diesel	2.56E-06	3.10E-06	3.69E-06	6.44E-05	2.83E-05	0.01056306	2.34E-06	2.15E-06	1.00E-07	0	343.2484719	210.4493628	0.31594772	6120.64236
Sacramento	2026 Industrial - Other Truck	Aggregate	175	Diesel	2.70E-05	3.27E-05	3.89E-05	0.000526582	0.000165966	0.084031477	6.50E-06	5.98E-06	7.96E-07	0	2730.617499	946.0076339	1.011317192	54730.68091
Sacramento	2026 Industrial - Other Truck	Aggregate	300	Diesel	5.24E-05	6.34E-05	7.55E-05	0.000340804	0.000412422	0.151577553	1.73E-05	1.60E-05	1.44E-06	0	4925.539039	1119.145503	1.437939639	98993.02152
Sacramento	2026 Industrial - Other Truck	Aggregate	50	Diesel	6.17E-06	7.47E-06	8.89E-06	6.92E-05	5.38E-05	0.008651507	1.81E-06	1.66E-06	8.20E-08	0	281.1322417	468.1472223	0.805666686	5013.015491
Sacramento	2026 Industrial - Other Truck	Aggregate	600	Diesel	0.000177847	0.000215195	0.0002561	0.001177811	0.000998432	0.559473945	4.75E-05	4.37E-05	5.30E-06	0	18180.20344	2291.552044	3.681270685	363109.0224
Sacramento	2026 Industrial - Other Truck	Aggregate	75	Diesel	1.04E-05	1.26E-05	1.50E-05	0.000118934	0.000120944	0.019391296	4.35E-06	4.00E-06	1.84E-07	0	630.1235509	448.8108482	0.71088237	11236.06138
Sacramento	2026 Industrial - Other Truck	Aggregate	750	Diesel	1.61E-05	1.95E-05	2.32E-05	8.42E-05	0.000147344	0.042784205	6.11E-06	5.62E-06	4.05E-07	0	1390.280203	105.1377024	0.379137264	27560.35635
Sacramento	2026 Industrial - Other Truck	Aggregate	9999	Diesel	1.42E-05	1.71E-05	2.04E-05	9.64E-05	0.000233102	0.048561038	5.39E-06	4.96E-06	4.60E-07	0	1577.999394	38.35664094	0.063189544	31281.62619
Sacramento	2026 Industrial - Railcars or Track Cars	Aggregate	100	Diesel	4.33E-07	5.24E-07	6.24E-07	5.87E-06	3.43E-06	0.000993431	2.11E-07	1.94E-07	9.41E-09	0	32.28170104	16.61844844	0.031594772	575.6318323
Sacramento	2026 Industrial - Railcars or Track Cars	Aggregate	175	Diesel	8.58E-06	1.04E-05	1.24E-05	0.000153998	7.06E-05	0.025134056	3.23E-06	2.97E-06	2.38E-07	0	816.7355275	293.3660397	0.505694025	16482.89548
Sacramento	2026 Industrial - Railcars or Track Cars	Aggregate	300	Diesel	7.47E-06	9.04E-06	1.08E-05	5.65E-05	3.88E-05	0.027522014	1.70E-06	1.56E-06	2.61E-07	0	894.3326334	211.1228998	0.31594772	17728.89092
Sacramento	2026 Industrial - Railcars or Track Cars	Aggregate	50	Diesel	2.14E-07	2.59E-07	3.08E-07	1.32E-06	1.07E-06	0.000172211	3.62E-08	3.33E-08	1.63E-09	0	5.596028126	8.336315243	0.015797386	99.78569346
Sacramento	2026 Industrial - Railcars or Track Cars	Aggregate	600	Diesel	2.47E-06	2.99E-06	3.56E-06	2.19E-05	6.96E-06	0.011295718	4.30E-07	3.96E-07	1.07E-07	0	367.0563214	60.67616662	0.094784316	7276.37709
Sacramento	2026 Industrial - Railcars or Track Cars	Aggregate	75	Diesel	4.64E-07	5.61E-07	6.68E-07	8.34E-06	6.98E-06	0.001461895	5.86E-08	5.39E-08	1.38E-08	0	47.50452332	40.99285513	0.079111392	806.9033603
Sacramento	2026 Industrial - Railcars or Track Cars	Aggregate	9999	Diesel	1.43E-06	1.73E-06	2.06E-06	1.01E-05	2.94E-05	0.0048298	8.14E-07	7.49E-07	4.58E-08	0	156.945196	10.66069946	0.015797386	3111.21853
Sacramento	2026 Industrial - Sweepers/Scrubbers	Aggregate	100	Diesel	3.20E-05	3.88E-05	4.61E-05	0.000530604	0.000356129	0.093725351	2.55E-05	2.35E-05	8.88E-07	0	3045.621622	1403.02649	4.601426279	53376.27811
Sacramento	2026 Industrial - Sweepers/Scrubbers	Aggregate	175	Diesel	7.64E-06	9.24E-06	1.10E-05	0.000122714	8.21E-05	0.02121622	3.95E-06	3.63E-06	2.01E-07	0	689.4247713	251.418696	0.632209982	13765.1901
Sacramento	2026 Industrial - Sweepers/Scrubbers	Aggregate	300	Diesel	6.75E-06	8.17E-06	9.72E-06	5.84E-05	5.19E-05	0.02902037	2.17E-06	2.00E-06	2.75E-07	0	943.0219713	187.2371241	0.458124194	18827.81126
Sacramento	2026 Industrial - Sweepers/Scrubbers	Aggregate	50	Diesel	5.37E-05	6.49E-05	7.73E-05	0.000534527	0.000483796	0.081598373	1.72E-05	1.59E-05	7.73E-07	0	2651.553375	2927.365697	11.07794397	44755.63345
Sacramento	2026 Industrial - Sweepers/Scrubbers	Aggregate	600	Diesel	1.25E-06	1.51E-06	1.80E-06	1.33E-05	9.92E-06	0.004657798	5.14E-07	4.73E-07	4.41E-08	0	151.3559625	20.26048281	0.047392158	3000.41981
Sacramento	2026 Industrial - Sweepers/Scrubbers	Aggregate	75	Diesel	2.60E-05	3.15E-05	3.75E-05	0.000411815	0.000391892	0.072219808	8.78E-06	8.08E-06	6.84E-07	0	2346.795259	1305.372353	4.28306693	41141.09854
Sacramento	2026 Industrial - Sweepers/Scrubbers	Aggregate	9999	Diesel	1.49E-06	1.80E-06	2.15E-06	1.74E-05	3.09E-05	0.009197229	6.85E-07	6.30E-07	8.71E-08	0	298.865556	5.854338681	0.015797386	5924.590746
Sacramento	2026 Industrial - Tow Tractor	Aggregate	600	Diesel	5.22E-07	6.31E-07	7.51E-07	3.93E-06	6.34E-06	0.002092517	1.79E-07	1.65E-07	1.98E-08	0	67.99669029	8.47227579	0.015797386	1347.939078
Sacramento	2026 Industrial - Yard Goat	Aggregate	100	Diesel	5.16E-06	6.24E-06	7.43E-06	6.53E-05	4.60E-05	0.01072028	2.90E-06	2.66E-06	1.02E-07	0	348.3573554	180.103016	0.189568632	6211.741523
Sacramento	2026 Industrial - Yard Goat	Aggregate	175	Diesel	0.000520761	0.000630121	0.000749896	0.009259386	0.003488276	1.458617941	0.000147492	0.000135692	1.38E-05	0	47398.04448	14854.02189	11.83289845	941747.1222
Sacramento	2026 Industrial - Yard Goat	Aggregate	300	Diesel	0.000306008	0.00037027	0.000440652	0.001998517	0.001678059	0.905793324	7.74E-05	7.12E-05	8.58E-06	0	29433.91208	7593.110222	6.936032782	586501.3087
Sacramento	2026 Industrial - Yard Goat	Aggregate	50	Diesel	2.08E-06	2.52E-06	3.00E-06	2.36E-05	1.84E-05	0.002532439	7.98E-07	7.34E-07	2.40E-08	0	82.29203436	121.9221896	0.221163404	1467.392145
Sacramento	2026 Industrial - Yard Goat	Aggregate	600	Diesel	2.50E-05	3.03E-05	3.60E-05	0.000152457	0.000149678	0.07512864	6.10E-06	5.61E-06	7.12E-07	0	2441.318251	340.0038203	0.316202071	50063.08456
Sacramento	2026 Industrial - Yard Goat	Aggregate	75	Diesel	2.84E-06	3.43E-06	4.09E-06	2.91E-05	3.06E-05	0.004525563	1.11E-06	1.02E-06	4.29E-08	0	147.058967	116.0662487	0.142176474	2622.285069
Sacramento	2026 Industrial - Yard Goat	Aggregate	9999	Diesel	5.22E-06	6.31E-06	7.51E-06	2.99E-05	7.61E-05	0.01557443	1.83E-06	1.68E-06	1.48E-07	0	506.0938289	15.24340707	0.015797386	10032.6008
Sacramento	2026 Lawn and Garden - Misc - Chainsaws	Aggregate	2	Gasoline	0.20478854	0.206904426	0.225391992	0.580080822	0.006544	3.102192064	0.002455	0.001857	0.0000452	0.00006245	176362.0043	0	41843.19966	0
Sacramento	2026 Lawn and Garden - Misc - Chainsaws	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	25648.52195	0
Sacramento	2026 Lawn and Garden - Misc - Chainsaws	Aggregate	5	Gasoline	0.1671	0.1688	0.183911026	0.537763632	0.005973	2.876017761	0.002284	0.001722	0.00004111	0.00005664	160541.2137	0	29770.98832	0
Sacramento	2026 Lawn and Garden - Misc - Chainsaws	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	18248.64861	0
Sacramento	2026 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	2	Gasoline	0.1777	0.1795	0.195584994	0.312354947	0.006371	1.670411111	0.001324	0.001	0.00002658	0.00003665	103743.8987	0	22530.95367	0
Sacramento	2026 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	13810.74259	0
Sacramento	2026 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	5	Gasoline	0.1648	0.1665	0.1813	0.289588112	0.005903	1.548624948	0.001228	0.000927	0.00002454	0.00003394	96180.60738	0	16030.53217	0
Sacramento	2026 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	9826.195405	0
Sacramento	2026 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	15	Gasoline	0.000224	0.000227	0.000247	0.0124	0.000091	0.0275	4.64E-07	0.000000351	4.58E-07	0.000000632	1783.812427	0	184.4550582	0
Sacramento	2026 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	68.46008642	0
Sacramento	2026 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	2	Gasoline	0.0000701	0.0000708	0.0000772	0.000912	0.0000076	0.00213	3.39E-08	2.56E-08	0.000000039	5.38E-08	142.2010771	0	63.80911157	0
Sacramento	2026 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	23.68261047	0
Sacramento	2026 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	25	Diesel	0.00000639	0.00000769	0.00000919	0.0000262	4.86E-05	0.006418825	0.00000163	0.00000123	6.09E-08	5.25E-08	208.7836366	0	0.497531458	0
Sacramento	2026 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	5	Gasoline	0.000263	0.000265	0.000289	0.0124	9.55E-05	0.029	0.000000466	0.000000352	0.000000481	0.000000664	1844.565827	0	293.3101901	0
Sacramento	2026 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	108.8614276	0
Sacramento	2026 Lawn and Garden - Misc - Lawn Mowers	Aggregate	15	Gasoline	0.0004571	0.0004615	0.0005022	0.03101	0.0002092	0.06557	0.000003901	0.000002945	0.000001139	0.00000157	4321.633109	0	613.9055867	0
Sacramento	2026 Lawn and Garden - Misc - Lawn Mowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	268.534412	0
Sacramento	2026 Lawn and Garden - Misc - Lawn Mowers	Aggregate	2	Gasoline	0.00002882	0.00002914	0.00003172	0.0006582	0.000014	0.001777	1.37E-06	0.000001033	3.05E-08	4.20E-08	108.835423	0	40.86583697	0
Sacramento	2026 Lawn and Garden - Misc - Lawn Mowers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	17.87553309	0
Sacramento	2026 Lawn and Garden - Misc - Lawn Mowers	Aggregate	25	Gasoline	0.0003786	0.0003819	0.0004159	0.02617	0.0001311	0.055205102	0.00000329	0.000002477	9.34E-07	0.00000129	3639.562978	0	167.1366569	0
Sacramento	2026 Lawn and Garden - Misc - Lawn Mowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	73.10887026	0
Sacramento	2026 Lawn and Garden - Misc - Lawn Mowers	Aggregate	5	Gasoline	0.09856	0.09955	0.10845	4.867919625	0.06115	13.38659206	0.0006825	0.0005155	0.0002137	0.0002952	797431.0343	0	167840.9793	0
Sacramento	2026 Lawn and Garden - Misc - Lawn Mowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	73416.95477	0
Sacramento	2026 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	15	Gasoline	0.002296	0.002319	0.002527	0.1649	0.001727	0.425794323	6.51E-06	4.92E-06	6.69E-06	0.00000923	25846.60067	0	1384.184568	0
Sacramento	2026 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	2	Gasoline	0.258872707	0.261375426	0.284740606	1.60707495	0.011185	6.778307296	0.0036571	0.002761	0.00009708	0.00013408	380682.9692	0	45918.95716	0
Sacramento	2026 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	109785.3829	0
Sacramento	2026 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	25	Gasoline	0.00004904	0.00004959	0.00005412	0.003582	0.00005457	0.01374	1.61E-07	1.22E-07	1.86E-07	0.000000257	729.0345312	0	13.95749291	0

Sacramento	2026 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	5	Gasoline	0.35476016	0.358331192	0.390383427	1.318948749	0.0087338	8.614267511	0.00544057	0.00410799	0.00011303	0.000156099	444772.1207	0	22293.7061	0
Sacramento	2026 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	59079.65721	0
Sacramento	2026 Lawn and Garden - Misc - Other	Aggregate	15	Gasoline	0.001235	0.001247	0.001358	0.0689	0.000454	0.179068103	0.00000335	0.000002524	0.0000028	0.00000386	10877.07076	0	1357.502386	0
Sacramento	2026 Lawn and Garden - Misc - Other	Aggregate	15	Diesel	0.0000024	0.00000289	0.00000345	0.000017	0.0000203	0.002814274	0.000000714	0.00000054	2.67E-08	2.30E-08	91.53924685	0	0.384921493	0
Sacramento	2026 Lawn and Garden - Misc - Other	Aggregate	25	Gasoline	0.0002192	0.0002211	0.000241	0.0202	0.0001507	0.0425	0.000000794	0.000000599	0.000000713	0.000000984	2797.572875	0	117.0648821	0
Sacramento	2026 Lawn and Garden - Misc - Other	Aggregate	25	Diesel	0.000000424	0.00000051	0.00000061	0.00000174	0.00000322	0.00042611	0.000000108	8.19E-08	4.04E-09	3.48E-09	13.85997141	0	0.0438	0
Sacramento	2026 Lawn and Garden - Misc - Other	Aggregate	5	Gasoline	0.000623	0.000629	0.000686	0.031272814	0.000244	0.0706	0.000001217	0.00000092	0.000001196	0.000001651	4547.867732	0	1105.362639	0
Sacramento	2026 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Gasoline	0.004802	0.004847	0.005280584	0.261703	0.003858	0.765800571	0.00001966	0.000014855	1.15E-05	1.58E-05	44524.57581	0	1194.788739	0
Sacramento	2026 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Diesel	0.0006125	0.0007369	0.0008807	0.004338	0.00518	0.717385788	0.0001824	0.00013732	0.000006811	5.87E-06	23334.24299	0	826.0169756	0
Sacramento	2026 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	72.16964094	0
Sacramento	2026 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Gasoline	0.160071211	0.161701837	0.176150594	9.563712038	0.082986218	19.86326017	0.000532553	0.000403173	0.000337251	0.000465718	1322224.166	0	13925.66135	0
Sacramento	2026 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Diesel	0.001851	0.002227	0.002655	0.007584	0.014102	1.856938303	0.0004726	0.0003573	0.00001761	0.00001516	60400.20626	0	1683.481625	0
Sacramento	2026 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	824.3533528	0
Sacramento	2026 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	5	Gasoline	0.000546	0.0005515	0.0006009	0.019294855	0.0002257	0.04532	1.18E-06	8.88E-07	7.58E-07	1.05E-06	2890.569137	0	194.476876	0
Sacramento	2026 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	11.74711968	0
Sacramento	2026 Lawn and Garden - Misc - Snowblowers	Aggregate	15	Gasoline	0.000811	0.000819	0.000892	0.06085	0.000397	0.1063	0.000002035	1.54E-06	0.000002096	0.000002899	7638.468029	0	1867.009039	0
Sacramento	2026 Lawn and Garden - Misc - Snowblowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	183.3007232	0
Sacramento	2026 Lawn and Garden - Misc - Snowblowers	Aggregate	25	Gasoline	0.000002573	0.000002597	2.82E-06	0.0002606	0.000001851	0.0004555	8.71E-09	6.59E-09	8.60E-09	1.19E-08	32.58617365	0	3.845538304	0
Sacramento	2026 Lawn and Garden - Misc - Snowblowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0.377550369	0
Sacramento	2026 Lawn and Garden - Misc - Snowblowers	Aggregate	5	Gasoline	0.000364	0.0003685	0.0004008	0.01913	0.0001567	0.04369	0.000000754	5.70E-07	7.31E-07	0.000001008	2800.255941	0	1403.621625	0
Sacramento	2026 Lawn and Garden - Misc - Snowblowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	137.8058989	0
Sacramento	2026 Lawn and Garden - Misc - Tillers	Aggregate	15	Gasoline	0.0009032	0.0009126	0.0009948	0.05768	0.0005572	0.146301492	2.50E-06	0.00000189	2.32E-06	3.20E-06	8952.225077	0	1485.076505	0
Sacramento	2026 Lawn and Garden - Misc - Tillers	Aggregate	2	Gasoline	0.0038026	0.00383466	0.00418453	0.0110994	0.000067938	0.064469	6.30E-06	4.76E-06	1.03E-06	1.42E-06	3550.164718	0	2009.584354	0
Sacramento	2026 Lawn and Garden - Misc - Tillers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	621.350497	0
Sacramento	2026 Lawn and Garden - Misc - Tillers	Aggregate	5	Gasoline	0.00056	0.0005653	0.0006162	0.028485	0.00018492	0.06676	9.97E-07	7.53E-07	1.12E-06	1.53E-06	4232.665452	0	998.2568786	0
Sacramento	2026 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	15	Gasoline	0.00005155	0.00005202	0.00005669	0.002844	0.00001989	0.007355	1.13E-07	0.000000085	1.18E-07	0.000000163	448.1930277	0	55.12220737	0
Sacramento	2026 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	2	Gasoline	0.379631299	0.383399312	0.417679601	2.110525839	0.02259	11.09382848	0.0032883	0.00249	0.00015023	0.00020731	586872.3202	0	123261.1299	0
Sacramento	2026 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	184579.6794	0
Sacramento	2026 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	25	Gasoline	0.00005744	0.00005801	0.00006324	0.002888	2.41E-05	0.01134	1.27E-07	9.64E-08	1.54E-07	2.13E-07	599.5246302	0	25.3737141	0
Sacramento	2026 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	5	Gasoline	0.013956	0.014091	0.015355	0.25229	0.0015768	0.857031638	0.00016887	0.00012757	0.000012362	0.000017077	48569.08178	0	3974.486143	0
Sacramento	2026 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	2976.055439	0
Sacramento	2026 Lawn and Garden - Misc - Wood Splitters	Aggregate	15	Gasoline	0.0177782	0.017879	0.0194861	0.905011893	0.0090594	2.301121137	7.18E-05	0.000054239	0.000036483	0.000050253	141177.4385	0	4847.705323	0
Sacramento	2026 Lawn and Garden - Misc - Wood Splitters	Aggregate	2	Gasoline	0.0003391	0.00034212	0.00037331	0.0091075	0.00018619	0.021108	6.38E-07	4.82E-07	3.62E-07	5.00E-07	1366.419365	0	129.8351136	0
Sacramento	2026 Lawn and Garden - Misc - Wood Splitters	Aggregate	25	Gasoline	1.06E-05	1.07E-05	1.16E-05	0.00062217	4.62E-06	0.00149764	4.44E-08	3.36E-08	2.38E-08	3.30E-08	93.53754287	0	1.055568684	0
Sacramento	2026 Lawn and Garden - Misc - Wood Splitters	Aggregate	5	Gasoline	0.00112491	0.00113496	0.0012354	0.051373	0.00039374	0.121703873	3.67E-06	2.78E-06	2.01E-06	2.77E-06	7697.13652	0	467.089737	0
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	100	Gasoline	0.001860812	0.001711575	0.00204771	0.093844833	0.004703852	1.776877749	0.000123888	9.36E-05	1.72E-05	2.56E-05	73073	19385.15	40.09	1356960.5
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	15	Gasoline	0.118864515	0.12005316	0.130803146	7.742885515	0.0731367	15.26692786	0.000201369	0.000266518	0.000265547	0.000366553	1038706.845	0	9684.877627	0
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	15	Diesel	1.96E-05	2.36E-05	2.82E-05	0.000121824	0.000147855	0.02010199	4.18E-06	5.54E-06	1.91E-07	1.64E-07	653.8528238	0	2.471179118	0
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	118994.6309	0
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	175	Gasoline	0.000187191	0.000172178	0.000205992	0.008265857	0.000645174	0.222542084	1.60E-05	1.21E-05	2.21E-06	3.14E-06	8949.8	1295.75	2.68	173630.5
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	25	Gasoline	0.001674088	0.001690829	0.001842231	0.243951394	0.002459995	0.371504805	4.66E-06	6.17E-06	7.22E-06	9.96E-06	28372.3195	0	100.2377679	0
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	25	Diesel	8.18E-05	9.84E-05	0.000117638	0.000331935	0.000616591	0.080521417	1.66E-05	0.000021955	7.64E-07	6.58E-07	2619.101669	0	4.96362682	0
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	630.4544953	0
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	5	Gasoline	0.025193608	0.025445543	0.027724027	1.030592545	0.007543505	2.43512724	2.93E-05	3.88E-05	3.95E-05	5.46E-05	154507.1722	0	3650.32536	0
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	44850.2434	0
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	50	Gasoline	0.000612732	0.000563591	0.000674275	0.050204999	0.000823421	0.277098749	1.91E-05	1.44E-05	3.37E-06	4.75E-06	13563.4	5967.75	12.36	208871.25
Sacramento	2026 Light Commercial - Misc - Air Compressors	Aggregate	50	Diesel	0.000565506	0.000672999	0.000814329	0.005977663	0.004609822	0.711108098	0.000146883	0.000135133	8.93E-06	5.82E-06	23130.05	22659.2	27.85	838390.4
Sacramento	2026 Light Commercial - Misc - Gas Compressors	Aggregate	100	Nat Gas	0	0	0.000225018	0.11680753	0.008866537	2.7933266	0	0	0	0	154570.2	15965.1	1.88	1404928.8
Sacramento	2026 Light Commercial - Misc - Gas Compressors	Aggregate	175	Nat Gas	0	0	6.28E-05	0.023759632	0.002372644	0.7269724	0	0	0	0	39693.75	2573.25	0.3	375694.5
Sacramento	2026 Light Commercial - Misc - Gas Compressors	Aggregate	300	Nat Gas	0	0	4.83E-05	0.027339857	0.002293201	0.74923866	0	0	0	0	41109.95	2058.6	0.25	432306
Sacramento	2026 Light Commercial - Misc - Gas Compressors	Aggregate	50	Nat Gas	0	0	4.13E-05	0.0073043	0.001498274	0.49707888	0	0	0	0	26415.05	7723.4	0.91	247148.8
Sacramento	2026 Light Commercial - Misc - Gas Compressors	Aggregate	600	Nat Gas	0	0	6.80E-05	0.038503624	0.003229592	1.0551778	0	0	0	0	57899.95	1799.45	0.21	608214.1
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	100	Gasoline	0.000636108	0.000585092	0.000699998	0.028418424	0.003853432	1.191389147	8.31E-05	6.28E-05	1.15E-05	1.64E-05	46855.05	9030.1	78.6	749498.3
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	100	Nat Gas	0	0	3.09E-06	0.002434898	0.000236672	0.077245271	0	0	0	0	4201.15	671.6	5.84	55742.8
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	15	Gasoline	0.109982726	0.111082554	0.121029281	6.127448055	0.057349942	15.58982002	0.000205935	0.000272561	0.000243909	0.000336685	954912.1645	0	21954.69123	0
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	15	Diesel	0.001025626	0.001233603	0.001474354	0.007127553	0.008671982	1.174219039	0.000246371	0.000326079	1.11E-05	9.60E-06	38193.55335	0	246.4053295	0
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	175	Gasoline	6.48E-05	5.96E-05	7.13E-05	0.006277493	0.000666453	0.192579337	1.38E-05	1.04E-05	1.91E-06	2.69E-06	7668.65	854.1	7.39	124698.6
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	175	Nat Gas	0	0	3.43E-06	0.002915998	0.000321353	0.112644337	0	0	0	0	6069.95	558.45	4.86	81533.7
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	2	Gasoline	0.337392826	0.340766756	0.371280226	5.780333047	0.098641322	12.56950625	0.000416493	0.000551241	0.000222579	0.000307241	851511.5267	0	53004.18927	0
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	16047.26639	0
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	25	Gasoline	0.003871518	0.003910233	0.004260369	0.362960456	0.002216439	0.561003936	7.19E-06	9.52E-06	1.09E-05	1.50E-05	42701.38624	0	420.9935901	0
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	25	Diesel	0.001486949	0.001788472	0.002137513	0.00611214	0.011346918	1.479856294	0.000307186	0.000406569	1.40E-05	1.21E-05	48134.94624	0	180.232404	0
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	5	Gasoline	0.031700546	0.032017551	0.034884517	1.471553591	0.007229974	3.111477285	4.58E-05	6.06E-05	5.35E-05	7.39E-05	206425.3486	0	12136.60767	0
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	50	Gasoline	0.003057754	0.002812522	0.003364871	0.21222002	0.006522988	2.405339135	0.000165822	0.000125288	2.92E-05	3.65E-05	104068.8	46730.95	406.85	1495390.4
Sacramento	2026 Light Commercial - Misc - Generator Sets	Aggregate	50	Diesel	0.001051414	0.00125127	0.001514036	0.012804622	0.011822227	1.959053997	0.000326744	0.000300604	2.47E-05	1.60E-05	63721.7	45617.7	135.15	1505384.1
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	15	Gasoline	0.040206008	0.040608069	0.04424426	2.94732817	0.020495861	5.758045589	7.36E-05	9.75E-05	0.000100026	0.000138072	392739.4597	0	13024.12524	0
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	15	Diesel	9.75E-06	1.17E-05	0.000014018	6.78E-05	8.25E-05	0.011178717	2.34E-06	3.10E-06	1.06E-07	9.14E-08	363.6075735	0	11.41314644	0
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	24674.49359	0
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	2	Gasoline	2.36E-05	2.39E-05	2.60E-05	0.00049259	8.05E-06	0.001111416	1.35E-08	1.79E-08	1.89E-08	2.61E-08	73.40065888	0	9.515862321	0
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	18.02801183	0
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	25	Gasoline	0.000631786	0.000638103	0.000695241	0.051705224	0.000310744	0.101012342	1.29E-06	1.71E-06	1.75E-06	2.41E-06	6880.231995	0	86.41430583	0
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	25	Diesel	3.76E-06	4.52E-06	5.40E-06	1.54E-05	2.87E-05	0.003745425	7.71E-07	1.02E-06	3.55E-08	3.06E-08	121.8265813	0	2.622917558	0
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	163.7138154	0
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	5	Gasoline	0.074701547	0.075448563	0.082204495	3.760032188	0.030397302	8.484187022	0.000103259	0.000136666	0.000139671	0.000192797	546540.7397	0	34034.62833	0
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	64479.35681	0
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	50	Gasoline	2.73E-05	2.51E-05	3.01E-05	0.001942255	4.57E-05	0.024353927	1.68E-06	1.27E-06	2.96E-07	3.68E-07	1051.2	408.8	3.64	11855.2
Sacramento	2026 Light Commercial - Misc - Pressure Washers	Aggregate	50	Diesel	3.49E-06	4.15E-06	5.02E-06	5.22E-05	5.44E-05	0.009313867	1.26E-06	1.16E-06	1.19E-07	7.62E-08	302.95	470.85	3.23	17892.3
Sacramento	2026 Light Commercial - Misc - Pumps	Aggregate	100	Gasoline	0.000711179	0.000654142	0.000782609	0.037047292	0.001880644	1.365304407	9.52E-05	7.19E-05	1.32E-05	1.89E-05	53950.65	9092.15	41.21	845569.95
Sacramento	2026 Light Commercial - Misc - Pumps	Aggregate	15	Gasoline	0.012593767	0.012719705	0.013858672	0.821301711	0.007075011	1.872325258	2.38E-05	3.15E-05	3.05E-05	4.21E-05	119609.5173	0	3036.628995	0
Sacramento	2026 Light Commercial - Misc - Pumps	Aggregate	15	Diesel	0.000750172	0.000902292	0.001078385	0.004641894	0.005655307	0.765103693	0.000161815	0.000214167	7.26E-06	0.000006255	24886.35232	0	185.0647288	0
Sacramento	2026 Light Commercial - Misc - Pumps	Aggregate	175	Gasoline	2.66E-05	2.44E-05	2.92E-05	0.002064981	9.30E-05	0.06198287	4.44E-06	3.36E-06	6.16E-07	8.62E-07	2460.1	266.45	1.25	38368.8
Sacramento	2026 Light Commercial - Misc - Pumps	Aggregate	2	Gasoline	0.005861923	0.005920542	0.006450689	0.054878602	0.00034915	0.162511025	1.60E-06	2.11E-06	2.65E-06	3.66E-06	10040.63157	0	1100.689522	0
Sacramento	2026 Light Commercial - Misc - Pumps	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	86761.15413	0
Sacramento	2026 Light Commercial - Misc - Pumps	Aggregate	25	Gasoline	9.35E-05	9.45E-05	0.000102945	0.006764896	6.71E-05	0.015418725	1.99E-07	2.64E-07	2.50E-07	3.45E-07	983.7533413	0	10.11198465	0
Sacramento	2026 Light Commercial - Misc - Pumps	Aggregate	25	Diesel	0.000610039	0.000733742	0.000876941	0.002469988	0.004585854	0.598166802	0.000123911	0.000164	5.68E-06	4.89E-06	19456.43437	0	55.2779883	0
Sacramento	2026 Light Commercial - Misc - Pumps	Aggregate	5	Gasoline	0.00969821	0.009795192	0.010672288	0.436152302	0.003233938	1.013631842	1.21E-05	1.61E-05	1.67E-05	2.30E-05	64631.48775	0	3333.921346	0
Sacramento	2026 Light Commercial - Misc - Pumps	Aggregate	50	Gasoline	0.000468953	0.000431343	0.000516054	0.037060179	0.000736342	0.363141403	2.50E-05	1.89E-05	4.42E-06	5.61E-06	16008.9	7186.85	32.53	222792.35
Sacramento	2026 Light Commercial - Misc - Pumps	Aggregate	50	Diesel	0.00067913	0.000808221	0.000977947	0.007875238	0.007015974	1.147513242	0.000203785	0.000187482	1.45E-05	9.39E-06	37324.9	23812.6	59.16	881066.2
Sacramento	2026 Light Commercial - Misc - Welders	Aggregate	100	Gasoline	0.000816846	0.000751335	0.000898889	0.035609616	0.002321977	1.143817314	7.97E-05	6.03E-05	1.11E-05	1.59E-05	45508.2	13694.8	65.94	958636
Sacramento	2026 Light Commercial - Misc - Welders	Aggregate	15	Gasoline	0.063918655	0.064557842	0.070338581	3.761068198	0.029025172	6.748778867	0.0001348	0.000178411	0.000122634	0.00016928	480471.3958	0	9932.290723	0
Sacramento	2026 Light Commercial - Misc - Welders	Aggregate	15	Diesel	0.000452376	0.000544109	0.000650298	0.002799399	0.003410397	0.461423937	9.76E-05	0.000129135	4.38E-06	3.77E-06	15008.63056	0	83.65931756	0
Sacramento	2026 Light Commercial - Misc - Welders	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	42420.396	0
Sacramento	2026 Light Commercial - Misc - Welders	Aggregate	175	Gasoline	7.52E-05	6.92E-05	8.28E-05	0.004804416	0.000320796	0.142413794	1.02E-05	7.71E-06	1.41E-06	1.99E-06	5683.05	945.35	4.55	122895.5
Sacramento	2026 Light Commercial - Misc - Welders	Aggregate	25	Diesel	0.000751108	0.000903418	0.00107973	0.0030409	0.005645522	0.736358677	0.000152571	0.000201932	6.99E-06	0.00000602	23951.3698	0	73.64126779	0
Sacramento	2026 Light Commercial - Misc - Welders	Aggregate	50	Gasoline	0.001138249	0.001046961	0.001252574	0.080812053	0.001783621	0.728628521	5.02E-05	3.80E-05	8.86E-06	1.14E-05	32525.15	13424.7	64.6	604111.5
Sacramento	2026 Light Commercial - Misc - Welders	Aggregate	50	Diesel	0.002382775	0.002835699	0.003431195	0.025686386	0.020762307	3.263780816	0.000655058	0.000602653	4.11E-05	2.67E-05	106160.25	89381.2	139.18	4111535.2
Sacramento	2026 Locomotive - Line Haul	Aggregate	0	Diesel	0.030976	0.037	0.045	0.218	0.895	0	0.02	0.019	0.001	0.001	0	0	0	0
Sacramento	2026 Locomotive - Passenger	Aggregate	0	Diesel	0.003919232	0.00000387	0.00000461	0.015254983	0.07944523	0	0.001701135	0.001565045	0.0000602	0.0000532	0	0	0	0
Sacramento	2026 Locomotive - Short Line	Aggregate	0	Diesel	0.000242451	4.87E-09	5.80E-09	0.000646535	0.006566368	0	0.000111387	0.000102476	0.00000313	0.00000277	0	0	0	0
Sacramento	2026 Locomotive - Switcher	Aggregate	0	Diesel	0.001685807	0.000000107	0.000000127	0.004516446	0.026387025	0	0.000565663	0.00052041	0.0000152	0.0000135	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - A/C Unit	Aggregate	100	Diesel	2.84E-06	3.38E-06	4.09E-06	6.18E-05	3.85E-05	0.01088488	1.36E-06	1.25E-06	1.25E-07	8.91E-08	354.05	98.55	0.33	9953.55
Sacramento	2026 Military Tactical Support - Misc - A/C Unit	Aggregate	300	Diesel	1.51E-06	1.80E-06	2.18E-06	1.59E-05	1.44E-05	0.009201651	3.94E-07	3.63E-07	1.03E-07	7.53E-08	299.3	54.75	0.16	11388
Sacramento	2026 Military Tactical Support - Misc - A/C Unit	Aggregate	600	Diesel	8.85E-07	1.05E-06	1.27E-06	9.37E-06	8.00E-06	0.005498548	2.30E-07	2.12E-07	5.37E-08	4.50E-08	178.85	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Aircraft Support	Aggregate	100	Diesel	5.20E-07	6.18E-07	7.48E-07	1.13E-05	7.05E-06	0.001795444	2.48E-07	2.28E-07	2.28E-08	1.47E-08	58.4	0	0.09	0
Sacramento	2026 Military Tactical Support - Misc - Aircraft Support	Aggregate	175	Diesel	1.16E-06	1.38E-06	1.67E-06	2.93E-05	1.16E-05	0.005835193	4.51E-07	4.15E-07	6.44E-08	4.77E-08	189.8	51.1	0.16	7154
Sacramento	2026 Military Tactical Support - Misc - Cart	Aggregate	100	Diesel	2.65E-07	3.16E-07	3.82E-07	5.78E-06	3.60E-06	0.000897722	1.27E-07	1.17E-07	1.16E-08	7.35E-09	29.2	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Cart	Aggregate	175	Diesel	9.49E-08	1.13E-07	1.37E-07	2.40E-06	9.48E-07	0	3.70E-08	3.40E-08	5.27E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Cart	Aggregate	300	Diesel	3.33E-07	3.96E-07	4.79E-07	3.51E-06	3.17E-06	0.001795444	8.68E-08	7.98E-08	2.26E-08	1.47E-08	58.4	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Communications	Aggregate	100	Diesel	1.31E-07	1.56E-07	1.89E-07	2.85E-06	1.78E-06	0	6.26E-08	5.76E-08	5.75E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Communications	Aggregate	50	Diesel	7.66E-08	9.12E-08	1.10E-07	1.04E-06	9.73E-07	0	2.26E-08	2.08E-08	2.11E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Compressor	Aggregate	100	Diesel	2.93E-06	3.48E-06	4.21E-06	6.37E-05	3.97E-05	0.011109311	1.40E-06	1.29E-06	1.28E-07	9.09E-08	361.35	138.7	0.49	9847.7
Sacramento	2026 Military Tactical Support - Misc - Compressor	Aggregate	175	Diesel	1.38E-07	1.64E-07	1.99E-07	3.49E-06	1.38E-06	0	5.38E-08	4.95E-08	7.68E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Compressor	Aggregate	300	Diesel	3.01E-07	3.59E-07	4.34E-07	3.18E-06	2.87E-06	0.001795444	7.86E-08	7.23E-08	2.05E-08	1.47E-08	58.4	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Compressor	Aggregate	50	Diesel	9.39E-08	1.12E-07	1.35E-07	1.28E-06	1.19E-06	0	2.77E-08	2.55E-08	2.59E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Compressor	Aggregate	600	Diesel	1.73E-06	2.05E-06	2.48E-06	1.83E-05	1.56E-05	0.01088488	4.49E-07	4.13E-07	1.05E-07	8.91E-08	354.05	0	0.09	0
Sacramento	2026 Military Tactical Support - Misc - Crane	Aggregate	100	Diesel	2.57E-07	3.06E-07	3.70E-07	9.63E-06	4.27E-06	0.001683229	3.76E-08	3.46E-08	2.01E-08	1.38E-08	54.75	0	0.06	0
Sacramento	2026 Military Tactical Support - Misc - Crane	Aggregate	175	Diesel	4.70E-08	5.60E-08	6.77E-08	2.14E-06	2.72E-07	0	8.14E-09	7.49E-09	4.86E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Crane	Aggregate	300	Diesel	4.61E-08	5.48E-08	6.64E-08	7.39E-07	2.31E-07	0	7.32E-09	6.73E-09	4.92E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Deicer	Aggregate	100	Diesel	1.20E-07	1.43E-07	1.73E-07	2.61E-06	1.63E-06	0	5.74E-08	5.28E-08	5.27E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Generator	Aggregate	100	Diesel	1.52E-05	1.81E-05	2.19E-05	0.000331475	0.00020662	0.057903074	7.27E-06	6.69E-06	6.68E-07	4.74E-07	1883.4	660.65	2.22	54833.95
Sacramento	2026 Military Tactical Support - Misc - Generator	Aggregate	175	Diesel	1.64E-05	1.96E-05	2.37E-05	0.000415605	0.000164223	0.082814861	6.41E-06	5.90E-06	9.14E-07	6.78E-07	2693.7	532.9	1.79	78336.3
Sacramento	2026 Military Tactical Support - Misc - Generator	Aggregate	300	Diesel	5.39E-06	6.41E-06	7.76E-06	5.68E-05	5.14E-05	0.033103501	1.40E-06	1.29E-06	3.66E-07	2.71E-07	1076.75	127.75	0.47	28488.25
Sacramento	2026 Military Tactical Support - Misc - Generator	Aggregate	50	Diesel	4.91E-07	5.85E-07	7.07E-07	6.70E-06	6.24E-06	0.001234368	1.45E-07	1.33E-07	1.35E-08	1.01E-08	40.15	0	0.07	0
Sacramento	2026 Military Tactical Support - Misc - Generator	Aggregate	600	Diesel	3.33E-06	3.97E-06	4.80E-06	3.53E-05	3.01E-05	0.020647608	8.67E-07	7.98E-07	2.02E-07	1.69E-07	671.6	58.4	0.16	20323.2
Sacramento	2026 Military Tactical Support - Misc - Generator	Aggregate	750	Diesel	1.78E-07	2.11E-07	2.56E-07	1.87E-06	1.62E-06	0.001346583	4.64E-08	4.27E-08	1.10E-08	1.10E-08	43.8	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Hydraulic Unit	Aggregate	100	Diesel	1.74E-06	2.07E-06	2.50E-06	3.78E-05	2.36E-05	0.006508485	8.30E-07	7.64E-07	7.63E-08	5.33E-08	211.7	58.4	0.17	5548
Sacramento	2026 Military Tactical Support - Misc - Lift	Aggregate	100	Diesel	5.18E-08	6.17E-08	7.47E-08	1.13E-06	7.04E-07	0	2.48E-08	2.28E-08	2.28E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Light	Aggregate	50	Diesel	1.20E-07	1.42E-07	1.72E-07	1.63E-06	1.52E-06	0	3.53E-08	3.25E-08	3.30E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	100	Diesel	3.45E-07	4.10E-07	4.97E-07	7.51E-06	4.68E-06	0.001683229	1.65E-07	1.52E-07	1.51E-08	1.38E-08	54.75	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	175	Diesel	4.90E-07	5.83E-07	7.05E-07	1.24E-05	4.89E-06	0.001907659	1.91E-07	1.76E-07	2.72E-08	1.56E-08	62.05	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	300	Diesel	2.21E-07	2.63E-07	3.18E-07	2.33E-06	2.11E-06	0.001683229	5.76E-08	5.30E-08	1.50E-08	1.38E-08	54.75	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	50	Diesel	2.39E-08	2.85E-08	3.45E-08	3.26E-07	3.04E-07	0	7.06E-09	6.49E-09	6.60E-10	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	600	Diesel	8.92E-08	1.06E-07	1.28E-07	9.45E-07	8.06E-07	0	2.32E-08	2.13E-08	5.41E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Other Tactical Support Equipment	Aggregate	750	Diesel	1.04E-07	1.24E-07	1.50E-07	1.10E-06	9.53E-07	0	2.72E-08	2.50E-08	6.43E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Pressure Washers	Aggregate	175	Diesel	9.43E-08	1.12E-07	1.36E-07	2.38E-06	9.42E-07	0	3.68E-08	3.38E-08	5.24E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Pump	Aggregate	100	Diesel	1.23E-06	1.46E-06	1.77E-06	2.67E-05	1.67E-05	0.00448861	5.87E-07	5.40E-07	5.39E-08	3.67E-08	146	54.75	0.16	5475
Sacramento	2026 Military Tactical Support - Misc - Pump	Aggregate	50	Diesel	1.08E-06	1.29E-06	1.56E-06	1.48E-05	1.38E-05	0.001907659	3.19E-07	2.94E-07	2.99E-08	1.56E-08	62.05	58.4	0.16	2277.6
Sacramento	2026 Military Tactical Support - Misc - Start Cart	Aggregate	100	Diesel	2.73E-08	3.25E-08	3.93E-08	5.94E-07	3.70E-07	0	1.30E-08	1.20E-08	1.20E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Start Cart	Aggregate	600	Diesel	4.67E-08	5.56E-08	6.73E-08	4.95E-07	4.23E-07	0	1.22E-08	1.12E-08	2.84E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Test Stand	Aggregate	100	Diesel	8.28E-07	9.86E-07	1.19E-06	1.80E-05	1.12E-05	0.003029812	3.96E-07	3.64E-07	3.64E-08	2.48E-08	98.55	29.2	0.14	2686.4
Sacramento	2026 Military Tactical Support - Misc - Test Stand	Aggregate	175	Diesel	5.87E-08	6.99E-08	8.45E-08	1.48E-06	5.86E-07	0	2.29E-08	2.11E-08	3.26E-09	0	0	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Test Stand	Aggregate	300	Diesel	1.03E-06	1.23E-06	1.49E-06	1.09E-05	9.84E-06	0.005947409	2.69E-07	2.48E-07	7.02E-08	4.87E-08	193.45	14.6	0.13	2876.2
Sacramento	2026 Military Tactical Support - Misc - Test Stand	Aggregate	600	Diesel	6.80E-07	8.09E-07	9.79E-07	7.20E-06	6.15E-06	0.003927534	1.77E-07	1.63E-07	4.13E-08	3.21E-08	127.75	0	0	0
Sacramento	2026 Military Tactical Support - Misc - Welder	Aggregate	100	Diesel	9.81E-07	1.17E-06	1.41E-06	2.14E-05	1.33E-05	0.003703104	4.69E-07	4.31E-07	4.31E-08	3.03E-08	120.45	58.4	0.16	3620.8
Sacramento	2026 Military Tactical Support - Misc - Welder	Aggregate	50	Diesel	3.52E-07	4.19E-07	5.07E-07	4.80E-06	4.47E-06	0	1.04E-07	9.55E-08	9.70E-09	0	0	0	0	0
Sacramento	2026 Ocean Going Vessels - Bulk Cargo	Aggregate	0	Diesel	0.001068309	0.001323636	0.001581579	0.002507291	0.024215566	1.107578958	0.0003389	0.000311788	0.000704118	3.14E-05	36025.96673	843.770304	0	598748.4477
Sacramento	2026 Ocean Going Vessels - General Cargo	Aggregate	0	Diesel	0.001430524	0.001841656	0.002200315	0.00340169	0.033717892	1.601793706	0.0004793	0.000440956	0.000988992	4.21E-05	52101.17646	932.5891875	0	854718.7373
Sacramento	2026 Ocean Going Vessels - Tanker	Aggregate	Handysize	Diesel	0.001007582	0.001311089	0.001566613	0.002383949	0.023774127	1.086143161	0.000328562	0.000302277	0.000665477	3.12E-05	35328.72946	439.3306917	0	589413.5112
Sacramento	2026 Oil Drilling - Drill Rig	Aggregate	100	Diesel	1.47E-05	1.78E-05	2.12E-05	0.00027737	0.000162819	0.045873886	1.35E-05	1.24E-05	4.35E-07	0	1490.679931	590.9792512	1.119387066	26581.0906
Sacramento	2026 Oil Drilling - Drill Rig	Aggregate	175	Diesel	0.000176148	0.000213139	0.000253653	0.003261186	0.001394977	0.557440218	5.91E-05	5.44E-05	5.28E-06	0	18114.11714	4890.14135	7.296111391	340739.6893
Sacramento	2026 Oil Drilling - Drill Rig	Aggregate	300	Diesel	0.000287604	0.000348	0.000414149	0.002180305	0.001973371	0.949486231	9.33E-05	8.58E-05	8.99E-06	0	30853.72072	4999.201374	7.682399251	580061.3741
Sacramento	2026 Oil Drilling - Drill Rig	Aggregate	50	Diesel	1.80E-05	2.17E-05	2.59E-05	0.000219566	0.000177286	0.028337215	6.51E-06	5.99E-06	2.68E-07	0	920.8227354	717.419314	1.698380376	16419.67001
Sacramento	2026 Oil Drilling - Drill Rig	Aggregate	600	Diesel	0.000672069	0.000813203	0.000967779	0.005530963	0.004815671	2.15363914	0.000238049	0.000219005	2.04E-05	0	69982.87961	6439.90905	10.81092604	1379248.759
Sacramento	2026 Oil Drilling - Drill Rig	Aggregate	75	Diesel	2.59E-05	3.13E-05	3.73E-05	0.000378547	0.000323555	0.063876875	4.86E-06	4.47E-06	6.05E-07	0	2075.690191	1124.730745	2.238981549	35531.0649
Sacramento	2026 Oil Drilling - Drill Rig	Aggregate	750	Diesel	8.61E-05	0.00010417	0.000123971	0.000650558	0.000695218	0.339010117	3.12E-05	2.87E-05	3.21E-06	0	11016.19291	652.2219578	1.119387066	218380.5836
Sacramento	2026 Oil Drilling - Drill Rig	Aggregate	9999	Diesel	7.04E-05	8.52E-05	0.00010144	0.000608818	0.001306373	0.310247744	3.09E-05	2.84E-05	2.94E-06	0	10081.55458	462.2505518	0.77199108	199852.6889
Sacramento	2026 Oil Drilling - Drill Rig (Mobile)	Aggregate	100	Diesel	1.41E-05	1.70E-05	2.02E-05	0.000200446	0.00015498	0.031465952	1.13E-05	1.04E-05	2.98E-07	0	1022.491614	412.6991014	0.77199108	18232.58076
Sacramento	2026 Oil Drilling - Drill Rig (Mobile)	Aggregate	175	Diesel	0.000217506	0.000263182	0.000313208	0.003769735	0.001781341	0.652855628	8.26E-05	7.60E-05	6.18E-06	0	21214.65752	5560.17094	8.609494749	392450.3945
Sacramento	2026 Oil Drilling - Drill Rig (Mobile)	Aggregate	300	Diesel	0.00022673	0.000274344	0.000326492	0.001688353	0.001649083	0.735503716	7.88E-05	7.25E-05	6.97E-06	0	23900.32158	3917.845134	6.257442284	448565.9162
Sacramento	2026 Oil Drilling - Drill Rig (Mobile)	Aggregate	50	Diesel	1.66E-05	2.01E-05	2.39E-05	0.000174129	0.00014397	0.022985002	5.80E-06	5.34E-06	2.18E-07	0	746.901642	670.1410962	1.54398216	13318.39237
Sacramento	2026 Oil Drilling - Drill Rig (Mobile)	Aggregate	600	Diesel	0.000741173	0.000896819	0.001067289	0.005848568	0.005916613	2.376898549	0.000263542	0.000242459	2.25E-05	0	77237.73305	7197.751044	12.35712769	1510815.845
Sacramento	2026 Oil Drilling - Drill Rig (Mobile)	Aggregate	75	Diesel	2.66E-05	3.22E-05	3.84E-05	0.000347261	0.000329373	0.056743674	8.62E-06	7.93E-06	5.38E-07	0	1843.895572	1001.057302	1.968577254	32879.46276
Sacramento	2026 Oil Drilling - Drill Rig (Mobile)	Aggregate	750	Diesel	0.000146272	0.00017699	0.000210632	0.001238456	0.001395456	0.434920874	6.46E-05	5.94E-05	4.12E-06	0	14132.82969	850.7738736	1.544940149	279343.305
Sacramento	2026 Oil Drilling - Drill Rig (Mobile)	Aggregate	9999	Diesel	0.00011375	0.000137637	0.000163799	0.000690918	0.001926359	0.365086326	4.51E-05	4.15E-05	3.46E-06	0	11863.54384	614.955444	1.15798662	235178.1283
Sacramento	2026 Oil Drilling - Misc - Compressors (Workover)	Aggregate	25	Diesel	4.21E-06	5.01E-06	6.06E-06	2.07E-05	3.85E-05	0.003815319	1.52E-06	1.40E-06	6.32E-08	3.12E-08	124.1	240.9	0.32	5781.6
Sacramento	2026 Oil Drilling - Misc - Generator (Drilling)	Aggregate	50	Diesel	2.76E-06	3.29E-06	3.98E-06	3.01E-05	2.14E-05	0.003590888	5.89E-07	5.42E-07	4.17E-08	2.94E-08	116.8	116.8	0	3854.4
Sacramento	2026 Oil Drilling - Workover Rig (Mobile)	Aggregate	100	Diesel	6.65E-06	8.04E-06	9.57E-06	0.000121645	4.52E-05	0.027178641	3.55E-06	3.27E-06	2.57E-07	0	883.1746947	229.7102804	0.231597324	9245.838784
Sacramento	2026 Oil Drilling - Workover Rig (Mobile)	Aggregate	175	Diesel	3.93E-06	4.75E-06	5.66E-06	6.34E-05	3.23E-05	0.010503999	1.78E-06	1.63E-06	9.95E-08	0	341.3292889	85.53269939	0.154398216	6569.995505
Sacramento	2026 Oil Drilling - Workover Rig (Mobile)	Aggregate	300	Diesel	8.77E-05	0.00010609	0.000126255	0.000651915	0.000642503	0.247003366	3.51E-05	3.23E-05	2.34E-06	0	8026.417473	1249.040998	1.815435415	148111.4836
Sacramento	2026 Oil Drilling - Workover Rig (Mobile)	Aggregate	50	Diesel	4.61E-07	5.58E-07	6.64E-07	6.46E-06	4.83E-06	0.000922047	1.06E-07	9.74E-08	8.73E-09	0	29.96207763	21.80691504	0.038599554	534.2694186
Sacramento	2026 Oil Drilling - Workover Rig (Mobile)	Aggregate	600	Diesel	0.001615527	0.001954787	0.002326358	0.014916128	0.010073565	5.726068773	0.000486989	0.00044803	5.42E-05	0	186069.6038	17409.17937	21.69060772	3629194.031
Sacramento	2026 Oil Drilling - Workover Rig (Mobile)	Aggregate	750	Diesel	7.01E-05	8.48E-05	0.000100949	0.000552247	0.000664048	0.191324792	3.03E-05	2.79E-05	1.81E-06	0	6217.13248	380.0908413	0.656632227	124036.1563
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	120	Gasoline	0.352471275	0.355995988	0.387873136	1.239556988	0.02613982	4.210072016	0.017870993	0.013502529	7.05E-05	9.73E-05	275547.6827	0	1459.746454	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	15	Gasoline	1.84E-06	1.86E-06	2.02E-06	4.60E-05	8.89E-07	0.000112975	9.08E-09	6.86E-09	2.02E-09	2.79E-09	7.150333077	0	0.316083713	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	175	Gasoline	0.124636402	0.125882765	0.137154757	1.216145999	0.069078199	6.403859469	0.010665604	0.008058457	8.32E-05	0.000114822	326348.6844	0	1359.643558	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	250	Gasoline	0.163351412	0.164984926	0.179758264	2.112418601	0.050477271	11.14677935	0.001112647	0.000840667	0.000142532	0.000196748	560818.3637	0	1883.278307	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	50	Gasoline	0.15612203	0.15768325	0.171802771	0.335641038	0.001424832	0.7954033	0.007765461	0.005867237	1.81E-05	2.50E-05	69656.44468	0	649.1745279	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	500	Gasoline	0.01067962	0.010786416	0.01175227	0.137637958	0.003101641	0.71176588	7.43E-05	5.61E-05	9.14E-06	1.26E-05	36004.14858	0	84.89279088	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	750	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Personal Water Craft	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	120	Gasoline	0.000635533	0.000641889	0.000699365	0.012026911	0.000478834	0.059665687	0.000202578	0.000153058	7.77E-07	1.07E-06	3013.008453	0	12.63039076	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	15	Gasoline	6.41E-05	6.47E-05	7.05E-05	0.001234218	4.43E-05	0.006515862	1.27E-05	9.56E-06	9.50E-08	1.31E-07	323.7032052	0	12.08310529	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	175	Gasoline	0.000715139	0.00072229	0.000786967	0.005071453	0.000504377	0.062679144	6.31E-06	4.76E-06	7.00E-07	9.67E-07	2728.098948	0	8.210007497	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	25	Gasoline	0.000119843	0.000121041	0.000131879	0.002250221	9.35E-05	0.012314875	4.45E-05	3.36E-05	1.69E-07	2.33E-07	606.8001722	0	13.76706078	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	250	Gasoline	0.001208005	0.001220084	0.001329335	0.008566644	0.000851988	0.106708766	1.07E-05	8.05E-06	1.19E-06	1.64E-06	4639.300757	0	8.210007497	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	50	Gasoline	0.000396701	0.000400668	0.000436546	0.007138964	0.000365996	0.039915305	0.000257882	0.000194845	5.23E-07	7.22E-07	1958.796575	0	24.4601778	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	500	Gasoline	0.001472155	0.001486877	0.001620017	0.016848255	0.001637501	0.16329493	1.70E-05	1.29E-05	1.85E-06	2.56E-06	7269.603977	0	8.210007497	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	750	Gasoline	0.006055826	0.006116385	0.006664068	0.028140046	0.002852083	0.306177994	3.20E-05	2.41E-05	3.52E-06	4.87E-06	13857.15227	0	8.210007497	0
Sacramento	2026 Pleasure Craft - Sailboat Auxiliary Inboard Engine	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	120	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	15	Gasoline	0.000828728	0.000837015	0.000911964	0.010339561	0.000387097	0.077485891	0.000006231	4.71E-06	1.17E-06	1.62E-06	3603.906988	0	289.0563701	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	175	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	250	Gasoline	0.011386844	0.011500713	0.012530528	0.097040375	0.009917599	1.082666928	0.000108069	8.17E-05	1.23E-05	1.70E-05	47550.50089	0	225.6006982	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	50	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	500	Gasoline	0.108272693	0.109355421	0.119147494	1.210538655	0.042168141	13.58947357	0.001418267	0.001071579	0.000151698	0.000209399	591897.6057	0	1973.80536	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	750	Gasoline	0.000356771	0.000360338	0.000392604	0.005913556	0.000121564	0.092090752	9.61E-06	7.26E-06	9.74E-07	1.34E-06	3827.803919	0	8.025441981	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Engines	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	120	Gasoline	0.025354625	0.025608171	0.027901218	0.074658376	0.00101717	0.242439672	0.001235768	0.000933692	4.31E-06	5.95E-06	16717.85348	0	161.2571271	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	175	Gasoline	0.004881839	0.004930657	0.005372165	0.044940878	0.001877927	0.233555285	0.000110175	8.32E-05	3.07E-06	4.24E-06	11980.41718	0	94.63370948	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	250	Gasoline	0.015604505	0.01576055	0.017171805	0.152139764	0.006479497	0.994356282	0.001659255	0.00125366	1.22E-05	1.69E-05	48035.01043	0	319.5957388	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	50	Gasoline	0.024033742	0.024274079	0.026447666	0.054535972	0.000449152	0.153210357	0.001176575	0.000888968	3.21E-06	4.43E-06	12038.5152	0	232.9426191	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	500	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	750	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Inboard Jet Engines	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	120	Gasoline	0.388144418	0.392025863	0.427129256	1.420201108	0.052083541	7.286271199	0.031345782	0.023683479	0.00010466	0.000144469	405513.0867	0	2477.5769	0
Sacramento	2026 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026 Pleasure Craft - Vessels W/Outboard Engines	Aggregate	15	Gasoline	0.05805534	0.058635893	0.06388636	0.225040352	0.005546266	0.765535921	0.003046025	0.002301442	1.46E-05	2.01E-05	49297.78791	0	2508.083887	0

Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	175	Gasoline	0.181970245	0.183789947	0.200247154	0.850092318	0.030185506	4.072278817	0.019903053	0.015037863	5.77E-05	7.96E-05	225392.6964	0	739.0043677	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	25	Gasoline	0.069780042	0.070477842	0.076788679	0.186431843	0.006390898	0.746418512	0.004196599	0.003170763	1.30E-05	1.80E-05	47847.71819	0	1073.242973	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	250	Gasoline	0.172185665	0.173907522	0.189479821	0.880495801	0.053755638	5.276358281	0.037757532	0.028527908	6.92E-05	9.55E-05	270810.7487	0	667.725659	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	50	Gasoline	0.165822791	0.167481019	0.182477866	0.484633279	0.018924409	2.203484022	0.011988075	0.009057657	3.49E-05	0.000048235	132169.6545	0	1590.78894	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	500	Gasoline	0.068555418	0.069240973	0.075441056	0.928854294	0.032504218	3.838226271	0.008894007	0.006719916	5.26E-05	7.26E-05	206519.69	0	412.1742269	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	750	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Outboard Engines	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	120	Gasoline	3.03E-06	3.06E-06	3.33E-06	2.57E-05	1.49E-06	0.000497607	4.55E-08	3.44E-08	5.37E-09	7.42E-09	20.46251831	0	0.283468289	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	120	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	15	Gasoline	0.002009975	0.002030075	0.002211855	0.032837116	0.002080088	0.253673713	3.69E-05	2.79E-05	3.86E-06	5.33E-06	11647.63778	0	1209.887324	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	15	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	175	Gasoline	0.015170664	0.015322371	0.016694391	0.170659558	0.044210905	2.96292883	0.000298077	0.000225213	3.19E-05	4.40E-05	122487.3053	0	1073.46332	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	250	Gasoline	0.072870056	0.073598757	0.080189051	0.830860423	0.064703002	7.522167861	0.000750847	0.000567306	8.77E-05	0.000121037	338740.3746	0	2163.217807	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	250	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	50	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	500	Gasoline	0.091445842	0.092360301	0.100630571	0.637034371	0.035027457	13.52784492	0.001411835	0.00106672	0.000142011	0.000196027	553795.6677	0	2746.34056	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	500	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	750	Gasoline	0.0084695	0.008554195	0.009320168	0.015794269	0.002588798	0.443708353	4.63E-05	0.000034988	4.73E-06	6.53E-06	18577.24067	0	49.3632719	0
Sacramento	2026	Pleasure Craft - Vessels W/Sterndrive Engines	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Portable Equipment - Non-Rental Compressor	Aggregate	100	Diesel	0.000446961	0.000540822	0.000643623	0.01161632	0.005949688	1.697065227	0.000433609	0.000398921	1.57E-05	1.39E-05	55200.05139	42971.42816	102.2641171	3414874.966
Sacramento	2026	Portable Equipment - Non-Rental Compressor	Aggregate	175	Diesel	0.000112605	0.000136252	0.000162152	0.00324538	0.001276205	0.556382137	5.47E-05	5.04E-05	5.15E-06	4.55E-06	18097.31414	9099.831846	21.65593068	1119565.353
Sacramento	2026	Portable Equipment - Non-Rental Compressor	Aggregate	300	Diesel	0.000134362	0.000162578	0.000193481	0.001953126	0.001081518	1.035488977	4.22E-05	3.89E-05	9.59E-06	8.47E-06	33681.11243	7583.193205	18.0466089	2083635.518
Sacramento	2026	Portable Equipment - Non-Rental Compressor	Aggregate	50	Diesel	3.06E-06	3.71E-06	4.41E-06	7.64E-05	6.26E-05	0.013579043	5.84E-07	5.37E-07	1.26E-07	1.11E-07	441.6824201	505.5462137	1.20310726	24578.27164
Sacramento	2026	Portable Equipment - Non-Rental Compressor	Aggregate	600	Diesel	0.000210066	0.000254179	0.000302494	0.002129211	0.001961513	1.117999052	8.75E-05	8.05E-05	1.04E-05	9.15E-06	36364.89872	5055.462137	12.0310726	2249664.251
Sacramento	2026	Portable Equipment - Non-Rental Compressor	Aggregate	75	Diesel	0.000119319	0.000144376	0.000171819	0.002580625	0.001920229	0.394851839	1.38E-05	1.27E-05	3.66E-06	3.23E-06	12843.2552	13144.20156	31.28078876	794530.2506
Sacramento	2026	Portable Equipment - Non-Rental Compressor	Aggregate	750	Diesel	0.000115591	0.000139865	0.000166451	0.001582291	0.00165094	0.860497821	7.16E-05	6.58E-05	7.97E-06	7.04E-06	27989.21524	2527.731068	6.0155363	1731514.157
Sacramento	2026	Portable Equipment - Non-Rental Generator	Aggregate	100	Diesel	0.000845455	0.001023001	0.001217456	0.01885599	0.007809276	2.492444369	0.00068976	0.000634579	2.31E-05	2.04E-05	81071.1663	55658.89051	39.70253958	5015355.771
Sacramento	2026	Portable Equipment - Non-Rental Generator	Aggregate	175	Diesel	0.001124621	0.001360791	0.001619454	0.026800313	0.006758581	4.134946081	0.000316727	0.000291389	3.83E-05	3.38E-05	134496.4427	57345.52355	40.90564684	8320436.734
Sacramento	2026	Portable Equipment - Non-Rental Generator	Aggregate	300	Diesel	0.000919302	0.001112355	0.001323795	0.007477761	0.004020967	3.334902209	0.000194974	0.000179376	3.09E-05	2.73E-05	108473.5992	28672.76178	20.45282342	6710569.45
Sacramento	2026	Portable Equipment - Non-Rental Generator	Aggregate	50	Diesel	0.000126606	0.000153194	0.000182313	0.001828758	0.001051514	0.177514592	3.65E-05	3.36E-05	1.64E-06	1.45E-06	5773.976414	6746.532183	4.81242904	321304.0734
Sacramento	2026	Portable Equipment - Non-Rental Generator	Aggregate	600	Diesel	0.002477669	0.002997979	0.003567843	0.017006785	0.01289107	8.00875518	0.000664864	0.000611675	7.42E-05	6.55E-05	260498.9428	32046.02787	22.85903794	16115407.43
Sacramento	2026	Portable Equipment - Non-Rental Generator	Aggregate	75	Diesel	0.000858316	0.001038562	0.001235975	0.012755455	0.009162473	1.718181537	0.000194021	0.0001785	1.59E-05	1.41E-05	55886.89676	53972.25746	38.49943232	3457365.707
Sacramento	2026	Portable Equipment - Non-Rental Generator	Aggregate	750	Diesel	0.000626843	0.00075848	0.000902654	0.003836039	0.004241297	1.774733495	0.000229884	0.000211494	1.64E-05	1.45E-05	57726.34931	5059.899137	3.60932178	3571160.899
Sacramento	2026	Portable Equipment - Non-Rental Generator	Aggregate	9999	Diesel	0.003494322	0.00422813	0.005031824	0.024128908	0.049605818	11.33783586	0.001076554	0.00099043	0.000104987	9.28E-05	368783.1866	18552.9635	13.23417986	22814262.67
Sacramento	2026	Portable Equipment - Non-Rental Other	Aggregate	100	Diesel	0.000149454	0.000180839	0.000215214	0.005981024	0.002768049	0.93786957	0.000188036	0.000172993	8.69E-06	7.67E-06	30505.86839	21265.27231	64.96779204	1887203.429
Sacramento	2026	Portable Equipment - Non-Rental Other	Aggregate	175	Diesel	0.000599116	0.00072493	0.000862726	0.022513155	0.007184098	4.047984872	0.000284637	0.000261866	3.75E-05	3.31E-05	131667.8754	61826.81025	188.8878398	8145451.324
Sacramento	2026	Portable Equipment - Non-Rental Other	Aggregate	300	Diesel	0.00031187	0.000377362	0.000449092	0.002778228	0.003380605	1.326998063	0.000132291	0.000121708	1.23E-05	1.09E-05	43162.96161	11420.23884	34.89011054	2670217.026
Sacramento	2026	Portable Equipment - Non-Rental Other	Aggregate	600	Diesel	0.000327265	0.000395991	0.000471262	0.003216992	0.003370675	1.553018804	0.000128162	0.000117909	1.44E-05	1.27E-05	50514.68642	7482.225444	22.85903794	3125021.331
Sacramento	2026	Portable Equipment - Non-Rental Other	Aggregate	75	Diesel	0.000173875	0.000210389	0.00025038	0.004151275	0.003230257	0.650877598	5.73E-05	5.27E-05	6.03E-06	5.33E-06	21170.94634	20083.8683	61.35847026	1309711.366
Sacramento	2026	Portable Equipment - Non-Rental Other	Aggregate	750	Diesel	6.76E-05	8.18E-05	9.73E-05	0.001006163	0.000404786	0.537867228	2.40E-05	2.21E-05	4.98E-06	4.40E-06	17495.08394	1575.205357	4.81242904	1082309.213
Sacramento	2026	Portable Equipment - Non-Rental Other	Aggregate	9999	Diesel	0.002570346	0.003110119	0.003701299	0.029045027	0.050358377	14.85154329	0.000716482	0.000659163	0.000137584	0.000121526	483072.742	9845.033479	30.0776815	29884628.22
Sacramento	2026	Portable Equipment - Non-Rental Pump	Aggregate	100	Diesel	0.000114404	0.000138429	0.000164742	0.003608379	0.002014521	0.568400318	0.000125506	0.000115466	5.27E-06	4.65E-06	18488.22678	13417.86898	40.90564684	1143748.623
Sacramento	2026	Portable Equipment - Non-Rental Pump	Aggregate	175	Diesel	0.000237711	0.00028763	0.000342303	0.007824492	0.003011836	1.399693081	0.000106899	9.83E-05	1.30E-05	1.15E-05	45527.49579	22494.6627	68.57711382	2816495.669
Sacramento	2026	Portable Equipment - Non-Rental Pump	Aggregate	300	Diesel	5.18E-05	6.26E-05	7.45E-05	0.00064851	0.000439899	0.338199162	1.42E-05	1.31E-05	3.13E-06	2.77E-06	11000.52658	3157.145642	9.624858081	680532.3888
Sacramento	2026	Portable Equipment - Non-Rental Pump	Aggregate	50	Diesel	1.66E-05	2.01E-05	2.39E-05	9.86E-05	8.70E-05	0.010816503	5.59E-06	5.14E-06	9.98E-08	8.85E-08	351.8258988	394.6432052	1.20310726	19578.0319
Sacramento	2026	Portable Equipment - Non-Rental Pump	Aggregate	600	Diesel	0.00027497	0.000332713	0.000395956	0.003399384	0.001394497	1.78186981	6.60E-05	6.08E-05	1.65E-05	1.46E-05	57958.47059	8287.50731	25.26525246	3585520.762
Sacramento	2026	Portable Equipment - Non-Rental Pump	Aggregate	75	Diesel	0.000154856	0.000187376	0.000222993	0.00371213	0.00298175	0.587275646	6.46E-05	5.94E-05	5.44E-06	4.81E-06	19102.18022	18548.23065	56.54604122	1181730.005
Sacramento	2026	Portable Equipment - Rental Compressor	Aggregate	100	Diesel	2.51E-05	3.04E-05	3.62E-05	0.000961186	0.000331897	0.140130846	2.61E-05	2.40E-05	1.30E-06	1.15E-06	4558.003897	3312.289833	6.0155363	281974.618
Sacramento	2026	Portable Equipment - Rental Compressor	Aggregate	175	Diesel	0.000142556	0.000172493	0.000205281	0.007422765	0.000806782	1.366684059	2.24E-05	2.06E-05	1.27E-05	1.12E-05	44453.8189	20536.19696	37.29632506	2750074.13
Sacramento	2026	Portable Equipment - Rental Compressor	Aggregate	300	Diesel	0.00010838	0.00013114	0.000156068	0.001822565	0.000219307	0.974383018	1.62E-05	1.49E-05	9.03E-06	7.97E-06	31693.53293	7949.495598	14.43728712	1960676.656
Sacramento	2026	Portable Equipment - Rental Compressor	Aggregate	600	Diesel	0.000307496	0.00037207	0.000442794	0.003733125	0.000492914	1.919041311	3.50E-05	3.22E-05	1.78E-05	1.57E-05	62420.21654	7287.037632	13.23417986	3861540.515
Sacramento	2026	Portable Equipment - Rental Compressor	Aggregate	75	Diesel	2.39E-05	2.89E-05	3.44E-05	0.000562196	0.00042643	0.087867594	3.59E-06	3.31E-06	8.14E-07	7.19E-07	2858.049064	2649.831866	4.81242904	176809.2593
Sacramento	2026	Portable Equipment - Rental Compressor	Aggregate	750	Diesel	0.000161388	0.00019528	0.000232399	0.002135101	0.000878977	1.117127027	4.79E-05	4.40E-05	1.03E-05	9.14E-06	36336.53457	3312.289833	6.0155363	2247909.542
Sacramento	2026	Portable Equipment - Rental Generator	Aggregate	100	Diesel	0.00070535	0.000853473	0.001015703	0.020319867	0.006425676	2.775506222	0.000552412	0.000508219	2.57E-05	2.27E-05	90278.25427	59612.94405	39.70253958	5584939.556
Sacramento	2026	Portable Equipment - Rental Generator	Aggregate	175	Diesel	0.000868675	0.001051097	0.001250892	0.028845238	0.002806836	4.724417523	0.000104767	9.64E-05	4.38E-05	3.87E-05	153670.0451	68645.2083	45.71807588	9506585.175
Sacramento	2026	Portable Equipment - Rental Generator	Aggregate	300	Diesel	0.000648682	0.000784905	0.000934102	0.005756683	0.001331467	2.55638731	6.74E-05	6.21E-05	2.37E-05	2.09E-05	83151.02367	25290.3399	16.84350164	5144023.275
Sacramento	2026	Portable Equipment - Rental Generator	Aggregate	600	Diesel	0.001208529	0.00146232	0.001740282	0.010987809	0.001870766	5.238367167	0.000129365	0.000119016	4.85E-05	4.29E-05	170387.1673	25290.3399	16.84350164	10540766.86
Sacramento	2026	Portable Equipment - Rental Generator	Aggregate	75	Diesel	0.000473324	0.000572722	0.000681587	0.008229334	0.00593981	1.178432199	4.99E-05	4.59E-05	1.09E-05	9.64E-06	38330.59384	36129.057	24.0621452	2371269.266
Sacramento	2026	Portable Equipment - Rental Generator	Aggregate	750	Diesel	0.000506632	0.000613024	0.00072955	0.002668442	0.003885337	1.234548018	0.000194748	0.000179168	1.14E-05	1.01E-05	40155.86021	3612.9057	2.40621452	2484186.85
Sacramento	2026	Portable Equipment - Rental Generator	Aggregate	9999	Diesel	0.000390196	0.000472138	0.000561883	0.003240252	0.007067807	1.499094022	0.000156432	0.000143917	1.39E-05	1.23E-05	48760.6874	3612.9057	2.40621452	3016512.604
Sacramento	2026	Portable Equipment - Rental Other	Aggregate	100	Diesel	6.55E-05	7.93E-05	9.43E-05	0.001970629	0.000607539	0.261153116	5.37E-05	4.94E-05	2.42E-06	2.14E-06	8494.467494	6249.386415	4.81242904	525498.5035
Sacramento	2026	Portable Equipment - Rental Other	Aggregate	175	Diesel	0.000276276	0.000334294	0.000397837	0.006156079	0.002015902	0.946005977	6.51E-05	5.99E-05	8.76E-06	7.74E-06	30770.51942	12498.77283	9.624858081	1903575.7
Sacramento	2026	Portable Equipment - Rental Other	Aggregate	75	Diesel	0.000151972	0.000183886	0.00021884	0.002382455	0.001703463	0.328174712	2.00E-05	1.84E-05	3.04E-06	2.69E-06	10674.46358	10936.42623	8.421750821	660360.9513
Sacramento	2026	Portable Equipment - Rental Pump	Aggregate	100	Diesel	0.000266092	0.000321971	0.000383172	0.008021957	0.002313411	1.094983916	0.000212407	0.000195415	1.01E-05	8.96E-06	35616.29069	26814.14309	26.46835972	2203352.649
Sacramento	2026	Portable Equipment - Rental Pump	Aggregate	175	Diesel	0.000244914	0.000296346	0.000352676	0.005996738	0.002239082	0.958561661	7.73E-05	7.11E-05	8.88E-06	7.84E-06	31178.91529	15844.72092	15.64039438	1928840.546
Sacramento	2026	Portable Equipment - Rental Pump	Aggregate	300	Diesel	0.000364594	0.000441159	0.000525015	0.00252497	0.002349001	1.135850495	0.000108093	9.94E-05	1.05E-05	9.29E-06	36945.54852	10969.42217	10.82796534	2285585.35
Sacramento	2026	Portable Equipment - Rental Pump	Aggregate	600	Diesel	9.24E-05	0.000111851	0.000133112	0.00084361	0.000108922	0.402655996	8.31E-06	7.65E-06	3.73E-06	3.29E-06	13097.09921	2437.649372	2.40621452	810233.9599
Sacramento	2026	Portable Equipment - Rental Pump	Aggregate	75	Diesel	0.000166351	0.000201285	0.000239545	0.003887146	0.003122189	0.60638791	8.08E-05	7.43E-05	5.62E-06	4.96E-06	19723.84045	17063.5456	16.84350164	1220188.158
Sacramento	2026	Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	120	Gasoline	0.003732341	0.003769664	0.004107213	0.083174214	0.001973437	1.534456452	0.000194469	0.000146932	1.89E-05	2.21E-05	62592.3726	0	1925.129578	0
Sacramento	2026	Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	15	Gasoline	0.001954569	0.001974114	0.002150884	0.024588668	0.000503183	0.355875657	5.74E-05	4.33E-05	4.97E-06	5.37E-06	14968.88076	0	705.6208141	0
Sacramento	2026	Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	25	Gasoline	0.001190752	0.00120266	0.001310351	0.01068524	0.000199992	0.143544836	2.67E-05	2.02E-05	2.08E-06	2.22E-06	6135.129951	0	344.4001493	0
Sacramento	2026	Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	50	Gasoline	0.008896778	0.008985746	0.009790362	0.170750998	0.003728128	2.963130934	0.000374671	0.000283085	3.63E-05	4.35E-05	121683.7265	0	4903.157956	0
Sacramento	2026	Recreational - Golf Carts	Aggregate	120	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Recreational - Golf Carts	Aggregate	15	Gasoline	0.001865108	0.00188376	0.002052439	0.05206523	0.001459157	0.632129314	0.000140876	0.00010644	5.33E-06	9.46E-06	26871.29523	0	714.5905477	0
Sacramento	2026	Recreational - Golf Carts	Aggregate	25	Gasoline	0.000552625	0.000558151	0.000608131	0.015426735	0.000432343	0.187297575	4.17E-05	3.15E-05	1.58E-06	2.80E-06	7961.86526	0	119.0984246	0
Sacramento	2026	Recreational - Golf Carts	Aggregate	5	Gasoline	4.29E-05	4.33E-05	4.72E-05	0.001211343	3.38E-05	0.006689199	3.25E-06	2.45E-06	1.69E-07	1.15E-07	326.0692552	0	17.01406066	0
Sacramento	2026	Recreational - Golf Carts	Aggregate	50	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Recreational - Minibikes	Aggregate	120	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Recreational - Minibikes	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Recreational - Minibikes	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Recreational - Minibikes	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Recreational - Minibikes	Aggregate	50	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Recreational - Off-Road Motorcycles Active	Aggregate	120	Gasoline	0.006736243	0.006803604	0.007412824	0.035279554	0.000246343	0.267833067	9.78E-05	7.39E-05	4.69E-06	5.01E-06	12933.97352	0	436.919407	0
Sacramento	2026	Recreational - Off-Road Motorcycles Active	Aggregate	15	Gasoline	0.000655048	0.000661599	0.000720841	0.00747778	9.10E-05	0.052698582	1.63E-05	1.23E-05	1.57E-06	1.10E-06	2489.063092	0	122.0378287	0
Sacramento	2026	Recreational - Off-Road Motorcycles Active	Aggregate	25	Gasoline	0.001872703	0.001891431	0.002060797	0.004515689	2.27E-05	0.021252432	2.28E-05	1.72E-05	8.07E-07	5.70E-07	1301.046841	0	55.52000703	0
Sacramento	2026	Recreational - Off-Road Motorcycles Active	Aggregate	5	Gasoline	0.002004376	0.002024418	0.002205692	0.013780576	6.30E-05	0.074990054	5.70E-05	4.31E-05	2.14E-06	1.73E-06	3865.495596	0	186.2276402	0
Sacramento	2026	Recreational - Off-Road Motorcycles Active	Aggregate	50	Gasoline	0.009199651	0.009291648	0.010123656	0.030196662	0.000243213	0.218925741	0.000116348	8.79E-05	5.62E-06	4.66E-06	11132.51428	0	393.9305664	0
Sacramento	2026	Recreational - Snowmobiles Active	Aggregate	120	Gasoline	0	0	0	0	0	0	0	0	0	1.26E-08	0	0	0	0
Sacramento	2026	Recreational - Snowmobiles Active	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Recreational - Snowmobiles Active	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	1.05E-08	0	0	0	0
Sacramento	2026	Recreational - Snowmobiles Active	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2026	Recreational - Snowmobiles Active	Aggregate	50	Gasoline	0	0	0	0	0	0	0	0	0	8.16E-08	0	0	0	0
Sacramento	2026	Transport Refrigeration Unit - Instate Genset	Aggregate	25	Diesel	0.000213236	0.00217796	0.000307022	0.000236861	0.00343907	0.549486151	9.85E-05	0.000090681	862.56	1.23E-08	17873.01	37970.12	48.54	0
Sacramento	2026	Transport Refrigeration Unit - Instate Genset	Aggregate	50	Diesel	0.00017196	0.0017557	0.0002475	0.00019101	0.0016675	0.311299579	3.02E-05	0.000027798	488.63	6.98E-09	10125.57	19471.53	24.86	0
Sacramento	2026	Transport Refrigeration Unit - Instate Trailer	Aggregate	25	Diesel	0.00442579	0.0451775	0.00637491	0.00491642	0.04596542	7.345608721	0.001263807	0.001161988	11531.61	1.65E-07	238928.93	364139.48	202.99	0
Sacramento	2026	Transport Refrigeration Unit - Instate Trailer	Aggregate	50	Diesel	0.006813808	0.0674082	0.009801926	0.00756112	0.06209866	11.50325756	0.000823049	0.00075723	18058.64	2.58E-07	374163.82	498261.64	277.77981	0
Sacramento	2026	Transport Refrigeration Unit - Instate Truck	Aggregate	23	Diesel	0.0006361	0.0064928	0.00091649	0.00070669	0.0082566	1.320215293	0.000424816	0.000390849	2072.51	2.96E-08	42942.34	77513.66	103.51	0
Sacramento	2026	Transport Refrigeration Unit - Out-Of-State Genset	Aggregate	25	Diesel	0.000197977	0.002023273	0.00028525	0.000220268	0.003037651	0.485635976	9.25E-05	8.52E-05	762.31	1.09E-08	15796.17	33557.98	270.56446	0
Sacramento	2026	Transport Refrigeration Unit - Out-Of-State Genset	Aggregate	50	Diesel	0.00012344	0.0012599	0.00017765	0.00013697	0.00117612	0.201597941	2.95E-05	0.000027114	316.41	4.52E-09	6557.33	12481.27	100.56	0
Sacramento	2026	Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	25	Diesel	0.004391873	0.044849894	0.006326513	0.004879558	0.045949532	7.346892279	0.00133141	0.001224652	11533.65	1.65E-07	238970.68	364203.17	1338.88	0
Sacramento	2026	Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	50	Diesel	0.0021497	0.021967	0.0030963	0.0023888	0.017585	3.073921513	0.0003441	0.00031667	4825.6	6.89E-08	99984.74	133445.54	490.52	0
Sacramento	2026	Transport Refrigeration Unit - Railcar TRU	Aggregate	25	Diesel	0.000215781	0.002203666	0.000310771	0.000239819	0.002104982	0.336385377	7.03E-05	6.45E-05	528.00784	7.54E-09	10941.53	16675.45	50.860736	0
Sacramento	2026	Transport Refrigeration Unit - Railcar TRU	Aggregate	50	Diesel	0.000038283	0.000390498	5.51E-05	0.000042481	0.000340666	0.067510237	3.06E-06	2.81E-06	105.91	1.51E-09	2195.89	2981.31	9.09197	0

OFFROAD 2027

	Equipment Type	Horsepower	Gas				Diesel				Natural Gas				
		HP	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	
Air Compressors25	Air Compressors	25	28811.02216	101.771682	0	0	2628.232202	4.981211062	0	0	0	0	0	0	
Air Compressors50	Air Compressors	50	13300.6	12.1	5850.95	2.273237679	22604.45	27.23	22162.8	1.019927536	0	0	0	0	
Air Compressors75	Air Compressors	75	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors100	Air Compressors	100	71510.8	39.23	18965.4	3.770592764	0	0	0	0	0	0	0	0	
Air Compressors175	Air Compressors	175	8752.7	2.65	1262.9	6.930635838	0	0	0	0	0	0	0	0	
Air Compressors300	Air Compressors	300	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors600	Air Compressors	600	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors750	Air Compressors	750	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors9999	Air Compressors	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Aerial Lifts25	Aerial Lifts	25	2385.707552	14.1340431	0	0	18.49478299	8.626349232	0	0	0	0	0	0	
Aerial Lifts50	Aerial Lifts	50	6730.6	11.59	4193.85	1.604873803	9571.684425	50.01756931	11697.72315	0.81825192	0	0	0	0	
Aerial Lifts75	Aerial Lifts	75	0	0	0	0	19031.17799	54.5385612	15955.69495	1.192751431	0	0	0	0	
Aerial Lifts100	Aerial Lifts	100	12001.2	11.59	4193.85	2.861618799	3780.569641	9.416447443	2684.425908	1.408334508	0	0	0	0	
Aerial Lifts175	Aerial Lifts	175	0	0	0	0	5554.994857	6.667363997	2987.961773	1.859125142	0	0	0	0	
Aerial Lifts300	Aerial Lifts	300	0	0	0	0	117.3706081	0.07898693	32.04168373	3.663059941	0	0	0	0	
Aerial Lifts600	Aerial Lifts	600	0	0	0	0	69.80311419	0.031594772	11.85384185	5.88864902	0	0	0	0	
Bore/Drill rigs25	Bore/Drill rigs	25	414.7796078	4.662486862	0	0	24.76308868	3.896056274	0	0	0	0	0	0	
Bore/Drill rigs50	Bore/Drill rigs	50	237.25	0.89	87.6	2.708333333	1414.763951	2.689915946	1270.271698	1.113749093	0	0	0	0	
Bore/Drill rigs75	Bore/Drill rigs	75	0	0	0	0	5444.787678	6.265895607	3036.253887	1.793258364	0	0	0	0	
Bore/Drill rigs100	Bore/Drill rigs	100	2726.55	3.99	416.1	6.552631579	4220.659821	3.313638178	1701.519617	2.48052375	0	0	0	0	
Bore/Drill rigs175	Bore/Drill rigs	175	959.95	0.97	109.5	8.766666667	29848.43638	13.13078948	8512.929492	3.506247339	0	0	0	0	
Bore/Drill rigs300	Bore/Drill rigs	300	0	0	0	0	35736.89502	10.273855	6336.537905	5.639813973	0	0	0	0	
Bore/Drill rigs600	Bore/Drill rigs	600	0	0	0	0	51308.55663	8.82779863	5091.848605	10.07660687	0	0	0	0	
Bore/Drill rigs750	Bore/Drill rigs	750	0	0	0	0	21196.14432	2.29694092	1300.36978	16.3000899	0	0	0	0	
Bore/Drill rigs9999	Bore/Drill rigs	9999	0	0	0	0	6990.880497	0.557665501	324.9974807	21.51056827	0	0	0	0	
Cement and Mortar Mixers25	Cement and Mortar Mixers	25	186.3076771	2.70352051	0	0	7.124908131	2.758797909	0	0	0	0	0	0	
Cement and Mortar Mixers50	Cement and Mortar Mixers	50	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers75	Cement and Mortar Mixers	75	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers100	Cement and Mortar Mixers	100	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers175	Cement and Mortar Mixers	175	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers300	Cement and Mortar Mixers	300	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers600	Cement and Mortar Mixers	600	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers750	Cement and Mortar Mixers	750	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers9999	Cement and Mortar Mixers	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws25	Concrete/Industrial Saws	25	6202.177632	29.73139274	0	0	4.872131879	1.018951255	0	0	0	0	0	0	
Concrete/Industrial Saws50	Concrete/Industrial Saws	50	5482.3	3.24	1981.95	2.76611418	1700.9	2.12	1226.4	1.386904762	0	0	0	0	
Concrete/Industrial Saws75	Concrete/Industrial Saws	75	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws100	Concrete/Industrial Saws	100	5347.25	1.86	1135.15	4.710610932	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws175	Concrete/Industrial Saws	175	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws300	Concrete/Industrial Saws	300	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws600	Concrete/Industrial Saws	600	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws750	Concrete/Industrial Saws	750	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws9999	Concrete/Industrial Saws	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Cranes25	Cranes	25	0	0	0	0	104.2031818	0.065607706	10.51823353	9.906908941	0	0	0	0	
Cranes50	Cranes	50	813.95	0.97	408.8	1.991071429	193.9408112	0.853657008	167.4382529	1.158282578	0	0	0	0	
Cranes75	Cranes	75	0	0	0	0	821.1566023	2.527440357	465.1686053	1.765288098	0	0	0	0	
Cranes100	Cranes	100	2726.55	1.96	821.25	3.32	2022.118936	4.959497738	965.790927	2.093743977	0	0	0	0	
Cranes175	Cranes	175	171.55	0.03	32.85	5.222222222	15642.6387	22.30167646	5885.650946	2.657758478	0	0	0	0	
Cranes300	Cranes	300	0	0	0	0	48168.03626	50.15970737	12820.18305	3.757203471	0	0	0	0	
Cranes600	Cranes	600	0	0	0	0	66327.65077	40.08142292	10623.77979	6.243319429	0	0	0	0	
Cranes750	Cranes	750	0	0	0	0	10244.66713	4.626601707	1089.28593	9.404938454	0	0	0	0	
Cranes9999	Cranes	9999	0	0	0	0	3460.83483	1.083051768	263.1382698	13.15215317	0	0	0	0	
Crawler Tractors25	Crawler Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0	
Crawler Tractors50	Crawler Tractors	50	0	0	0	0	948.4593096	2.82203154	770.8743974	1.230368154	0	0	0	0	
Crawler Tractors75	Crawler Tractors	75	0	0	0	0	5855.677228	11.19023147	3339.430716	1.753495648	0	0	0	0	
Crawler Tractors100	Crawler Tractors	100	0	0	0	0	22283.51458	28.15876605	9936.969725	2.242485908	0	0	0	0	
Crawler Tractors175	Crawler Tractors	175	0	0	0	0	79046.39589	57.81555712	26605.59557	2.97104403	0	0	0	0	
Crawler Tractors300	Crawler Tractors	300	0	0	0	0	97522.97506	46.83697914	20380.18359	4.785186288	0	0	0	0	
Crawler Tractors600	Crawler Tractors	600	0	0	0	0	169607.1423	46.79801697	20558.86651	8.249829445	0	0	0	0	
Crawler Tractors750	Crawler Tractors	750	0	0	0	0	11003.93616	2.13834304	841.9473899	13.06962441	0	0	0	0	
Crawler Tractors9999	Crawler Tractors	9999	0	0	0	0	17294.93799	2.530334809	1006.952205	17.17553018	0	0	0	0	
Crushing/Proc. Equipment25	Crushing/Proc. Equipment	25	74.78446828	0.376454204	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment50	Crushing/Proc. Equipment	50	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment75	Crushing/Proc. Equipment	75	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment100	Crushing/Proc. Equipment	100	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment175	Crushing/Proc. Equipment	175	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment300	Crushing/Proc. Equipment	300	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment600	Crushing/Proc. Equipment	600	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment750	Crushing/Proc. Equipment	750	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment9999	Crushing/Proc. Equipment	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Dumpers/Tenders25	Dumpers/Tenders	25	458.9285858	7.708348918	0	0	3.525284525	1.424898917	0	0	0	0	0	0	
Dumpers/Tenders100	Dumpers/Tenders	100	233.6	0.74	80.3	2.909090909	0	0	0	0	0	0	0	0	
Excavators25	Excavators	25	0	0	0	0	27.38383469	2.267117149	13.19021079	2.076072561	0	0	0	0	
Excavators50	Excavators	50	0	0	0	0	87250.95191	245.1473083	114688.5847	0.760764048	0	0	0	0	
Excavators75	Excavators	75	0	0	0	0	68878.12918	101.3997119	52167.05451	1.320337708	0	0	0	0	
Excavators100	Excavators	100	0	0	0	0	54028.162	53.37811364	28027.28465	1.927698765	0	0	0	0	
Excavators175	Excavators	175	0	0	0	0	303552.3508	151.6701974	107963.2955	2.811625464	0	0	0	0	
Excavators300	Excavators	300	0	0	0	0	325225.9127	113.0081025	72356.31139	4.494782922	0	0	0	0	
Excavators600	Excavators	600	0	0	0	0	373703.7811	78.77678673	52140.17143	7.167290994	0	0	0	0	
Excavators750	Excavators	750	0	0	0	0	10546.83744	1.642938595	874.0569302	12.06653374	0	0	0	0	
Excavators9999	Excavators	9999	0	0	0	0	52451.86266	3.052999609	1748.749455	29.99392652	0	0	0	0	
Forklifts25	Forklifts	25	44.9656542	0.107863336	0	0	0.070840591	0.015797386	5.263314534	0.013459312	0	0	0	0	
Forklifts50	Forklifts	50	116883.95	39.42	70101.9	1.667343538	12274.99507	36.20855416	18692.08884	0.656694668	171177.7	71.04	127987.25	1.337459005	
Forklifts75	Forklifts	75	0	0	0	0	124881.9043	246.7737457	97947.79396	1.274984349	0	0	0	0	
Forklifts100	Forklifts	100	545675	147.17	249572.4	2.186439686	73027.34921	126.6415816	54461.78662	1.340891545	1073735.1	249.33	449209.15	2.390278782	
Forklifts175	Forklifts	175	37474.55	5.28	9066.6	4.133252818	280166.2085	274.9462752	146572.1406	1.911456075	80471.55	9.14	16439.6	4.894982238	
Forklifts300	Forklifts	300	0	0	0	0	9041.305676	7.702985342	3813.212661	2.371046799	0	0	0	0	
Forklifts600	Forklifts	600	0	0	0	0	2708.721095	1.428409061	705.2393584	3.840853552	0	0	0	0	
Forklifts750	Forklifts	750	0	0	0	0	325.781129	0.080202465	35.35009096	9.215849808	0	0	0	0	
Forklifts9999	Forklifts	9999	0	0	0	0	3091.245471	0.316127526	155.3075332	19.90402788	0	0	0	0	
Generator Sets25	Generator Sets	25	43519.37048	428.8269032	0	0	48355.98992	181.066738	0	0	0	0	0	0	
Generator Sets50	Generator Sets	50	101820.4	398.14	45730.85	2.226514486	62305.5	132.17	44621.25	1.396319018	0	0	0	0	
Generator Sets75	Generator Sets	75	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets100	Generator Sets	100	45818.45	76.91	8836.65	5.185047501	0	0	0	0	4117.2	5.72	657	6.266666667	
Generator Sets175	Generator Sets	175	7504.4	7.27	835.85	8.978165939	0	0	0	0	5949.5	4.76	543.85	10.93959732	
Generator Sets300	Generator Sets	300	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets600	Generator Sets	600	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets750	Generator Sets	750	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets9999	Generator Sets	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Graders25	Graders	25	0	0	0	0	0	0	0	0	0	0	0	0	
Graders50	Graders	50	0	0	0	0	289.8502448	1.213791919	319.8013101	0.90634477	0	0	0	0	
Graders75	Graders	75	0	0	0	0	1046.595022	2.331479369	576.9142276	1.814125865	0	0	0	0	
Graders100	Graders	100	0	0	0	0	2503.635921	4.036842231	1083.688091	2.310291994	0	0	0	0	
Graders175	Graders	175	0	0	0	0	37283.7996	34.39421026	11376.52425	3.277257516	0	0	0	0	
Graders300	Graders	300	0	0	0	0	118657.3251	64.33283881	25002.31749	4.745853065	0	0	0	0	
Graders600	Graders	600	0	0	0	0	28474.59337	9.516260004	4005.37877	7.109088804	0	0	0	0	
Graders750	Graders	750	0	0	0	0	1078.12578	0.196823118	73.84279632	14.60028376	0	0	0	0	
Graders9999	Graders	9999	0	0	0	0	768.6090072	0.131215412	49.48392795	15.5324979	0	0	0	0	
Off-Highway Tractors25	Off-Highway Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0	
Off-Highway Tractors50	Off-Highway Tractors	50	0	0	0	0	15002.35315	26.37937781	16113.45794	0.931044919	0	0	0	0	
Off-Highway Tractors75	Off-Highway Tractors	75	0	0	0	0	13047.95059	14.24446446	8698.366402	1.500046099	0	0	0	0	
Off-Highway Tractors100	Off-Highway Tractors	100	0	0	0	0	12370.99915	9.415548932	5954.155256	2.077708528	0	0	0	0	
Off-Highway Tractors175	Off-Highway Tractors	175	0	0	0	0	66800.9742	20.8323504	21016.83906	3.178450099	0	0	0	0	
Off-Highway Tractors300	Off-Highway Tractors	300	0	0	0	0	30006.0679	8.139402083	6443.614858	4.656713438	0	0	0	0	
Off-Highway Tractors600	Off-Highway Tractors	600	0	0	0	0	79126.73088	10.56978838	9689.501294	8.166233584	0	0	0	0	
Off-Highway Tractors750	Off-Highway Tractors	750	0	0	0	0	6391.381794	0.689032936	503.2883519	12.69924442	0	0	0	0	
Off-Highway Tractors9999	Off-Highway Tractors	9999	0	0	0	0	5767.448734	0.230254828	180.1342218	32.01750715	0	0	0	0	
Off-Highway Trucks25	Off-Highway Trucks	25	0	0	0	0	0	0	0	0	0	0	0	0	
Off-Highway Trucks50	Off-Highway Trucks	50	0	0	0	0	635.8100548	1.705800356	1061.148779	0.599171452	0	0	0	0	
Off-Highway Trucks75	Off-Highway Trucks	75	0	0	0	0	774.4997888	0.853082554	462.9923352	1.672813414	0	0	0	0	
Off-Highway Trucks100	Off-Highway Trucks	100	0	0	0	0	339.194107	0.295234677	186.4748895	1.818980067	0	0	0	0	
Off-Highway Trucks175	Off-Highway Trucks	175	0	0	0	0	17380.00652	6.36506074	5765.357818	3.014558171	0	0	0	0	
Off-Highway Trucks300	Off-Highway Trucks	300	0	0	0	0	40486.40438	12.63702767	9315.735467	4.346023406	0	0	0	0	
Off-Highway Trucks600	Off-Highway Trucks	600	0	0	0	0	296095.6107	43.3474106	35972.86729	8.231081729	0	0	0	0	
Off-Highway Trucks750	Off-Highway Trucks	750	0	0	0	0	36819.79904	5.630303267	3252.059111	11.32199563	0	0	0	0	
Off-Highway Trucks9999	Off-Highway Trucks	9999	0	0	0	0	139677.5206	9.823971508	6559.380969	21.2943144	0	0	0	0	
Pavers25	Pavers	25	1369.440401	4.698526896	0	0	6.638540206	0.88405228	0	0	0	0	0	0	
Pavers50	Pavers	50	2569.6	2.8	1113.25	2.308196721	1443.959584	4.363336304	1560.142237	0.92553073	0	0	0	0	
Pavers75	Pavers	75	0	0	0	0	7033.706864	11.31848273	4405.564848	1.596550523	0	0	0	0	
Pavers100	Pavers	100	2288.55	1.56	605.9	3.777108434	7616.396045	8.694575185	3793.661769	2.007663442	0	0	0	0	
Pavers175	Pavers	175	0	0	0	0	25292.50527	15.38957034	8508.667702	2.97255765	0	0	0	0	
Pavers300	Pavers	300	0	0	0	0	30620.55528	11.3843609	6349.331636	4.822642293	0	0	0	0	
Pavers600	Pavers	600	0	0	0	0	5386.215025	1.181874232	685.4507872	7.857916463	0	0	0	0	
Pavers750	Pavers	750	0	0	0	0	221.0349527	0.032803853	16.55974348	13.34772806	0	0	0	0	
Pavers9999	Pavers	9999	0	0	0	0	5071.123793	0.229626971	123.1922014	41.16432481	0	0	0	0	
Paving Equipment25	Paving Equipment	25	1338.205419	10.12593429	0	0	11.23170277	2.188835106	0	0	0	0	0	0	
Paving Equipment50	Paving Equipment	50	2996.65	7.65	1335.9	2.243169399	3525.449482	12.07238309	4642.737381	0.759347168	0	0	0	0	
Paving Equipment75	Paving Equipment	75	0	0	0	0	2622.690411	4.756683556	1941.028104	1.351186212	0	0	0	0	
Paving Equipment100	Paving Equipment	100	1230.05	1.98	343.1	3.585106383	4404.741726	5.416675983	2330.042663	1.890412479	0	0	0	0	
Paving Equipment175	Paving Equipment	175	0	0	0	0	28059.30703	17.48854636	11381.96925	2.465241859	0	0	0	0	
Paving Equipment300	Paving Equipment	300	0	0	0	0	12649.59097	5.54667109	2976.924769	4.24921419	0	0	0	0	
Paving Equipment600	Paving Equipment	600	0	0	0	0	29766.82384	8.008057292	4630.219826	6.428814389	0	0	0	0	
Paving Equipment750	Paving Equipment	750	0	0	0	0	6436.151999	1.082527149	557.1329461	11.55227319	0	0	0	0	
Paving Equipment9999	Paving Equipment	9999	0	0	0	0	4034.569623	0.426450089	222.3905873	18.14181828	0	0	0	0	
Rollers25	Rollers	25	4109.994652	22.18623032	0	0	78.83821966	17.34450136	0	0	0	0	0	0	
Rollers50	Rollers	50	3394.5	1.96	1222.75	2.776119403	35725.01507	122.7059382	44330.09243	0.80588632	0	0	0	0	
Rollers75	Rollers	75	0	0	0	0	14212.30022	24.93521993	9323.777661	1.524307071	0	0	0	0	
Rollers100	Rollers	100	10486.45	3.7	2303.15	4.553090333	21994.60303	29.60185584	11258.92643	1.953525779	0	0	0	0	
Rollers175	Rollers	175	0	0	0	0	121883.8865	80.19669651	47511.87002	2.565335493	0	0	0	0	
Rollers300	Rollers	300	0	0	0	0	10605.98218	5.32339539	2428.983229	4.36642874	0	0	0	0	
Rollers600	Rollers	600	0	0	0	0	8391.171167	2.300412236	1141.520562	7.350871676	0	0	0	0	
Rollers750	Rollers	750	0	0	0	0	205.7334381	0.032803853	14.96871851	13.7442252	0	0	0	0	
Rollers9999	Rollers	9999	0	0	0	0	9076.328379	0.426450089	202.689035	44.7795727	0	0	0	0	
Rough Terrain Forklifts25	Rough Terrain Forklifts	25	0	0	0	0	0	0	0	0	0	0	0	0	
Rough Terrain Forklifts50	Rough Terrain Forklifts	50	1087.7	0.68	313.9	3.465116279	1080.509621	4.067677772	1091.027429	0.990359722	0	0	0	0	
Rough Terrain Forklifts75	Rough Terrain Forklifts	75	0	0	0	0	43070.43905	83.09738353	26940.20732	1.59874193	0	0	0	0	
Rough Terrain Forklifts100	Rough Terrain Forklifts	100	23688.5	11.2	4650.1	5.094191523	30995.21731	47.58266298	15210.24104	2.03778607	0	0	0	0	
Rough Terrain Forklifts175	Rough Terrain Forklifts	175	1343.2	0.32	116.8	11.5	194305.102	166.919567	79273.8646	2.451061305	0	0	0	0	
Rough Terrain Forklifts300	Rough Terrain Forklifts	300	0	0	0	0	1666.8834	1.017219364	388.9448554	4.285654835	0	0	0	0	
Rough Terrain Forklifts600	Rough Terrain Forklifts	600	0	0	0	0	471.3364465	0.164025719	69.22613917	6.808648469	0	0	0	0	
Rough Terrain Forklifts750	Rough Terrain Forklifts	750	0	0	0	0	155.3298049	0.032810307	12.31173694	12.61640057	0	0	0	0	
Rough Terrain Forklifts9999	Rough Terrain Forklifts	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Rubber Tired Dozers25	Rubber Tired Dozers	25	0	0	0	0	0	0	0	0	0	0	0	0	
Rubber Tired Dozers50	Rubber Tired Dozers	50	0	0	0	0	399.7502389	0.592468543	229.0375621	1.745347947	0	0	0	0	
Rubber Tired Dozers75	Rubber Tired Dozers	75	0	0	0	0	767.7398348	0.985680293	458.3925782	1.674852237	0	0	0	0	
Rubber Tired Dozers100	Rubber Tired Dozers	100	0	0	0	0	1530.808875	1.641340461	732.8720609	2.088780507	0	0	0	0	
Rubber Tired Dozers175	Rubber Tired Dozers	175	0	0	0	0	4630.01532	2.723920045	1600.236311	2.893332246	0	0	0	0	
Rubber Tired Dozers300	Rubber Tired Dozers	300	0	0	0	0	5742.416642	2.199504125	1255.320895	4.574461132	0	0	0	0	
Rubber Tired Dozers600	Rubber Tired Dozers	600	0	0	0	0	31167.83089	8.031875479	4410.961251	7.065995169	0	0	0	0	
Rubber Tired Dozers750	Rubber Tired Dozers	750	0	0	0	0	946.8554552	0.164421341	85.23046105	11.10935508	0	0	0	0	
Rubber Tired Dozers9999	Rubber Tired Dozers	9999	0	0	0	0	2525.198856	0.164019265	95.87895329	26.33736362	0	0	0	0	
Scrapers25	Scrapers	25	0	0	0	0	0	0	0	0	0	0	0	0	
Scrapers50	Scrapers	50	0	0	0	0	76.78492623	0.164306231	40.84008894	1.880136117	0	0	0	0	
Scrapers75	Scrapers	75	0	0	0	0	642.1332328	1.279897731	337.5136798	1.902539871	0	0	0	0	
Scrapers100	Scrapers	100	0	0	0	0	794.1939454	1.017915655	316.2854787	2.511003504	0	0	0	0	
Scrapers175	Scrapers	175	0	0	0	0	6821.743485	6.169391195	1794.303058	3.801890352	0	0	0	0	
Scrapers300	Scrapers	300	0	0	0	0	95142.49727	48.71949875	15883.5509	5.990001724	0	0	0	0	
Scrapers600	Scrapers	600	0	0	0	0	338449.9271	101.7247389	33859.94077	9.995585326	0	0	0	0	
Scrapers750	Scrapers	750	0	0	0	0	52789.76141	15.36385231	4135.671665	12.76449527	0	0	0	0	
Scrapers9999	Scrapers	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Skid Steer Loaders25	Skid Steer Loaders	25	10290.54948	57.36174844	0	0	1286.841265	228.1787978	0	0	0	0	0	0	
Skid Steer Loaders50	Skid Steer Loaders	50	15990.65	26.95	8358.5	1.913100437	33697.21375	96.52051259	37227.45038	0.905171141	0	0	0	0	
Skid Steer Loaders75	Skid Steer Loaders	75	0	0	0	0	235084.1062	376.0180351	167615.0402	1.402523938	0	0	0	0	
Skid Steer Loaders100	Skid Steer Loaders	100	21352.5	16.12	4996.85	4.273192111	120202.052	146.7418516	68668.73691	1.750462545	0	0	0	0	
Skid Steer Loaders175	Skid Steer Loaders	175	0	0	0	0	34795.99059	25.42493201	16588.18915	2.097636473	0	0	0	0	
Skid Steer Loaders300	Skid Steer Loaders	300	0	0	0	0	2861.152931	1.377761826	738.8264816	3.87256413	0	0	0	0	
Skid Steer Loaders600	Skid Steer Loaders	600	0	0	0	0	1979.758295	0.393646236	224.4250482	8.821467616	0	0	0	0	
Skid Steer Loaders750	Skid Steer Loaders	750	0	0	0	0	197.0838521	0.032803853	16.44738203	11.98268829	0	0	0	0	
Skid Steer Loaders9999	Skid Steer Loaders	9999	0	0	0	0	14529.23301	0.721684766	342.1412379	42.46560017	0	0	0	0	
Surfacing Equipment25	Surfacing Equipment	25	482.5404758	2.001543512	0	0	0	0	0	0	0	0	0	0	
Surfacing Equipment50	Surfacing Equipment	50	0	0	0	0	380.9409354	1.115829108	527.3758593	0.722332903	0	0	0	0	
Surfacing Equipment75	Surfacing Equipment	75	0	0	0	0	654.1340721	1.083453771	527.6754872	1.239652188	0	0	0	0	
Surfacing Equipment100	Surfacing Equipment	100	0	0	0	0	907.3964597	1.019018062	484.8021078	1.87168423	0	0	0	0	
Surfacing Equipment175	Surfacing Equipment	175	0	0	0	0	3237.485779	2.46122984	1584.94767	2.042645218	0	0	0	0	
Surfacing Equipment300	Surfacing Equipment	300	0	0	0	0	3767.530522	1.873040785	1028.276741	3.663926618	0	0	0	0	
Surfacing Equipment600	Surfacing Equipment	600	0	0	0	0	21335.83839	5.611574775	3631.278239	5.875572453	0	0	0	0	
Surfacing Equipment750	Surfacing Equipment	750	0	0	0	0	9027.588767	1.673166515	941.72246	9.586251948	0	0	0	0	
Surfacing Equipment9999	Surfacing Equipment	9999	0	0	0	0	3983.112623	0.65864744	327.6371981	12.15708304	0	0	0	0	
Sweepers/Scrubbers25	Sweepers/Scrubbers	25	1492.318455	6.463520234	0	0	3.303037456	0.528585011	0	0	0	0	0	0	FALSE
Sweepers/Scrubbers50	Sweepers/Scrubbers	50	14603.65	10.82	5584.5	2.61503268	2636.620131	11.07749855	2927.5144	0.900634385	0	0	0	0	FALSE
Sweepers/Scrubbers75	Sweepers/Scrubbers	75	0	0	0	0	2336.33891	4.282808182	1301.041106	1.795745653	0	0	0	0	FALSE
Sweepers/Scrubbers100	Sweepers/Scrubbers	100	20848.8	9.02	4657.4	4.476489028	3045.852385	4.600978799	1404.127736	2.169213175	0	0	0	0	FALSE

Sweepers/Scrubbers175	Sweepers/Scrubbers		175	240.9	0.07	29.2	8.25	689.3038785	0.632185595	251.0288858	2.745914584	0	0	0	0	FALSE
Sweepers/Scrubbers300	Sweepers/Scrubbers		300	0	0	0	0	938.2954029	0.458124194	186.2596803	5.03756584	0	0	0	0	FALSE
Sweepers/Scrubbers600	Sweepers/Scrubbers		600	0	0	0	0	149.9716809	0.047392158	20.0743114	7.470825669	0	0	0	0	FALSE
Sweepers/Scrubbers750	Sweepers/Scrubbers		750	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
Sweepers/Scrubbers9999	Sweepers/Scrubbers		9999	0	0	0	0	297.0911435	0.015797386	5.819580539	51.05026754	0	0	0	0	FALSE
Tractors/Loaders/Backhoes25	Tractors/Loaders/Backhoes		25	0	0.161973476	0	0	128.0242301	16.49286036	16.13321764	7.935443068	0	0	0	0	
Tractors/Loaders/Backhoes50	Tractors/Loaders/Backhoes		50	0	0	0	0	35444.22342	105.9767187	42075.92325	0.842387301	0	0	0	0	
Tractors/Loaders/Backhoes75	Tractors/Loaders/Backhoes		75	0	0	0	0	157344.7545	250.3080691	110798.0061	1.420104567	0	0	0	0	
Tractors/Loaders/Backhoes100	Tractors/Loaders/Backhoes		100	8869.5	3.46	3029.5	2.927710843	369264.8005	415.5763837	199594.1063	1.850078679	0	0	0	0	
Tractors/Loaders/Backhoes175	Tractors/Loaders/Backhoes		175	0	0	0	0	384659.1654	246.5433398	161822.9213	2.377037581	0	0	0	0	
Tractors/Loaders/Backhoes300	Tractors/Loaders/Backhoes		300	0	0	0	0	179957.1778	67.86189944	41904.1776	4.294492534	0	0	0	0	
Tractors/Loaders/Backhoes600	Tractors/Loaders/Backhoes		600	0	0	0	0	123640.9161	28.91259256	17181.02975	7.196362378	0	0	0	0	
Tractors/Loaders/Backhoes750	Tractors/Loaders/Backhoes		750	0	0	0	0	5678.061955	0.853398284	442.5626046	12.82996325	0	0	0	0	
Tractors/Loaders/Backhoes9999	Tractors/Loaders/Backhoes		9999	0	0	0	0	22510.97894	1.148438392	624.583819	36.04156601	0	0	0	0	
Trenchers25	Trenchers		25	8399.266464	27.50806214	0	0	117.1235593	11.74567363	0	0	0	0	0	0	
Trenchers50	Trenchers		50	16136.65	17.98	7219.7	2.235085945	10818.27488	28.47672331	8879.743405	1.218309402	0	0	0	0	
Trenchers75	Trenchers		75	0	0	0	0	3571.869897	6.235386036	1876.985343	1.902982306	0	0	0	0	
Trenchers100	Trenchers		100	9946.25	5.95	2398.05	4.147640791	4229.90334	5.118766423	1661.514412	2.545812007	0	0	0	0	
Trenchers175	Trenchers		175	0	0	0	0	6823.383893	5.118961466	2128.71625	3.205398509	0	0	0	0	
Trenchers300	Trenchers		300	0	0	0	0	3988.846612	1.969654886	709.7681474	5.619929024	0	0	0	0	
Trenchers600	Trenchers		600	0	0	0	0	6457.46662	1.740328415	592.0061124	10.90777018	0	0	0	0	
Trenchers750	Trenchers		750	0	0	0	0	279.8403733	0.098784985	20.12884451	13.90245591	0	0	0	0	
Trenchers9999	Trenchers		9999	0	0	0	0	8166.211093	0.885704031	377.9563919	21.60622566	0	0	0	0	
Welders25	Welders		25	0	0	0	0	24062.81542	73.98850677	0	0	0	0	0	0	
Welders50	Welders		50	31857.2	63.24	13136.35	2.425118088	103795.05	136.11	87417.5	1.187348643	0	0	0	0	
Welders75	Welders		75	0	0	0	0	0	0	0	0	0	0	0	0	
Welders100	Welders		100	44519.05	64.53	13410.1	3.319814916	0	0	0	0	0	0	0	0	
Welders175	Welders		175	5566.25	4.45	930.75	5.980392157	0	0	0	0	0	0	0	0	
Welders300	Welders		300	0	0	0	0	0	0	0	0	0	0	0	0	
Welders600	Welders		600	0	0	0	0	0	0	0	0	0	0	0	0	
Welders750	Welders		750	0	0	0	0	0	0	0	0	0	0	0	0	
Welders9999	Welders		9999	0	0	0	0	0	0	0	0	0	0	0	0	

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2027
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bi	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consumptior	Total_Activity	Total_Population	Horsepower_Hours_hhpy
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	100	Gasoline	2.41E-07	2.92E-07	3.47E-07	3.74E-06	8.65E-07	0.000119757	9.01E-09	8.29E-09	1.08E-09	9.76E-10	3.881186926	22.96328661	0.011723736	103.578509
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	100	Diesel	0.010058086	0.012170284	0.014483643	0.097352237	0.08681604	15.86223868	0.006446121	0.005930431	0.000144789	0.000129796	515947.399	31352.22434	267.5175207	18441747.66
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	175	Gasoline	6.35E-07	7.69E-07	9.15E-07	1.04E-05	4.71E-06	0.000623213	4.69E-08	4.31E-08	5.66E-09	5.08E-09	20.19769919	63.4840935	0.046929087	539.0226223
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	175	Diesel	0.007119932	0.008615118	0.010252702	0.087514498	0.066445466	14.78653066	0.003160894	0.002908022	0.000135038	0.000120994	480958.091	40553.38765	172.7015112	19111640.09
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	25	Gasoline	4.88E-06	5.91E-06	7.03E-06	6.51E-05	1.10E-06	0.000184929	1.15E-07	1.06E-07	1.54E-09	1.51E-09	5.993345839	234.9347866	0.083983133	159.9463867
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	25	Diesel	0.000559392	0.000676864	0.000805525	0.002245626	0.00164151	0.211709213	9.56E-05	8.79E-05	1.92E-06	1.73E-06	6886.216996	4886.898901	17.85170363	246137.254
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	300	Diesel	0.003747831	0.004534876	0.005396877	0.026462137	0.027838397	12.32498849	0.001276517	0.001174396	0.000112623	0.000100852	400892.0736	26510.85149	57.73064709	15930088.59
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	50	Gasoline	4.43E-06	5.36E-06	6.37E-06	0.00015312	1.19E-05	0.003641159	2.74E-07	2.52E-07	3.31E-08	2.97E-08	118.0062461	432.3054683	0.415960046	3149.271404
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	50	Diesel	0.011485936	0.013897982	0.016539748	0.049033417	0.037436584	4.778314043	0.002936266	0.002701365	4.34E-05	3.91E-05	155423.1249	26395.00261	205.9749348	5555360.984
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	600	Diesel	0.004990411	0.006038398	0.007186192	0.039499918	0.03769562	16.39020347	0.001693508	0.001558027	0.00014977	0.000134116	533120.3889	22190.14486	44.45008122	21184392.53
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	75	Gasoline	1.82E-07	2.20E-07	2.62E-07	3.08E-06	6.44E-07	9.30E-05	7.00E-09	6.44E-09	8.42E-10	7.58E-10	3.014738696	70.19574178	0.013315852	80.45531976
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	75	Diesel	0.007677458	0.009289724	0.011055539	0.043907159	0.064934554	6.347439925	0.003960081	0.003643274	5.78E-05	5.19E-05	206461.7225	30714.1675	181.849114	7379657.289
Sacramento	2027	Agricultural - Agricultural Tractors	Aggregate	750	Diesel	0.000157169	0.000190175	0.000226324	0.001387447	0.001504466	0.367653441	6.96E-05	6.40E-05	3.36E-06	3.01E-06	11958.57915	286.87462	0.760838823	475193.2946
Sacramento	2027	Agricultural - ATVs	Aggregate	100	Gasoline	5.35E-05	6.47E-05	7.70E-05	0.002540058	0.000216707	0.174707296	1.31E-05	1.21E-05	1.59E-06	1.42E-06	5662.084856	300.4893093	7.012681813	181327.0983
Sacramento	2027	Agricultural - ATVs	Aggregate	175	Gasoline	5.73E-05	6.94E-05	8.25E-05	0.003141119	0.000302178	0.244293769	1.84E-05	1.69E-05	2.22E-06	1.99E-06	7917.311305	479.9062732	5.976362688	253550.2643
Sacramento	2027	Agricultural - ATVs	Aggregate	175	Diesel	6.61E-06	8.00E-06	9.52E-06	0.000151137	5.84E-05	0.027505445	2.38E-06	2.19E-06	2.51E-07	2.25E-07	894.6632872	790.3354576	0.430646866	42661.05417
Sacramento	2027	Agricultural - ATVs	Aggregate	25	Gasoline	0.008783658	0.010628226	0.012648467	0.11282537	0.00469974	0.435802199	0.000380521	0.00035008	3.71E-06	3.55E-06	14123.90373	3388.452378	79.40673638	452315.1037
Sacramento	2027	Agricultural - ATVs	Aggregate	25	Diesel	0.000230049	0.000278359	0.00033127	0.001539459	0.001323136	0.196781424	5.87E-05	5.40E-05	1.79E-06	1.61E-06	6400.664255	8623.065827	17.82705204	274538.3006
Sacramento	2027	Agricultural - ATVs	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	508.8161421	10.25635974	60206.30504
Sacramento	2027	Agricultural - ATVs	Aggregate	50	Gasoline	0.000163234	0.000197513	0.000235057	0.009487154	0.000427754	0.334062355	2.51E-05	2.31E-05	3.04E-06	2.72E-06	10826.61939	2819.608806	37.23981893	346720.2507
Sacramento	2027	Agricultural - ATVs	Aggregate	50	Diesel	0.000344865	0.000417286	0.000496605	0.003039892	0.00252578	0.439790892	9.25E-05	8.51E-05	4.01E-06	3.60E-06	14304.97746	8109.975622	26.30897516	613571.3488
Sacramento	2027	Agricultural - ATVs	Aggregate	75	Gasoline	5.30E-05	6.42E-05	7.63E-05	0.003067358	0.000145768	0.121259335	9.12E-06	8.39E-06	1.10E-06	9.89E-07	3929.891086	1110.230036	7.304165962	125853.9506
Sacramento	2027	Agricultural - Bale Wagons (Self Propelled)	Aggregate	175	Diesel	0.000212827	0.000257521	0.000306471	0.002086534	0.002061769	0.344238303	0.000100487	9.24E-05	3.14E-06	2.82E-06	11196.96034	5908.375002	3.233445323	427131.9868
Sacramento	2027	Agricultural - Bale Wagons (Self Propelled)	Aggregate	300	Diesel	2.47E-05	2.99E-05	3.56E-05	0.000139889	0.000252159	0.055381693	1.10E-05	1.01E-05	5.06E-07	4.53E-07	1801.38763	2306.975531	0.453389802	68717.78199
Sacramento	2027	Agricultural - Balers (Self Propelled)	Aggregate	75	Diesel	9.39E-06	1.14E-05	1.35E-05	7.36E-05	8.70E-05	0.011998303	4.14E-06	3.81E-06	1.09E-07	9.82E-08	390.2660584	398.2180362	0.223597876	13391.48251
Sacramento	2027	Agricultural - Combine Harvesters	Aggregate	175	Diesel	0.000101102	0.000122333	0.000145586	0.001054247	0.000955374	0.180474519	4.40E-05	4.04E-05	1.65E-06	1.48E-06	5870.253294	656.4822994	2.184605776	252330.5109
Sacramento	2027	Agricultural - Combine Harvesters	Aggregate	300	Diesel	0.000151411	0.000183207	0.000218032	0.000859969	0.001395502	0.329889963	6.58E-05	6.05E-05	3.01E-06	2.70E-06	10730.25516	3287.382835	1.999433445	461235.7572
Sacramento	2027	Agricultural - Combine Harvesters	Aggregate	600	Diesel	0.000418821	0.000506774	0.000603102	0.003299138	0.004205728	1.004356717	0.000173165	0.000159312	9.17E-06	8.22E-06	32668.48056	8625.901349	3.980720855	1404241.657
Sacramento	2027	Agricultural - Combine Harvesters	Aggregate	750	Diesel	0.000562603	0.00068075	0.000810149	0.004196921	0.006064595	1.360017045	0.000247203	0.000227427	1.24E-05	1.11E-05	44236.96247	2219.009602	3.704111724	1901508.269
Sacramento	2027	Agricultural - Combine Harvesters	Aggregate	9999	Diesel	1.34E-05	1.62E-05	1.93E-05	0.000101313	0.000192546	0.027095296	5.83E-06	5.36E-06	2.47E-07	2.22E-07	881.3224886	1637.747693	0.051293518	37883.29671
Sacramento	2027	Agricultural - Construction Equipment	Aggregate	100	Diesel	0.000232266	0.000281042	0.000334463	0.002001508	0.002006921	0.316673888	0.000150794	0.00013873	2.89E-06	2.59E-06	10300.37892	5491.716034	6.810323055	441805.4772
Sacramento	2027	Agricultural - Construction Equipment	Aggregate	175	Diesel	0.000589726	0.000713569	0.000849206	0.007344507	0.006394313	1.284286731	0.000275524	0.000253482	1.17E-05	1.05E-05	41773.69993	7895.174684	26.86786868	1991933.84
Sacramento	2027	Agricultural - Construction Equipment	Aggregate	300	Diesel	0.00017067	0.00020651	0.000245764	0.000888749	0.001663555	0.309220859	7.98E-05	7.35E-05	2.82E-06	2.53E-06	10057.95595	4534.576356	2.435200685	479602.7872
Sacramento	2027	Agricultural - Construction Equipment	Aggregate	50	Diesel	3.80E-05	4.60E-05	5.47E-05	0.000189001	0.000147503	0.022226285	8.69E-06	8.00E-06	2.02E-07	1.82E-07	722.9492759	1179.716529	0.724857782	31008.85423
Sacramento	2027	Agricultural - Construction Equipment	Aggregate	600	Diesel	0.000119275	0.000144323	0.000171756	0.000975042	0.001161091	0.218950235	5.39E-05	4.96E-05	2.00E-06	1.79E-06	7121.744075	3658.641951	1.135746525	339592.6898
Sacramento	2027	Agricultural - Construction Equipment	Aggregate	75	Diesel	7.43E-05	8.99E-05	0.000107041	0.000582422	0.000688453	0.094944426	3.28E-05	3.01E-05	8.66E-07	7.77E-07	3088.235576	2989.274176	2.569938815	132461.0866
Sacramento	2027	Agricultural - Cotton Pickers	Aggregate	600	Diesel	4.81E-05	5.82E-05	6.93E-05	0.000361184	0.000500634	0.11618016	2.00E-05	1.84E-05	1.06E-06	9.51E-07	3778.965405	2793.011325	0.512405332	162437.3268
Sacramento	2027	Agricultural - Forage & Silage Harvesters	Aggregate	600	Diesel	9.79E-05	0.000118421	0.000140931	0.000866368	0.000890344	0.229575064	3.98E-05	3.66E-05	2.10E-06	1.88E-06	7467.335443	288.3793612	0.606922635	320980.4478
Sacramento	2027	Agricultural - Forage & Silage Harvesters	Aggregate	750	Diesel	0.000280239	0.000339089	0.000403544	0.002264436	0.002877063	0.531486785	0.000134121	0.000123392	4.85E-06	4.35E-06	17287.54876	4723.550947	1.320236125	743098.4169
Sacramento	2027	Agricultural - Forage & Silage Harvesters	Aggregate	9999	Diesel	0.000162548	0.000196683	0.000234069	0.00131448	0.002214333	0.27717434	7.51E-05	6.91E-05	2.53E-06	2.27E-06	9015.586186	2250.570769	0.513893145	387531.3917
Sacramento	2027	Agricultural - Forklifts	Aggregate	100	Diesel	0.000296738	0.000359053	0.000427303	0.002611169	0.002259908	0.424329406	0.000167862	0.000154433	3.87E-06	3.47E-06	13802.06527	10415.90861	8.600011529	592000.3618
Sacramento	2027	Agricultural - Forklifts	Aggregate	175	Diesel	6.81E-05	8.24E-05	9.81E-05	0.000714391	0.000640505	0.12186943	2.97E-05	2.73E-05	1.11E-06	9.97E-07	3964.019	3130.524431	1.922871469	189019.9714
Sacramento	2027	Agricultural - Forklifts	Aggregate	50	Diesel	0.00033927	0.000410517	0.000488549	0.001760885	0.001403235	0.207604024	8.24E-05	7.58E-05	1.89E-06	1.70E-06	6752.68846	9148.573578	8.844713088	289637.3776
Sacramento	2027	Agricultural - Forklifts	Aggregate	75	Diesel	0.000942861	0.001140862	0.00135772	0.00744976	0.00877409	1.214361456	0.000418872	0.000385362	1.11E-05	9.94E-06	39499.25653	15329.83107	30.96912891	1694208.347
Sacramento	2027	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	175	Diesel	4.51E-05	5.46E-05	6.50E-05	0.00048774	0.000412277	0.081657573	1.99E-05	1.83E-05	7.46E-07	6.68E-07	2656.057143	2595.354885	1.085639369	120620.2104
Sacramento	2027	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	300	Diesel	0.000107262	0.000129787	0.000154457	0.000607644	0.001095323	0.240565681	4.78E-05	4.39E-05	2.20E-06	1.97E-06	7824.824715	1928.26669	2.013629803	355350.7863
Sacramento	2027	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	600	Diesel	6.23E-06	7.53E-06	8.96E-06	4.66E-05	6.49E-05	0.015109629	2.59E-06	2.38E-06	1.38E-07	1.24E-07	491.4674265	398.2180375	0.074532626	22319.13768
Sacramento	2027	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	75	Diesel	3.80E-06	4.60E-06	5.47E-06	2.98E-05	3.52E-05	0.004852804	1.67E-06	1.54E-06	4.43E-08	3.97E-08	157.8460293	1506.697422	0.107661717	6447.958853
Sacramento	2027	Agricultural - Nut Harvester	Aggregate	100	Diesel	0.001198365	0.001450022	0.001725646	0.009843776	0.009482763	1.552570886	0.000729434	0.000671079	1.42E-05	1.27E-05	50500.11709	17533.11342	26.08755119	1952590.743
Sacramento	2027	Agricultural - Nut Harvester	Aggregate	175	Diesel	0.000716219	0.000866625	0.001031355	0.007209208	0.006873302	1.208387182	0.000327413	0.00030122	1.10E-05	9.89E-06	39304.93271	13250.64425	16.17103401	1689506.916
Sacramento	2027	Agricultural - Nut Harvester	Aggregate	25	Diesel	8.07E-05	9.76E-05	0.000116184	0.00040141	0.000339693	0.047205354	1.68E-05	1.54E-05	4.29E-07	3.86E-07	1535.437729	312.0433663	3.784832687	59367.81293
Sacramento	2027	Agricultural - Nut Harvester	Aggregate	300	Diesel	0.000392527	0.000474957	0.000565238	0.002001232	0.003721682	0.660491063	0.000185133	0.000170322	6.03E-06	5.40E-06	21483.64132	3515.455415	4.282825382	923465.7891
Sacramento	2027	Agricultural - Nut Harvester	Aggregate	50	Diesel	0.000469388	0.000567959	0.000675918	0.002298467	0.00176467	0.253642483	0.000114228	0.00010509	2.31E-06	2.08E-06	8250.17085	5525.577261	9.510153467	318993.4637
Sacramento	2027	Agricultural - Nut Harvester	Aggregate	75	Diesel	0.000126048	0.000152518	0.00018151	0.001014658	0.001181141	0.164187069	5.63E-05	5.18E-05	1.50E-06	1.34E-06	5340.475135	3763.274611	3.290004978	206489.865
Sacramento	2027	Agricultural - Other Harvesters	Aggregate	100	Diesel	0.000590917	0.00071501	0.000850921	0.004939449	0.004544821	0.790576032	0.000344129	0.000316598	7.21E-06	6.47E-06	25714.88525	10952.11345	12.6819286	994267.9307
Sacramento	2027	Agricultural - Other Harvesters	Aggregate	175	Diesel	0.00069136	0.000836545	0.000995558	0.007022663	0.006614545	1.183271896	0.000312532	0.000287529	1.08E-05	9.68E-06	38488.01355	12909.02698	15.47299671	1654391.973
Sacramento	2027	Agricultural - Other Harvesters	Aggregate	300	Diesel	0.000183544	0.000222088	0.000264303	0.001041072	0.001787071	0.406039232	8.08E-05	7.43E-05	3.71E-06	3.32E-06	13207.14496	2590.008091	2.426901865	567703.878
Sacramento	2027	Agricultural - Other Harvesters	Aggregate	600	Diesel	0.000195522	0.000236582	0.000281552	0.001464409	0.002036832	0.474543309	8.13E-05	7.48E-05	4.33E-06	3.88E-06	15435.36138	2303.133472	1.910259041	663482.878
Sacramento	2027	Agricultural - Other Harvesters	Aggregate	75	Diesel	9.50E-05	0.000114973	0.000136828	0.000744496	0.000880034	0.121365284	4.19E-05	3.85E-05	1.11E-06	9.93E-07	3947.620751	3413.899202	2.540856354	152635.0474
Sacramento	2027	Agricultural - Other Harvesters	Aggregate	750	Diesel	1.68E-05	2.03E-05	2.41E-05	0.000125035	0.000180677	0.040517764	7.36E-06	6.78E-06	3.70E-07	3.32E-07	1317.912028	1506.697428	0.107661717	56649.92468
Sacramento	2027	Agricultural - Sprayers/Spray Rigs	Aggregate	100	Diesel	9.09E-05	0.000110042	0.000130959	0.000758188	0.000701582	0.121155972	5.32E-05	4.90E-05	1.11E-06	9.91E-07	3940.812526	1624.764222	2.168547893	160980.9073
Sacramento	2027	Agricultural - Sprayers/Spray Rigs	Aggregate	175	Diesel	0.000378735	0.00045827	0.000545379	0.003845431	0.003618533	0.648157199	0.000170909	0.000157237	5.92E-06	5.30E-06	21082.46055	11245.40011	8.152684765	957423.2419
Sacramento	2027	Agricultural - Sprayers/Spray Rigs	Aggregate	25	Diesel	3.21E-06	3.89E-06	4.63E-06	1.60E-05	1.35E-05	0.001879364	6.68E-07	6.15E-07	1.71E-08	1.54E-08	61.12963029	996.3927642	0.181431248	2497.125459
Sacramento	2027	Agricultural - Sprayers/Spray Rigs	Aggregate	300	Diesel	0.000445386	0.000538917	0.000641355	0.002310419	0.004274011	0.788668125	0.000208217	0.000191559	7.20E-06	6.45E-06	25652.8272	9015.747685	5.628467523	1164978.489
Sacramento	2027	Agricultural - Sprayers/Spray Rigs	Aggregate	50	Diesel	0.000149977	0.000181472	0.000215966	0.000753439	0.00058927	0.088544857	3.47E-05	3.19E-05	8.05E-07	7.25E-07	2880.078245	6400.494946	3.785885269	117650.2579
Sacramento	2027	Agricultural - Sprayers/Spray Rigs	Aggregate	600	Diesel	0.000563005	0.000681236	0.000810727	0.004647362	0.005438354	1.067364019	0.000251593	0.000231466	9.75E-06	8.73E-06	34717.90461	3825.839652	5.04366418	1576653.205
Sacramento	2027	Agricultural - Sprayers/Spray Rigs	Aggregate	75	Diesel	0.001523976	0.001844011	0.002194526	0.010852891	0.013532073	1.65674683	0.000787729	0.000724711	1.51E-05	1.36E-05	53888.62413	5953.201872	48.32950848	2201332.728
Sacramento	2027	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	100	Diesel	0.000213187	0.000257956	0.000306989	0.001873918	0.001598116	0.303635645	0.000120027	0.000110425	2.77E-06	2.48E-06	9876.286983	3275.735106	4.376448517	353012.7149
Sacramento	2027	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	175	Diesel	5.29E-05	6.40E-05	7.61E-05	0.000530945	0.00050745	0.088898569	2.42E-05	2.23E-05	8.12E-07	7.27E-07	2891.583371	2649.546179	0.956989911	114901.6962
Sacramento	2027	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	300	Diesel	0.000100053	0.000121064	0.000144076	0.000567179	0.000966413	0.220447926	4.40E-05	4.05E-05	2.01E-06	1.80E-06	7170.459117	2694.16111	1.432997857	284929.6774
Sacramento	2027	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	50	Diesel	0.000123652	0.000149619	0.000178059	0.000615189	0.000480113	0.072345398	2.83E-05	2.60E-05	6.58E-07	5.92E-07	2353.162156	656.4822994	2.184605758	84110.16856
Sacramento	2027	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	75	Diesel	8.00E-05	9.67E-05	0.000115134	0.00062875	0.000741539	0.102324005	3.53E-05	3.25E-05	9.34E-07	8.37E-07	3328.269435	1978.770731	2.307645089	118963.8805
Sacramento	2027	Airport Ground Support - A/C Tug Narrow Body	Aggregate	100	Diesel	2.55E-05	3.09E-05	3.68E-05	0.000493729	0.000240436	0.085467376	1.93E-05	1.77E-05	8.10E-07	0	2777.277298	1054.711001	2.083500731	48213.53643
Sacramento	2027	Airport Ground Support - A/C Tug Narrow Body	Aggregate	175	Diesel	7.34E-05	8.88E-05	0.000105674	0.001529348	0.000485084	0.263588672	2.48E-05	2.28E-05	2.50E-06	0	8565.359876	2598.49461	3.516785532	178426.977
Sacramento	2027	Airport Ground Support - A/C Tug Narrow Body	Aggregate	300	Diesel	2.46E-05	2.98E-05	3.54E-05	0.000238609	0.000113575	0.109643794	5.14E-06	4.72E-06	1.04E-06	0	3562.894201	634.1054063	1.05867724	76842.06926
Sacramento	2027	Airport Ground Support - A/C Tug Narrow Body	Aggregate	50	Diesel	1.23E-05	1.49E-05	1.77E-05	0.000139646	0.000106533	0.021683921	3.66E-06	3.37E-06	2.05E-07	0	704.6227935	550.6829802	1.306247344	9779.690649
Sacramento	2027	Airport Ground Support - A/C Tug Narrow Body	Aggregate	600	Diesel	2.46E-05	2.97E-05	3.54E-05	0.000208386	0.000111621	0.101720851	5.59E-06	5.14E-06	9.64E-07	0	3305.436807	367.0469348	0.559680677	69163.19547
Sacramento	2027	Airport Ground Support - A/C Tug Narrow Body	Aggregate	75	Diesel	7.68E-05	9.29E-05	0.000110606	0.001177835	0.001019362	0.196210947	1.36E-05	1.25E-05	1.86E-06	0	6375.908939	3057.029878	5.991035778	113632.9679
Sacramento	2027	Airport Ground Support - A/C Tug Wide Body	Aggregate	100	Diesel	2.90E-06	3.50E-06	4.17E-06	4.35E-05	3.19E-05	0.0072199	2.81E-06	2.58E-06	6.84E-08	0	234.611912	96.00356701	0.217287	4183.487252
Sacramento	2027	Airport Ground Support - A/C Tug Wide Body	Aggregate	175	Diesel	3.90E-05	4.71E-05	5.61E-05	0.000839051	0.000255335	0.138933538	1.13E-05	1.04E-05	1.32E-06	0	4514.669555	1162.747234	1.491146216	90939.24566
Sacramento	2027	Airport Ground Support - A/C Tug Wide Body	Aggregate	300	Diesel	8.72E-05	0.000105533	0.000125593	0.000712849	0.000509192	0.331364172	2.34E-05	2.16E-05	3.14E-06	0	10767.73657	1691.761358	2.797670295	221770.3054
Sacramento	2027	Airport Ground Support - A/C Tug Wide Body	Aggregate	50	Diesel	1.01E-06	1.22E-06	1.46E-06	1.21E-05	1.13E-05	0.001664323	4.52E-07	4.16E-07	1.58E-08	0	54.08247455	54.22520794	0.155205	964.3727846
Sacramento	2027	Airport Ground Support - A/C Tug Wide Body	Aggregate	600	Diesel	8.59E-05	0.000103898	0.000123647	0.000674466	0.000509571	0.305490759	2.54E-05	2.33E-05	2.89E-06	0	9926.975521	973.2974562	1.490246645	198273.3051
Sacramento	2027	Airport Ground Support - A/C Tug Wide Body	Aggregate	75	Diesel	3.23E-06	3.91E-06	4.65E-06	4.74E-05	4.18E-05	0.007896755	7.01E-07	6.45E-07	7.48E-08	0	256.6064308	125.526978	0.248328	4575.682978
Sacramento	2027	Airport Ground Support - A/C Tug Wide Body	Aggregate	750	Diesel	2.95E-06	3.56E-06	4.24E-06	2.20E-05	1.56E-05	0.010611251	1.02E-06	9.35E-07	1.01E-07	0	344.8144656	18.16106986	0.031041	6835.463475
Sacramento	2027	Airport Ground Support - AirCraft Tractor	Aggregate	75	Diesel	1.71E-06	2.06E-06	2.46E-06	2.69E-05	2.29E-05	0.004483124	3.89E-07	3.58E-07	4.25E-08	0	145.6798843	112.9123561	0.217287	2597.693926
Sacramento	2027	Airport Ground Support - Baggage Tug	Aggregate	100	Diesel	4.64E-05	5.62E-05	6.68E-05	0.001155598	0.000377201	0.213264053	2.84E-05	2.62E-05	2.02E-06	0	6930.052606	3274.345869	6.69506863	110904.2074
Sacramento	2027	Airport Ground Support - Baggage Tug	Aggregate	300	Diesel	3.86E-06	4.67E-06	5.55E-06	2.71E-05	4.02E-05	0.011995243	1.61E-06	1.48E-06	1.14E-07	0	389.7875116	112.1617442	0.186246	7726.991076
Sacramento	2027	Airport Ground Support - Baggage Tug	Aggregate	50	Diesel	3.15E-05	3.81E-05	4.54E-05	0.000424414	0.000353408	0.065647347	1.00E-05	9.22E-06	6.22E-07	0	2133.221979	2109.354841	5.00254994	32309.56631
Sacramento	2027	Airport Ground Support - Baggage Tug	Aggregate	75	Diesel	5.15E-05	6.23E-05	7.41E-05	0.000810459	0.000714048	0.143338216	1.40E-05	1.29E-05	1.36E-06	0	4657.800328	3266.564714	6.557874937	76178.30156
Sacramento	2027	Airport Ground Support - Belt Loader	Aggregate	100	Diesel	1.64E-05	1.98E-05	2.36E-05	0.000481572	0.000137758	0.090616028	9.97E-06	9.17E-06	8.58E-07	0	2944.583654	1536.772943	3.145956536	44897.40585
Sacramento	2027	Airport Ground Support - Belt Loader	Aggregate	175	Diesel	1.65E-06	2.00E-06	2.38E-06	2.79E-05	1.39E-05	0.004914945	6.44E-07	5.93E-07	4.66E-08	0	159.7119898	79.83877846	0.124286042	3183.860732
Sacramento	2027	Airport Ground Support - Belt Loader	Aggregate	300	Diesel	4.63E-07	5.61E-07	6.67E-07	4.35E-06	5.36E-07	0.002135293	4.63E-08	4.26E-08	2.02E-08	0	69.38672032	20.22785993	0.031041	1375.494475
Sacramento	2027	Airport Ground Support - Belt Loader	Aggregate	50	Diesel	3.46E-05	4.19E-05	4.99E-05	0.000471107	0.000387818	0.070900089	9.62E-06	8.85E-06	6.72E-07	0	2303.910757	2792.648027	6.643733764	39883.667
Sacramento	2027	Airport Ground Support - Belt Loader	Aggregate	75	Diesel	3.00E-05	3.63E-05	4.32E-05	0.000470008	0.000414021	0.084743963	8.93E-06	8.22E-06	8.03E-07	0	2753.769871	2102.953771	4.259370049	43002.59205
Sacramento	2027	Airport Ground Support - Belt Loader	Aggregate	750	Diesel	2.39E-06	2.89E-06	3.44E-06	3.50E-05	3.37E-05	0.001738625	1.73E-06	1.59E-06	1.65E-08	0	56.49692268	5.2704579	0.031041	1119.972304
Sacramento	2027	Airport Ground Support - Bobtail	Aggregate	100	Diesel	4.20E-07	5.08E-07	6.05E-07	5.39E-06	2.66E-06	0.000904988	1.75E-07	1.61E-07	8.57E-09	0	29.40774054	17.71570085	0.031041	524.3847451
Sacramento	2027	Airport Ground Support - Bobtail	Aggregate	175	Diesel	1.62E-06	1.96E-06	2.34E-06	1.87E-05	1.79E-05	0.00323617	9.73E-07	8.95E-07	3.07E-08	0	105.1599159	41.42827183	0.093123	2084.647936
Sacramento	2027	Airport Ground Support - Bobtail	Aggregate	50	Diesel	7.82E-08	9.46E-08	1.13E-07	1.20E-06	1.24E-06	0.000161541	4.71E-08	4.33E-08	1.53E-09	0	5.249318436	5.2704579	0.031041	93.60333231
Sacramento	2027	Airport Ground Support - Bobtail	Aggregate	600	Diesel	1.68E-05	2.03E-05	2.41E-05	0.000134398	0.000101791	0.059655688	5.14E-06	4.73E-06	5.65E-07	0	1938.521978	262.0746787	0.434574	38428.48111
Sacramento	2027	Airport Ground Support - Bobtail	Aggregate	75	Diesel	1.23E-06	1.48E-06	1.76E-06	1.30E-05	1.35E-05	0.002126878	3.60E-07	3.31E-07	2.01E-08	0	69.11328772	55.74556356	0.124164	1232.395046
Sacramento	2027	Airport Ground Support - Cargo Loader	Aggregate	100	Diesel	1.35E-05	1.63E-05	1.94E-05	0.000334808	0.000124141	0.060783086	9.23E-06	8.49E-06	5.76E-07	0	1975.156996	1064.017771	2.209616683	30998.06192
Sacramento	2027	Airport Ground Support - Cargo Loader	Aggregate	175	Diesel	0.000107378	0.000129927	0.000154624	0.002441318	0.000606366	0.417621456	2.90E-05	2.66E-05	3.96E-06	0	13570.68206	6297.478904	7.931051957	271291.0823
Sacramento	2027	Airport Ground Support - Cargo Loader	Aggregate	300	Diesel	1.22E-05	1.48E-05	1.76E-05	9.17E-05	0.000104964	0.034749758	5.26E-06	4.84E-06	3.29E-07	0	1129.199434	347.2149048	0.590578154	23030.9186
Sacramento	2027	Airport Ground Support - Cargo Loader	Aggregate	50	Diesel	3.25E-06	3.93E-06	4.68E-06	1.72E-05	1.39E-05	0.00169515	1.13E-06	1.04E-06	1.61E-08	0	55.08420041	95.69738998	0.217287	982.2350803
Sacramento	2027	Airport Ground Support - Cargo Loader	Aggregate	600	Diesel	1.74E-05	2.10E-05	2.50E-05	0.000130857	9.87E-05	0.06518973	4.22E-06	3.89E-06	6.18E-07	0	2118.35165	354.4922664	0.496816876	42370.40033
Sacramento	2027	Airport Ground Support - Cargo Loader	Aggregate	75	Diesel	2.57E-05	3.11E-05	3.70E-05	0.000394437	0.000332562	0.066517323	3.61E-06	3.32E-06	6.30E-07	0	2161.492002	1517.332898	2.9817485	37031.34151
Sacramento	2027	Airport Ground Support - Cargo Tractor	Aggregate	100	Diesel	1.15E-05	1.40E-05	1.66E-05	0.000331433	0.000113686	0.059532828	9.07E-06	8.35E-06	5.64E-07	0	1934.529629	1022.273709	2.053500351	31383.81875
Sacramento	2027	Airport Ground Support - Cargo Tractor	Aggregate	175	Diesel	5.45E-06	6.59E-06	7.84E-06	0.000104256	4.45E-05	0.017918294	2.16E-06	1.98E-06	1.70E-07	0	582.258086	228.6997071	0.31052777	11594.24312
Sacramento	2027	Airport Ground Support - Cargo Tractor	Aggregate	300	Diesel	1.25E-05	1.51E-05	1.80E-05	7.86E-05	0.00011268	0.0329459	5.50E-06	5.06E-06	3.12E-07	0	1070.582771	276.5975616	0.496656	21222.80286
Sacramento	2027	Airport Ground Support - Cargo Tractor	Aggregate	50	Diesel	2.48E-05	3.01E-05	3.58E-05	0.000383033	0.000321227	0.059435253	6.13E-06	5.64E-06	5.63E-07	0	1931.35893	2397.945545	5.990913	34439.06745
Sacramento	2027	Airport Ground Support - Cargo Tractor	Aggregate	600	Diesel	2.70E-06	3.27E-06	3.89E-06	1.82E-05	3.04E-05	0.009539605	8.97E-07	8.25E-07	9.04E-08	0	309.9911317	39.23966458	0.062082	6145.13969
Sacramento	2027	Airport Ground Support - Cargo Tractor	Aggregate	75	Diesel	4.05E-05	4.90E-05	5.83E-05	0.000712339	0.000575554	0.130648919	1.08E-05	9.92E-06	1.24E-06	0	4245.459411	3128.670635	6.253000755	62715.25182
Sacramento	2027	Airport Ground Support - Forklift	Aggregate	100	Diesel	2.19E-05	2.65E-05	3.15E-05	0.000364688	0.00022514	0.061015787	1.59E-05	1.46E-05	5.78E-07	0	1982.71865	1995.296472	3.446294152	34102.41076
Sacramento	2027	Airport Ground Support - Forklift	Aggregate	175	Diesel	4.88E-05	5.90E-05	7.02E-05	0.000862528	0.000376078	0.146636053	1.50E-05	1.38E-05	1.39E-06	0	4764.964115	3783.032978	5.494932841	93803.67679
Sacramento	2027	Airport Ground Support - Forklift	Aggregate	300	Diesel	9.16E-06	1.11E-05	1.32E-05	6.64E-05	8.32E-05	0.020762321	4.63E-06	4.26E-06	1.97E-07	0	674.6752551	293.681436	0.528810291	13052.22964
Sacramento	2027	Airport Ground Support - Forklift	Aggregate	50	Diesel	4.10E-06	4.96E-06	5.90E-06	4.35E-05	3.25E-05	0.006977846	1.19E-06	1.10E-06	6.61E-08	0	226.74632	361.2897762	0.777080797	2686.455155
Sacramento	2027	Airport Ground Support - Forklift	Aggregate	600	Diesel	4.10E-06	4.96E-06	5.90E-06	4.38E-05	3.73E-05	0.011533943	1.78E-06	1.64E-06	1.09E-07	0	374.7974937	111.602339	0.217485367	7550.050447
Sacramento	2027	Airport Ground Support - Forklift	Aggregate	75	Diesel	1.52E-05	1.84E-05	2.19E-05	0.000217531	0.000195658	0.03650909	4.03E-06	3.70E-06	3.46E-07	0	1186.369264	1549.804802	3.104634597	20436.2155
Sacramento	2027	Airport Ground Support - Forklift	Aggregate	750	Diesel	8.14E-07	9.84E-07	1.17E-06	6.72E-06	5.23E-06	0.003577117	3.29E-07	3.02E-07	3.39E-08	0	116.2390368	17.72519983	0.031041	2304.275978
Sacramento	2027	Airport Ground Support - Fuel Truck	Aggregate	300	Diesel	3.05E-06	3.70E-06	4.40E-06	1.79E-05	2.83E-05	0.008602508	1.07E-06	9.89E-07	8.15E-08	0	279.5399832	62.49798892	0.093123	5541.488351
Sacramento	2027	Airport Ground Support - Fuel Truck	Aggregate	600	Diesel	8.65E-07	1.05E-06	1.25E-06	5.17E-06	5.97E-06	0.002767905	2.47E-07	2.28E-07	2.62E-08	0	89.94356021	15.64039485	0.031041	1783.005013
Sacramento	2027	Airport Ground Support - Generator	Aggregate	100	Diesel	9.25E-08	1.12E-07	1.33E-07	1.52E-06	1.18E-06	0.00025923	5.47E-08	5.03E-08	2.46E-09	0	8.423737355	5.2704579	0.031041	150.2080502
Sacramento	2027	Airport Ground Support - Generator	Aggregate	175	Diesel	6.98E-07	8.44E-07	1.01E-06	1.10E-05	7.42E-06	0.001879988	3.57E-07	3.28E-07	1.78E-08	0	61.09052759	21.24621197	0.031041	1211.034083
Sacramento	2027	Airport Ground Support - Lift	Aggregate	100	Diesel	1.31E-05	1.59E-05	1.89E-05	0.000304267	0.000119327	0.05719848	8.04E-06	7.39E-06	5.42E-07	0	1858.6746	933.0813695	2.057005541	26709.31298
Sacramento	2027	Airport Ground Support - Lift	Aggregate	175	Diesel	1.57E-05	1.90E-05	2.27E-05	0.000313262	0.000108969	0.052817443	4.66E-06	4.29E-06	5.00E-07	0	1716.312035	876.4233374	1.242465819	33906.26258
Sacramento	2027	Airport Ground Support - Lift	Aggregate	300	Diesel	3.53E-06	4.27E-06	5.08E-06	2.66E-05	2.97E-05	0.013609033	1.13E-06	1.04E-06	1.29E-07	0	442.2278921	117.1998411	0.186246	8766.548116
Sacramento	2027	Airport Ground Support - Lift	Aggregate	50	Diesel	1.44E-05	1.74E-05	2.07E-05	0.000218356	0.00018387	0.034687016	4.53E-06	4.16E-06	3.29E-07	0	1127.160622	1124.722383	2.85766118	17884.68811
Sacramento	2027	Airport Ground Support - Lift	Aggregate	75	Diesel	1.64E-05	1.99E-05	2.36E-05	0.000251278	0.000222873	0.043733031	4.94E-06	4.55E-06	4.14E-07	0	1421.112472	1111.292627	2.298371185	24201.0769
Sacramento	2027	Airport Ground Support - Misc - A/C Tug Narrow Body	Aggregate	175	Gasoline	0.000342669	0.000315187	0.000377086	0.02313838	0.00222045	0.59025628	4.23E-05	3.20E-05	5.86E-06	8.32E-06	23754.2	2500.25	3.41	325032.5
Sacramento	2027	Airport Ground Support - Misc - A/C Tug Wide Body	Aggregate	600	Gasoline	0.000170726	0.000157034	0.000187874	0.018047386	0.001624596	0.514962196	3.80E-05	2.87E-05	5.26E-06	7.21E-06	20582.35	584	1.15	292000
Sacramento	2027	Airport Ground Support - Misc - Air Conditioner	Aggregate	175	Gasoline	1.33E-07	1.23E-07	1.47E-07	1.66E-05	1.63E-06	0.000528752	3.79E-08	2.86E-08	5.25E-09	1.28E-09	3.65	0	0.11	0
Sacramento	2027	Airport Ground Support - Misc - Air Conditioner	Aggregate	175	Nat Gas	0	0	6.31E-08	7.01E-05	7.19E-06	0.002841509	0	0	0	0	146	0	0.66	0
Sacramento	2027	Airport Ground Support - Misc - Air Start Unit	Aggregate	175	Gasoline	1.39E-05	1.28E-05	1.53E-05	0.001602217	0.000157235	0.050016089	3.59E-06	2.71E-06	4.97E-07	6.97E-07	1989.25	182.5	2.48	23725
Sacramento	2027	Airport Ground Support - Misc - Baggage Tug	Aggregate	100	Gasoline	0.00284886	0.002620381	0.003134997	0.210441444	0.017006091	5.211125226	0.000363332	0.000274518	5.03E-05	7.36E-05	210053.85	40511.35	46.15	4051135
Sacramento	2027	Airport Ground Support - Misc - Baggage Tug	Aggregate	100	Nat Gas	0	0	8.63E-05	0.0376317	0.00397861	0.85597992	0	0	0	0	47555.85	7632.15	9.16	763215
Sacramento	2027	Airport Ground Support - Misc - Belt Loader	Aggregate	100	Gasoline	0.000701497	0.000645237	0.000771955	0.053151263	0.004129941	1.242632586	8.66E-05	6.55E-05	1.20E-05	1.76E-05	50275.1	17706.15	21.83	1062369
Sacramento	2027	Airport Ground Support - Misc - Belt Loader	Aggregate	100	Nat Gas	0	0	6.19E-06	0.003219831	0.000324393	0.082519812	0	0	0	0	4540.6	1346.85	2.44	80811
Sacramento	2027	Airport Ground Support - Misc - Bobtail	Aggregate	100	Gasoline	0.000457864	0.000421144	0.000503852	0.033821812	0.002733193	0.83752409	5.84E-05	4.41E-05	8.09E-06	1.18E-05	33766.15	6515.25	7.42	651525
Sacramento	2027	Airport Ground Support - Misc - Bobtail	Aggregate	100	Nat Gas	0	0	1.08E-06	0.000740169	6.71E-05	0.020647919	0	0	0	0	1135.15	182.5	0.2	18250
Sacramento	2027	Airport Ground Support - Misc - Cargo Loader	Aggregate	100	Gasoline	0.000193014	0.000177535	0.000212401	0.014599651	0.001137643	0.342833625	2.39E-05	1.81E-05	3.31E-06	4.86E-06	13870	4179.25	5.85	292547.5
Sacramento	2027	Airport Ground Support - Misc - Cargo Loader	Aggregate	100	Nat Gas	0	0	8.70E-06	0.003460772	0.000376166	0.072767607	0	0	0	0	4077.05	1022	1.01	71540
Sacramento	2027	Airport Ground Support - Misc - Cargo Tractor	Aggregate	100	Gasoline	0.00515559	0.004742112	0.005673413	0.497500075	0.025643568	5.824878574	0.000406124	0.00030685	4.81E-05	8.78E-05	250696.6	48545	35.91	4611775
Sacramento	2027	Airport Ground Support - Misc - Cargo Tractor	Aggregate	175	Nat Gas	0	0	2.97E-06	0.002721833	0.000275041	0.10392391	0	0	0	0	5610.05	598.6	3.87	93142.16
Sacramento	2027	Airport Ground Support - Misc - Cart	Aggregate	15	Gasoline	2.46E-05	2.49E-05	2.71E-05	0.001389852	1.51E-05	5.35E-07	5.38E-08	4.07E-08	2.16E-08	2.98E-08	84.68236202	0	1.969006788	0
Sacramento	2027	Airport Ground Support - Misc - Catering Truck	Aggregate	300	Gasoline	0.000692622	0.000637074	0.000762188	0.041006974	0.003903324	0.937943358	6.92E-05	5.23E-05	8.19E-06	1.33E-05	38025.7	4004.05	3.92	816425.795
Sacramento	2027	Airport Ground Support - Misc - Catering Truck	Aggregate	300	Nat Gas	0	0	3.08E-06	0.002124271	0.000208593	0.071830005	0	0	0	0	3890.9	332.15	0.72	68090.75
Sacramento	2027	Airport Ground Support - Misc - Deicer	Aggregate	100	Gasoline	5.05E-06	4.64E-06	5.55E-06	0.000196453	3.58E-05	0.012827362	8.94E-07	6.76E-07	1.24E-07	1.76E-07	503.7	62.05	2.81	5770.65
Sacramento	2027	Airport Ground Support - Misc - Forklift	Aggregate	50	Gasoline	0.000199886	0.000183855	0.000219962	0.018579365	0.00044731	0.141838583	9.78E-06	7.39E-06	1.72E-06	2.28E-06	6500.65	3993.1	5.49	199655
Sacramento	2027	Airport Ground Support - Misc - Forklift	Aggregate	50	Nat Gas	0	0	1.30E-05	0.003530301	0.000954963	0.285869015	2.54E-05	0	0	0	15107.35	9354.95	12.85	467747.5
Sacramento	2027	Airport Ground Support - Misc - Fuel Truck	Aggregate	175	Gasoline	1.39E-06	1.28E-06	1.53E-06	0.000174081	1.71E-05	0.005535319	3.97E-07	3.00E-07	5.50E-08	7.42E-08	211.7	62.05	3.36	8066.5
Sacramento	2027	Airport Ground Support - Misc - Fuel Truck	Aggregate	175	Nat Gas	0	0	8.39E-07	0.000536696	5.22E-05	0.017390415	0	0	0	0	945.35	251.85	0.4	35259
Sacramento	2027	Airport Ground Support - Misc - Generator	Aggregate	100	Gasoline	4.98E-05	4.58E-05	5.48E-05	0.003877837	0.000221441	0.048907927	3.41E-06	2.58E-06	4.04E-07	7.33E-07	2091.45	255.5	0.27	27338.5
Sacramento	2027	Airport Ground Support - Misc - Ground Power Unit	Aggregate	175	Gasoline	0.000297758	0.000273878	0.000327665	0.030446931	0.002730911	0.88262788	6.33E-05	4.78E-05	8.77E-06	1.23E-05	35237.1	3452.9	4.32	517935
Sacramento	2027	Airport Ground Support - Misc - Hydrant Truck	Aggregate	175	Gasoline	0.000940195	0.000864791	0.001034627	0.047319577	0.004440609	0.975975802	7.00E-05	5.29E-05	8.29E-06	1.40E-05	39868.95	5029.7	3.3	611108.55
Sacramento	2027	Airport Ground Support - Misc - Lav Cart	Aggregate	15	Gasoline	2.12E-06	2.14E-06	2.33E-06	0.000119607	1.30E-06	4.60E-08	4.63E-09	3.50E-09	1.86E-09	2.56E-09	7.287416044	0	0.169447008	0
Sacramento	2027	Airport Ground Support - Misc - Lav Truck	Aggregate	175	Gasoline	0.000251321	0.000231165	0.000276563	0.018839299	0.001634035	0.474777258	3.40E-05	2.57E-05	4.72E-06	6.70E-06	19118.7	6424	5.29	835120
Sacramento	2027	Airport Ground Support - Misc - Lav Truck	Aggregate	175	Nat Gas	0	0	3.94E-07	0.00028589	2.82E-05	0.009917339	0	0	0	0	529.25	142.35	0.37	18505.5
Sacramento	2027	Airport Ground Support - Misc - Lift	Aggregate	100	Gasoline	0.000273653	0.000251706	0.000301138	0.017417107	0.00148187	0.424881188	2.96E-05	2.24E-05	4.10E-06	6.00E-06	17140.4	3635.4	9.64	363540
Sacramento	2027	Airport Ground Support - Misc - Lift	Aggregate	100	Nat Gas	0	0	6.99E-07	0.000443718	4.26E-05	0.012576119	0	0	0	0	693.5	109.5	0.33	10950
Sacramento	2027	Airport Ground Support - Misc - Maint. Truck	Aggregate	175	Gasoline	0.000172665	0.000158817	0.000190007	0.015937015	0.001441159	0.450527124	3.23E-05	2.44E-05	4.48E-06	6.31E-06	18012.75	3040.45	6.77	395258.5
Sacramento	2027	Airport Ground Support - Misc - Other	Aggregate	50	Gasoline	0.000139618	0.000128421	0.000153642	0.010922985	0.000301758	0.108457263	7.48E-06	5.65E-06	1.32E-06	1.67E-06	4777.85	1828.65	10.02	91432.5
Sacramento	2027	Airport Ground Support - Misc - Other	Aggregate	50	Nat Gas	0	0	1.16E-05	0.001648625	0.000468829	0.098069614	0	0	0	0	5237.75	1927.2	1.9	96360

Sacramento	2027 Airport Ground Support - Misc - Passenger Stand	Aggregate	175	Gasoline	4.79E-05	4.40E-05	5.27E-05	0.004838418	0.000472621	0.14547713	1.04E-05	7.88E-06	1.29E-06	2.03E-06	5807.15	857.75	4.61	107304.525
Sacramento	2027 Airport Ground Support - Misc - Passenger Stand	Aggregate	175	Nat Gas	0	0	8.63E-09	9.76E-06	1.00E-06	0.000397549	0	0	0	0	3.65	0	0.17	0
Sacramento	2027 Airport Ground Support - Misc - Service Truck	Aggregate	300	Gasoline	0.000853253	0.000784822	0.000938953	0.054478731	0.005208617	1.30705	9.64E-05	7.29E-05	1.34E-05	1.85E-05	52800.9	16417.7	19.51	2955186
Sacramento	2027 Airport Ground Support - Misc - Service Truck	Aggregate	300	Nat Gas	0	0	1.08E-05	0.00641196	0.00054469	0.182491232	0	0	0	0	9986.4	2489.3	1.9	448074
Sacramento	2027 Airport Ground Support - Misc - Sweeper	Aggregate	100	Gasoline	6.49E-06	5.97E-06	7.15E-06	0.00040927	3.54E-05	0.01024293	7.14E-07	5.40E-07	8.46E-08	1.43E-07	408.8	149.65	0.42	7976.345
Sacramento	2027 Airport Ground Support - Misc - Sweeper	Aggregate	50	Nat Gas	0	0	9.15E-08	2.60E-05	7.25E-06	0.002171204	0	0	0	0	109.5	51.1	0.15	2299.5
Sacramento	2027 Airport Ground Support - Misc - Water Truck	Aggregate	175	Gasoline	1.40E-05	1.29E-05	1.54E-05	0.001257139	0.000122286	0.036335126	2.60E-06	1.97E-06	3.61E-07	5.09E-07	1452.7	529.25	1.7	79387.5
Sacramento	2027 Airport Ground Support - Other	Aggregate	100	Diesel	6.89E-06	8.34E-06	9.92E-06	0.000107286	6.75E-05	0.017983068	5.05E-06	4.64E-06	1.70E-07	0	584.3629399	349.4823119	0.713943	10420.08008
Sacramento	2027 Airport Ground Support - Other	Aggregate	175	Diesel	2.18E-05	2.64E-05	3.14E-05	0.000431201	0.000152834	0.072870694	6.53E-06	6.01E-06	6.90E-07	0	2367.945908	1074.590446	1.522127131	47162.14724
Sacramento	2027 Airport Ground Support - Other	Aggregate	300	Diesel	4.16E-05	5.03E-05	5.99E-05	0.000307357	0.000311565	0.132136017	1.45E-05	1.33E-05	1.25E-06	0	4293.782932	1106.485511	1.833097794	86522.15864
Sacramento	2027 Airport Ground Support - Other	Aggregate	50	Diesel	2.63E-05	3.19E-05	3.79E-05	0.000242794	0.000209772	0.031617516	8.67E-06	7.98E-06	3.00E-07	0	1027.416707	1597.18035	3.600891907	18153.30789
Sacramento	2027 Airport Ground Support - Other	Aggregate	600	Diesel	2.91E-05	3.52E-05	4.19E-05	0.000221815	0.000158831	0.113553463	7.40E-06	6.81E-06	1.08E-06	0	3689.939596	622.7845529	0.93123	73147.88051
Sacramento	2027 Airport Ground Support - Other	Aggregate	75	Diesel	2.37E-05	2.86E-05	3.41E-05	0.000295705	0.000286735	0.050596585	9.34E-06	8.59E-06	4.79E-07	0	1644.144855	1293.682522	2.795525115	27474.17495
Sacramento	2027 Airport Ground Support - Other	Aggregate	750	Diesel	2.96E-06	3.58E-06	4.27E-06	2.21E-05	2.37E-05	0.011688242	9.92E-07	9.12E-07	1.11E-07	0	379.8114491	35.15046507	0.062082	7529.229618
Sacramento	2027 Airport Ground Support - Other	Aggregate	9999	Diesel	1.67E-05	2.02E-05	2.40E-05	0.000153858	0.000334268	0.078088585	7.33E-06	6.75E-06	7.40E-07	0	2537.502197	54.1274294	0.093123	50302.42439
Sacramento	2027 Airport Ground Support - Passenger Stand	Aggregate	175	Diesel	8.10E-07	9.80E-07	1.17E-06	1.46E-05	5.66E-06	0.002309536	2.82E-07	2.59E-07	2.19E-08	0	75.04876453	32.48333112	0.062082	1487.736565
Sacramento	2027 Airport Ground Support - Passenger Stand	Aggregate	300	Diesel	5.13E-07	6.21E-07	7.39E-07	6.42E-06	1.19E-06	0.002973524	6.98E-08	6.42E-08	2.82E-08	0	96.62517578	19.49611508	0.03115877	2144.572659
Sacramento	2027 Airport Ground Support - Passenger Stand	Aggregate	50	Diesel	3.37E-06	4.08E-06	4.85E-06	3.92E-05	3.14E-05	0.006177363	9.39E-07	8.64E-07	5.85E-08	0	200.7345018	187.8710843	0.466222064	2915.9457
Sacramento	2027 Airport Ground Support - Passenger Stand	Aggregate	75	Diesel	5.68E-06	6.87E-06	8.18E-06	7.64E-05	6.87E-05	0.013782576	1.47E-06	1.35E-06	1.31E-07	0	447.8672115	326.1893368	0.621909977	7045.983798
Sacramento	2027 Cargo Handling Equipment - Port Forklift	Aggregate	175	Diesel	0.0001756	0.0002124	0.0002528	0.001733536	0.001490869	0.256695565	0.0001191	0.0001095	2.43E-06	5.76E-09	8349.477772	3634.786979	0	0
Sacramento	2027 Cargo Handling Equipment - Port Tractors/Loaders/Backhoes	Aggregate	300	Diesel	0.0001724	0.000208576	0.000248222	0.00121879	0.0001336	0.52980347	0.00001218	0.00001122	0.00000502	1.19E-08	17232.79594	2128.265612	0	0
Sacramento	2027 Commercial Harbor Craft - AE - Commercial Fishing	Aggregate	75	Diesel	0.000137027	0.000165803	0.000197319	0.000458572	0.001231909	0.085079382	5.43E-05	5.19E-05	0	0	2898.005162	1880.540803	1.583453971	49420.61304
Sacramento	2027 Commercial Harbor Craft - AE - Excursion	Aggregate	75	Diesel	9.22E-06	1.12E-05	1.33E-05	5.04E-05	0.000225704	0.034862017	6.66E-06	6.36E-06	0	0	1187.482813	963.4008189	5.102426052	20965.52788
Sacramento	2027 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	100	Diesel	7.23E-06	8.74E-06	1.04E-05	2.47E-05	0.000141708	0.0125824	8.10E-06	7.74E-06	0	0	428.5863293	235.4687796	1.541667	7579.7405
Sacramento	2027 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	175	Diesel	6.83E-06	8.26E-06	9.83E-06	2.75E-05	0.000142671	0.01453523	5.41E-06	5.17E-06	0	0	492.6273285	235.4687743	1.541667	8712.344768
Sacramento	2027 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	50	Diesel	0.000147382	0.000178332	0.00021223	0.000506486	0.002444944	0.217552338	0.0001215	0.000116154	0	0	7295.312272	8882.677038	7.708332942	113826.9891
Sacramento	2027 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	300	Diesel	0.000217944	0.000263712	0.000313839	0.000868686	0.002516151	0.169737132	8.22E-05	7.86E-05	0	0	5781.648528	1578.696542	1.583453977	106562.0223
Sacramento	2027 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	50	Diesel	7.50E-06	9.07E-06	1.08E-05	7.15E-05	0.00014255	0.020404793	6.15E-06	5.88E-06	0	0	695.0355513	1578.696655	1.583454013	11508.69929
Sacramento	2027 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	600	Diesel	0.000108286	0.000131026	0.000155932	0.000543951	0.003027779	0.288910435	5.29E-05	5.05E-05	0	0	9840.973333	1578.696655	1.583454013	181155.4386
Sacramento	2027 Commercial Harbor Craft - ME - Excursion	Aggregate	600	Diesel	3.42E-05	4.14E-05	4.93E-05	0.000140884	0.000903787	0.130021632	1.27E-05	1.21E-05	0	0	4428.844593	1075.173188	5.102425803	82707.39844
Sacramento	2027 Commercial Harbor Craft - ME - Excursion	Aggregate	800	Diesel	0.000397056	0.000480437	0.00057176	0.001640728	0.010094945	1.454991659	0.000154169	0.000147386	0	0	49560.46029	5461.563943	5.102426	914812
Sacramento	2027 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	600	Diesel	0.000936427	0.001133076	0.001348455	0.002306047	0.0188162	1.495888968	0.000333726	0.000319042	0	0	50077.70095	7876.983946	9.24999993	924362.3122
Sacramento	2027 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	800	Diesel	4.59E-05	5.55E-05	6.61E-05	0.000249253	0.000951603	0.182569329	3.42E-05	3.27E-05	0	0	6184.698367	471.4464252	3.083332958	114160.7496
Sacramento	2027 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	9999	Diesel	0.000264998	0.000320647	0.000381596	0.002215568	0.005722678	1.611361964	0.000280124	0.000267799	0	0	54886.80296	2489.793787	3.083333042	1081068.47
Sacramento	2027 Commercial Harbor Craft - ME - Work Boat	Aggregate	300	Diesel	0.000171733	0.000207796	0.000247295	0.000551401	0.003061631	0.231469134	6.40E-05	6.12E-05	0	0	8156.262079	1960.344748	3.068023	150142.7935
Sacramento	2027 Commercial Harbor Craft - ME - Work Boat	Aggregate	600	Diesel	0.000601449	0.000727753	0.000866086	0.00184193	0.010075251	0.714535147	0.000222398	0.000212612	0	0	25178.02589	3920.688978	6.136045	463484.2675
Sacramento	2027 Commercial Harbor Craft - ME - Work Boat	Aggregate	9999	Diesel	0.005360711	0.00648646	0.007719423	0.023779443	0.048478914	8.463185147	0.001943249	0.001857746	0	0	298216.6773	11762.07087	18.40814082	5816402.517
Sacramento	2027 Construction and Mining - Bore/Drill Rigs	Aggregate	100	Diesel	5.72E-05	6.92E-05	8.23E-05	0.000785999	0.000561079	0.129885741	4.32E-05	3.97E-05	1.23E-06	0	4220.659821	1701.519617	3.313638178	74708.18725
Sacramento	2027 Construction and Mining - Bore/Drill Rigs	Aggregate	175	Diesel	0.000318247	0.000385079	0.000458275	0.005413644	0.002609894	0.918549812	0.000122498	0.000112698	8.70E-06	0	29848.43638	8512.929492	13.13078948	595726.9281
Sacramento	2027 Construction and Mining - Bore/Drill Rigs	Aggregate	300	Diesel	0.000379817	0.000459578	0.000546936	0.002519338	0.003349884	1.09976006	0.000149783	0.0001378	1.04E-05	0	35736.89502	6336.537905	10.273855	716210.1098
Sacramento	2027 Construction and Mining - Bore/Drill Rigs	Aggregate	50	Diesel	4.13E-05	5.00E-05	5.95E-05	0.000367018	0.000296843	0.043537663	1.42E-05	1.31E-05	4.12E-07	0	1414.763951	1270.271698	2.689915946	25227.39321
Sacramento	2027 Construction and Mining - Bore/Drill Rigs	Aggregate	600	Diesel	0.000520711	0.00063006	0.000749824	0.004188846	0.004313651	1.57895926	0.000197653	0.000181841	1.50E-05	0	51308.55663	5091.848605	8.82779863	1033972.074
Sacramento	2027 Construction and Mining - Bore/Drill Rigs	Aggregate	75	Diesel	7.70E-05	9.31E-05	0.000110827	0.001011983	0.000950122	0.167556807	2.72E-05	2.50E-05	1.59E-06	0	5444.787678	3036.253887	6.265895607	96611.2452
Sacramento	2027 Construction and Mining - Bore/Drill Rigs	Aggregate	750	Diesel	0.000185688	0.000224683	0.000267391	0.001274449	0.001531852	0.652285906	6.77E-05	6.23E-05	6.18E-06	0	21196.14432	1300.36978	2.29694092	424857.7424
Sacramento	2027 Construction and Mining - Bore/Drill Rigs	Aggregate	9999	Diesel	6.12E-05	7.41E-05	8.81E-05	0.000407237	0.000997223	0.215135958	2.11E-05	1.94E-05	2.04E-06	0	6990.880497	324.9974807	0.557665501	138584.4071
Sacramento	2027 Construction and Mining - Bucket	Aggregate	100	Diesel	4.58E-06	5.55E-06	6.60E-06	6.07E-05	4.31E-05	0.009979689	3.39E-06	3.12E-06	9.45E-08	0	324.2917242	185.3080428	0.360842383	5782.614714
Sacramento	2027 Construction and Mining - Bucket	Aggregate	175	Diesel	5.29E-06	6.40E-06	7.62E-06	9.70E-05	3.88E-05	0.015945919	1.60E-06	1.47E-06	1.51E-07	0	518.1654344	210.484339	0.360842383	10271.90345
Sacramento	2027 Construction and Mining - Bucket	Aggregate	300	Diesel	1.31E-05	1.58E-05	1.88E-05	9.17E-05	6.55E-05	0.041516435	3.32E-06	3.05E-06	3.93E-07	0	1349.083793	286.1671687	0.426450089	26743.69526
Sacramento	2027 Construction and Mining - Bucket	Aggregate	50	Diesel	2.56E-06	3.09E-06	3.68E-06	2.63E-05	2.23E-05	0.003410835	8.14E-07	7.49E-07	3.23E-08	0	110.8356801	127.7579792	0.295234677	1976.368766
Sacramento	2027 Construction and Mining - Bucket	Aggregate	75	Diesel	4.06E-06	4.92E-06	5.85E-06	5.81E-05	5.27E-05	0.009639331	1.04E-06	9.59E-07	9.13E-08	0	313.2317552	215.881472	0.426450089	5585.398643
Sacramento	2027 Construction and Mining - Bucket	Aggregate	750	Diesel	7.47E-06	9.03E-06	1.08E-05	6.50E-05	4.15E-05	0.033125374	2.47E-06	2.27E-06	3.14E-07	0	1076.414807	75.27308736	0.131215412	21338.4148
Sacramento	2027 Construction and Mining - Compactor	Aggregate	100	Diesel	1.10E-06	1.33E-06	1.58E-06	2.76E-05	1.44E-05	0.004659329	1.21E-06	1.11E-06	4.41E-08	0	151.4056998	88.45622339	0.196823118	2699.793927
Sacramento	2027 Construction and Mining - Compactor	Aggregate	175	Diesel	2.19E-05	2.65E-05	3.16E-05	0.000482453	0.000139915	0.080633486	5.63E-06	5.18E-06	7.64E-07	0	2620.199182	1057.721811	1.574584944	51941.77621
Sacramento	2027 Construction and Mining - Compactor	Aggregate	300	Diesel	5.43E-06	6.57E-06	7.82E-06	4.18E-05	2.93E-05	0.020607025	1.39E-06	1.28E-06	1.95E-07	0	669.6288791	156.3306163	0.262430824	13274.45395
Sacramento	2027 Construction and Mining - Compactor	Aggregate	50	Diesel	3.10E-06	3.76E-06	4.47E-06	3.54E-05	2.87E-05	0.004957887	6.84E-07	6.29E-07	4.70E-08	0	161.1073921	237.7512214	0.557665501	2872.789857
Sacramento	2027 Construction and Mining - Compactor	Aggregate	600	Diesel	1.22E-05	1.47E-05	1.75E-05	0.000102579	6.46E-05	0.052902031	2.65E-06	2.43E-06	5.01E-07	0	1719.060712	216.9230418	0.360986008	34420.54049
Sacramento	2027 Construction and Mining - Compactor	Aggregate	75	Diesel	2.00E-06	2.42E-06	2.88E-06	3.14E-05	2.76E-05	0.005334146	3.98E-07	3.66E-07	5.05E-08	0	173.3340198	127.4230063	0.295234677	3090.809227
Sacramento	2027 Construction and Mining - Compactor	Aggregate	9999	Diesel	2.98E-06	3.61E-06	4.29E-06	2.96E-05	5.08E-05	0.015230686	9.36E-07	8.61E-07	1.44E-07	0	494.9237939	17.31024607	0.032803853	9811.170509
Sacramento	2027 Construction and Mining - Concrete Mixer	Aggregate	175	Diesel	1.32E-06	1.60E-06	1.90E-06	2.85E-05	8.36E-06	0.004568672	4.02E-07	3.70E-07	4.33E-08	0	148.4598065	62.13016762	0.098411559	2943.007577
Sacramento	2027 Construction and Mining - Concrete Mixer	Aggregate	300	Diesel	1.25E-06	1.51E-06	1.80E-06	1.13E-05	5.55E-06	0.005463067	2.54E-07	2.33E-07	5.18E-08	0	177.5233172	42.31783237	0.065607706	3519.15094
Sacramento	2027 Construction and Mining - Concrete Mixer	Aggregate	50	Diesel	8.67E-07	1.05E-06	1.25E-06	1.40E-05	1.16E-05	0.002266346	1.17E-07	1.08E-07	2.15E-08	0	73.6452989	133.619017	0.32803853	1313.207699
Sacramento	2027 Construction and Mining - Concrete Mixer	Aggregate	600	Diesel	1.07E-06	1.30E-06	1.55E-06	8.08E-06	9.29E-06	0.004235305	3.04E-07	2.80E-07	4.01E-08	0	137.6269713	22.62240301	0.032803853	2728.261803
Sacramento	2027 Construction and Mining - Concrete Mixer	Aggregate	75	Diesel	3.76E-07	4.55E-07	5.41E-07	4.21E-06	3.27E-06	0.00062799	6.23E-08	5.73E-08	5.95E-09	0	20.40663876	17.13189308	0.032803853	363.881409
Sacramento	2027 Construction and Mining - Concrete Pump	Aggregate	100	Diesel	1.37E-06	1.66E-06	1.98E-06	2.52E-05	1.51E-05	0.004345696	1.08E-06	9.91E-07	4.12E-08	0	141.2141554	70.54603826	0.13133987	2342.531727
Sacramento	2027 Construction and Mining - Concrete Pump	Aggregate	175	Diesel	1.94E-05	2.34E-05	2.79E-05	0.000426449	0.000114629	0.070055035	4.22E-06	3.88E-06	6.64E-07	0	2276.45057	835.6394036	1.049723296	45127.44179
Sacramento	2027 Construction and Mining - Concrete Pump	Aggregate	300	Diesel	7.16E-06	8.66E-06	1.03E-05	6.14E-05	2.47E-05	0.028030585	1.53E-06	1.41E-06	2.66E-07	0	910.8587547	242.3231508	0.393646236	18056.49811
Sacramento	2027 Construction and Mining - Concrete Pump	Aggregate	50	Diesel	2.69E-07	3.25E-07	3.87E-07	2.63E-06	2.25E-06	0.000389526	6.02E-08	5.53E-08	3.69E-09	0	12.65772566	12.79515317	0.032803853	225.7065019
Sacramento	2027 Construction and Mining - Concrete Pump	Aggregate	600	Diesel	1.89E-05	2.28E-05	2.72E-05	0.000126734	0.000213347	0.067179435	6.66E-06	6.13E-06	6.36E-07	0	2183.007457	311.0181331	0.590469354	43275.06303
Sacramento	2027 Construction and Mining - Concrete Pump	Aggregate	75	Diesel	2.42E-06	2.93E-06	3.48E-06	2.83E-05	2.68E-05	0.00459131	8.34E-07	7.67E-07	4.35E-08	0	149.1954329	112.0884599	0.229626971	2660.381505
Sacramento	2027 Construction and Mining - Crane less than 35ton	Aggregate	100	Diesel	1.71E-06	2.07E-06	2.46E-06	3.61E-05	2.13E-05	0.006560576	1.54E-06	1.42E-06	6.21E-08	0	213.1870512	144.6478051	0.688880913	3801.449396
Sacramento	2027 Construction and Mining - Crane less than 35ton	Aggregate	175	Diesel	1.46E-05	1.77E-05	2.10E-05	0.000252012	0.0001569	0.046443922	7.35E-06	6.76E-06	4.40E-07	0	1509.203363	683.1198932	2.462178222	26610.0314
Sacramento	2027 Construction and Mining - Crane less than 35ton	Aggregate	300	Diesel	2.88E-06	3.49E-06	4.15E-06	2.29E-05	3.27E-05	0.012312458	1.16E-06	1.07E-06	1.17E-07	0	400.0954793	117.7208192	0.426450089	7931.332087
Sacramento	2027 Construction and Mining - Crane less than 35ton	Aggregate	50	Diesel	1.05E-06	1.27E-06	1.51E-06	1.98E-05	1.89E-05	0.003540517	4.01E-07	3.69E-07	3.35E-08	0	115.0497045	187.5168801	1.115331002	2051.511231
Sacramento	2027 Construction and Mining - Crane less than 35ton	Aggregate	600	Diesel	2.62E-06	3.17E-06	3.78E-06	3.05E-05	2.74E-05	0.00948004	1.27E-06	1.17E-06	8.98E-08	0	308.055548	56.8616092	0.229626971	6106.769455
Sacramento	2027 Construction and Mining - Crane less than 35ton	Aggregate	75	Diesel	1.98E-06	2.39E-06	2.85E-06	3.61E-05	3.25E-05	0.006755466	6.71E-07	6.17E-07	6.40E-08	0	219.5200453	167.8622493	0.787550923	3424.626848
Sacramento	2027 Construction and Mining - Crane less than 35ton	Aggregate	750	Diesel	3.19E-07	3.86E-07	4.60E-07	3.75E-06	2.90E-06	0.002115192	1.68E-07	1.54E-07	2.00E-08	0	68.73353262	7.791764994	0.032803853	1362.545945
Sacramento	2027 Construction and Mining - Crane less than 35ton	Aggregate	9999	Diesel	3.98E-06	4.81E-06	5.73E-06	5.41E-05	5.69E-05	0.002507461	2.86E-06	2.63E-06	2.38E-08	0	81.48037325	5.569773081	0.032803853	1615.234193
Sacramento	2027 Construction and Mining - Cranes	Aggregate	100	Diesel	2.65E-05	3.20E-05	3.81E-05	0.000318929	0.000265337	0.062228284	1.87E-05	1.72E-05	5.89E-07	0	2022.118936	965.790927	4.959497738	23966.25175
Sacramento	2027 Construction and Mining - Cranes	Aggregate	175	Diesel	0.000172883	0.000209188	0.000248952	0.002531746	0.001854788	0.481383435	9.55E-05	8.78E-05	4.56E-06	0	15642.6387	5885.650946	22.30167646	248111.0826
Sacramento	2027 Construction and Mining - Cranes	Aggregate	25	Diesel	1.11E-06	1.34E-06	1.60E-06	1.34E-05	8.59E-06	0.003206728	5.48E-07	5.04E-07	3.04E-08	0	104.2031818	10.51823353	0.065607706	66.34375798
Sacramento	2027 Construction and Mining - Cranes	Aggregate	300	Diesel	0.00040636	0.000491695	0.000585158	0.003651516	0.003884776	1.482313514	0.00019257	0.000177164	1.40E-05	0	48168.03626	12820.18305	50.15970737	887636.6686
Sacramento	2027 Construction and Mining - Cranes	Aggregate	50	Diesel	3.81E-06	4.61E-06	5.49E-06	3.24E-05	2.58E-05	0.005968296	1.22E-06	1.13E-06	5.65E-08	0	193.9408112	167.4382529	0.853657008	1942.701378
Sacramento	2027 Construction and Mining - Cranes	Aggregate	600	Diesel	0.000447498	0.000541473	0.000644397	0.00502528	0.004100468	2.041153859	0.000178775	0.000164473	1.93E-05	0	66327.65077	10623.77979	40.08142292	1286015.079
Sacramento	2027 Construction and Mining - Cranes	Aggregate	75	Diesel	1.40E-05	1.70E-05	2.02E-05	0.000128981	0.000155699	0.025270109	8.83E-06	8.12E-06	2.39E-07	0	821.1566023	465.1686053	2.527440357	8274.165767
Sacramento	2027 Construction and Mining - Cranes	Aggregate	750	Diesel	6.08E-05	7.36E-05	8.76E-05	0.000641023	0.000609859	0.315267337	2.68E-05	2.46E-05	2.99E-06	0	10244.66713	1089.28593	4.626601707	202853.1913
Sacramento	2027 Construction and Mining - Cranes	Aggregate	9999	Diesel	1.95E-05	2.36E-05	2.81E-05	0.000195591	0.000452465	0.106503039	9.02E-06	8.30E-06	1.01E-06	0	3460.83483	263.1382698	1.083051768	69078.62225
Sacramento	2027 Construction and Mining - Crawler Tractors	Aggregate	100	Diesel	0.000323446	0.00039137	0.000465762	0.00399634	0.003129084	0.685748421	0.000241019	0.000221738	6.50E-06	0	22283.51458	9936.969725	28.15876605	375525.6559
Sacramento	2027 Construction and Mining - Crawler Tractors	Aggregate	175	Diesel	0.00085125	0.001030012	0.0012258	0.014306395	0.00787088	2.432557978	0.000381262	0.000350761	2.30E-05	0	79046.39589	26605.59557	57.81555712	1548519.516
Sacramento	2027 Construction and Mining - Crawler Tractors	Aggregate	300	Diesel	0.000901816	0.001091197	0.001298615	0.007046053	0.007436011	3.00115253	0.000364279	0.000335137	2.84E-05	0	97522.97506	20380.18359	46.83697914	1924331.598
Sacramento	2027 Construction and Mining - Crawler Tractors	Aggregate	50	Diesel	3.39E-05	4.10E-05	4.88E-05	0.000216118	0.000172926	0.029187697	1.13E-05	1.04E-05	2.76E-07	0	948.4593096	770.8743974	2.82203154	12982.47562
Sacramento	2027 Construction and Mining - Crawler Tractors	Aggregate	600	Diesel	0.001406905	0.001702355	0.002025943	0.013232877	0.011287234	5.219456276	0.000502198	0.000462023	4.94E-05	0	169607.1423	20558.86651	46.79801697	3445181.218
Sacramento	2027 Construction and Mining - Crawler Tractors	Aggregate	75	Diesel	0.000131872	0.000159565	0.000189896	0.001097885	0.001497393	0.18020144	8.08E-05	7.43E-05	1.71E-06	0	5855.677228	3339.430716	11.19023147	95608.38148
Sacramento	2027 Construction and Mining - Crawler Tractors	Aggregate	750	Diesel	8.21E-05	9.94E-05	0.000118242	0.000794087	0.000679886	0.338632931	3.18E-05	2.93E-05	3.21E-06	0	11003.93616	841.9473899	2.13834304	233625.5641
Sacramento	2027 Construction and Mining - Crawler Tractors	Aggregate	9999	Diesel	0.000113621	0.000137482	0.000163615	0.001062132	0.002116767	0.532230963	4.67E-05	4.29E-05	5.04E-06	0	17294.93799	1006.952205	2.530334809	368921.8751
Sacramento	2027 Construction and Mining - Crushing/Processing Equipment	Aggregate	100	Diesel	2.16E-06	2.61E-06	3.10E-06	5.25E-05	2.49E-05	0.008909385	1.79E-06	1.65E-06	8.44E-08	0	289.5120286	166.9463786	0.32803853	5162.439839
Sacramento	2027 Construction and Mining - Crushing/Processing Equipment	Aggregate	175	Diesel	3.16E-05	3.82E-05	4.54E-05	0.000767972	0.00018132	0.127392257	6.54E-06	6.02E-06	1.21E-06	0	4139.63363	1748.442208	2.591504387	82062.43443
Sacramento	2027 Construction and Mining - Crushing/Processing Equipment	Aggregate	300	Diesel	1.56E-05	1.89E-05	2.25E-05	0.000127312	7.28E-05	0.062505011	3.46E-06	3.19E-06	5.92E-07	0	2031.111231	506.5481633	0.885704031	40263.93326
Sacramento	2027 Construction and Mining - Crushing/Processing Equipment	Aggregate	50	Diesel	1.15E-06	1.39E-06	1.66E-06	1.77E-05	1.55E-05	0.002796811	3.15E-07	2.90E-07	2.65E-08	0	90.88286157	108.6627311	0.295234677	1620.579661
Sacramento	2027 Construction and Mining - Crushing/Processing Equipment	Aggregate	600	Diesel	7.92E-05	9.58E-05	0.00011403	0.000675402	0.000258796	0.343791787	1.54E-05	1.41E-05	3.26E-06	0	11171.5741	1611.460548	2.788327505	221460.7981
Sacramento	2027 Construction and Mining - Crushing/Processing Equipment	Aggregate	75	Diesel	4.88E-06	5.91E-06	7.03E-06	8.18E-05	7.02E-05	0.013855574	6.93E-07	6.37E-07	1.31E-07	0	450.2392983	328.0600054	0.754488619	8028.451536
Sacramento	2027 Construction and Mining - Crushing/Processing Equipment	Aggregate	750	Diesel	8.11E-06	9.81E-06	1.17E-05	6.37E-05	5.19E-05	0.03262898	2.51E-06	2.31E-06	3.09E-07	0	1060.284396	84.23666844	0.164019265	21018.65201
Sacramento	2027 Construction and Mining - Crushing/Processing Equipment	Aggregate	9999	Diesel	1.40E-05	1.69E-05	2.02E-05	0.000136951	0.000243206	0.070295072	5.53E-06	5.09E-06	6.66E-07	0	2284.250633	135.2762546	0.262430824	45282.0671
Sacramento	2027 Construction and Mining - Excavators	Aggregate	100	Diesel	0.000527249	0.000637971	0.000759238	0.00995934	0.005527404	1.662651852	0.000422794	0.00038897	1.58E-05	0	54028.162	28027.28465	53.37811364	954289.3606
Sacramento	2027 Construction and Mining - Excavators	Aggregate	175	Diesel	0.002972237	0.003596407	0.004280022	0.056471032	0.021425243	9.341459333	0.000921794	0.00084805	8.85E-05	0	303552.3508	107963.2955	151.6701974	6012430.195
Sacramento	2027 Construction and Mining - Excavators	Aggregate	25	Diesel	2.96E-07	3.58E-07	4.26E-07	9.59E-07	7.67E-07	6.92E-05	6.56E-08	6.04E-08	6.56E-10	0	2.248728004	13.19021079	0.032803853	40.09824079
Sacramento	2027 Construction and Mining - Excavators	Aggregate	300	Diesel	0.002908439	0.003519211	0.004188152	0.021321077	0.019997931	10.00843719	0.000852561	0.000784356	9.48E-05	0	325225.9127	72356.31139	113.0081025	6462225.557
Sacramento	2027 Construction and Mining - Excavators	Aggregate	50	Diesel	0.00172982	0.002093082	0.00249094	0.0202774	0.016228317	2.685043344	0.000535861	0.000492993	2.54E-05	0	87250.95191	114688.5847	245.1473083	1547015.907
Sacramento	2027 Construction and Mining - Excavators	Aggregate	600	Diesel	0.002987818	0.003615259	0.004302457	0.023330324	0.015668067	11.50028542	0.000703756	0.000647456	0.00010894	0	373703.7811	52140.17143	78.77678673	7460766.062
Sacramento	2027 Construction and Mining - Excavators	Aggregate	75	Diesel	0.00090241	0.001091917	0.001299471	0.012815272	0.011323616	2.119641772	0.000208184	0.00019153	2.01E-05	0	68878.12918	52167.05451	101.3997119	1223129.451
Sacramento	2027 Construction and Mining - Excavators	Aggregate	750	Diesel	7.48E-05	9.05E-05	0.000107643	0.000649941	0.000475133	0.324566266	2.26E-05	2.08E-05	3.07E-06	0	10546.83744	874.0569302	1.642938595	222445.7361
Sacramento	2027 Construction and Mining - Excavators	Aggregate	9999	Diesel	0.000415382	0.000502613	0.000598151	0.003158613	0.0070693	1.614143131	0.000159997	0.000147197	1.53E-05	0	52451.86266	1748.749455	3.052999609	1069790.394
Sacramento	2027 Construction and Mining - Graders	Aggregate	100	Diesel	5.44E-05	6.59E-05	7.84E-05	0.000459175	0.000515003	0.077046391	4.05E-05	3.73E-05	7.30E-07	0	2503.635921	1083.688091	4.036842231	37778.09723
Sacramento	2027 Construction and Mining - Graders	Aggregate	175	Diesel	0.000531228	0.000642786	0.000764968	0.006426234	0.005792668	1.147364192	0.000309523	0.000284761	1.09E-05	0	37283.7996	11376.52425	34.39421026	674143.5073
Sacramento	2027 Construction and Mining - Graders	Aggregate	300	Diesel	0.000903131	0.001092788	0.001300508	0.007695292	0.00748196	3.651536791	0.000319286	0.000293743	3.46E-05	0	118657.3251	25002.31749	64.33283881	2324763.144
Sacramento	2027 Construction and Mining - Graders	Aggregate	50	Diesel	1.19E-05	1.44E-05	1.71E-05	6.97E-05	5.84E-05	0.008919793	3.76E-06	3.46E-06	8.45E-08	0	289.8502448	319.8013101	1.213791919	4749.252903
Sacramento	2027 Construction and Mining - Graders	Aggregate	600	Diesel	0.000193991	0.000234729	0.000279347	0.001728941	0.001243105	0.876271441	5.75E-05	5.29E-05	8.30E-06	0	28474.59337	4005.37877	9.516260004	564602.386
Sacramento	2027 Construction and Mining - Graders	Aggregate	75	Diesel	2.39E-05	2.90E-05	3.45E-05	0.000184919	0.000262073	0.032207706	1.56E-05	1.43E-05	3.05E-07	0	1046.595022	576.9142276	2.331479369	14436.41979
Sacramento	2027 Construction and Mining - Graders	Aggregate	750	Diesel	6.20E-06	7.50E-06	8.93E-06	6.22E-05	3.60E-05	0.033178027	2.18E-06	2.00E-06	3.14E-07	0	1078.12578	73.84279632	0.196823118	21372.33244
Sacramento	2027 Construction and Mining - Graders	Aggregate	9999	Diesel	5.67E-06	6.86E-06	8.16E-06	4.32E-05	0.000103616	0.02365302	2.09E-06	1.92E-06	2.24E-07	0	768.6090072	49.48392795	0.131215412	15236.59625
Sacramento	2027 Construction and Mining - Hopper Tractor Trailer	Aggregate	300	Diesel	1.36E-06	1.64E-06	1.95E-06	1.23E-05	1.51E-06	0.005964419	1.31E-07	1.21E-07	5.65E-08	0	193.8148237	45.25382368	0.065607706	3842.107222
Sacramento	2027 Construction and Mining - Hopper Tractor Trailer	Aggregate	600	Diesel	1.38E-06	1.67E-06	1.99E-06	1.03E-05	7.35E-06	0.005225865	3.58E-07	3.30E-07	4.95E-08	0	169.8153951	28.75635933	0.065607706	3366.352188
Sacramento	2027 Construction and Mining - Misc - Asphalt Pavers	Aggregate	100	Gasoline	4.01E-05	3.69E-05	4.41E-05	0.002330478	0.000104201	0.056918356	3.97E-06	3.00E-06	5.50E-07	8.02E-07	2288.55	605.9	1.56	36959.9
Sacramento	2027 Construction and Mining - Misc - Asphalt Pavers	Aggregate	15	Gasoline	0.000149058	0.000150548	0.000164029	0.004935428	0.000111202	1.95E-07	0.000063168	4.77E-05	7.88E-08	1.09E-07	308.6745166	0	2.746937228	0
Sacramento	2027 Construction and Mining - Misc - Asphalt Pavers	Aggregate	25	Gasoline	0.00065812	0.0006647	0.00072422	0.021903212	0.00042987	8.15E-07	0.000264114	0.000199552	3.48E-07	4.81E-07	1369.440401	0	4.698526896	0
Sacramento	2027 Construction and Mining - Misc - Asphalt Pavers	Aggregate	50	Gasoline	9.16E-05	8.42E-05	0.000100748	0.008088391	0.000129938	0.054975978	3.79E-06	2.86E-06	6.68E-07	9.00E-07	2569.6	1113.25	2.8	35624
Sacramento	2027 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	100	Gasoline	3.95E-05	3.64E-05	4.35E-05	0.001591014	0.000118375	0.069477285	4.84E-06	3.66E-06	6.71E-07	9.55E-07	2726.55	416.1	3.99	36616.8
Sacramento	2027 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	15	Gasoline	1.94E-05	1.96E-05	2.13E-05	0.000697148	1.45E-05	2.75E-08	8.92E-06	6.74E-06	1.11E-08	1.53E-08	43.38602582	0	0.931711688	0
Sacramento	2027 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	15	Diesel	0.000011306	1.36E-05	1.63E-05	7.13E-05	8.52E-05	0.000163252	2.99E-06	2.26E-06	1.55E-09	1.33E-09	5.310045037	0	1.018236702	0
Sacramento	2027 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	175	Gasoline	9.63E-06	8.86E-06	1.06E-05	0.000778519	4.55E-05	0.023947879	1.72E-06	1.30E-06	2.38E-07	3.36E-07	959.95	109.5	0.97	13797
Sacramento	2027 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	25	Gasoline	0.000185257	0.00018711	0.000203864	0.006665354	0.000121023	2.48E-07	0.000080372	6.07E-05	1.06E-07	1.46E-07	414.7796078	0	4.662486862	0
Sacramento	2027 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	25	Diesel	6.93E-05	8.33E-05	9.96E-05	0.000284442	0.000526626	0.000761314	1.77E-05	1.34E-05	7.23E-09	6.22E-09	24.76308868	0	3.896056274	0
Sacramento	2027 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	50	Gasoline	7.21E-06	6.63E-06	7.93E-06	0.000472262	1.22E-05	0.005565679	3.84E-07	2.90E-07	6.77E-08	8.31E-08	237.25	87.6	0.89	2803.2
Sacramento	2027 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	15	Gasoline	0.00669217	0.006759092	0.007364326	0.214817262	0.004977454	8.48E-06	0.00274792	0.002076206	3.47E-06	4.79E-06	13461.82314	0	647.3037374	0
Sacramento	2027 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	15	Diesel	0.000077691	9.34E-05	0.000111682	0.00049016	0.000585192	0.001121814	2.06E-05	1.55E-05	1.06E-08	9.17E-09	36.48897384	0	30.9624419	0
Sacramento	2027 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	25	Gasoline	9.18E-05	9.27E-05	0.000101054	0.00297476	5.99E-05	1.11E-07	3.59E-05	2.71E-05	4.75E-08	6.55E-08	186.3076771	0	2.70352051	0
Sacramento	2027 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	25	Diesel	0.000019946	2.40E-05	2.87E-05	0.00008181	0.000151762	0.000219048	5.18E-06	3.91E-06	2.08E-09	1.79E-09	7.124908131	0	2.758797909	0
Sacramento	2027 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	5	Gasoline	0.003069442	0.003100136	0.003377732	0.083113814	0.001389556	3.13E-06	3.94E-05	2.98E-05	1.37E-06	1.90E-06	5270.931152	0	382.0375772	0
Sacramento	2027 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	100	Gasoline	5.86E-05	5.39E-05	6.45E-05	0.00288892	0.000148313	0.136487882	9.52E-06	7.19E-06	1.32E-06	1.87E-06	5347.25	1135.15	1.86	74919.9
Sacramento	2027 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	15	Gasoline	0.004859592	0.004908188	0.005347684	0.157965338	0.003625244	6.24E-06	0.002021778	0.001527566	2.52E-06	3.48E-06	9891.11742	0	95.03170166	0
Sacramento	2027 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	25	Gasoline	0.003032444	0.003062768	0.00333702	0.099084276	0.00198067	3.69E-06	0.001194776	0.00090272	1.58E-06	2.18E-06	6202.177632	0	29.73139274	0
Sacramento	2027 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	25	Diesel	1.36E-05	1.64E-05	1.96E-05	5.60E-05	0.000103613	0.000149788	3.48E-06	2.63E-06	1.42E-09	1.22E-09	4.872131879	0	1.018951255	0
Sacramento	2027 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	5	Gasoline	0.000258728	0.000261316	0.000284714	0.006883984	0.00011713	2.59E-07	3.26E-06	2.47E-06	1.14E-07	1.57E-07	437.15548	0	21.1731051	0
Sacramento	2027 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	50	Gasoline	0.00014268	0.000131237	0.000157011	0.010599282	0.000231702	0.127714729	8.80E-06	6.65E-06	1.55E-06	1.92E-06	5482.3	1981.95	3.24	69368.25
Sacramento	2027 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	50	Diesel	2.91E-05	3.46E-05	4.19E-05	0.000380427	0.00030398	0.052292311	6.27E-06	5.77E-06	6.58E-07	4.28E-07	1700.9	1226.4	2.12	40471.2
Sacramento	2027 Construction and Mining - Misc - Cranes	Aggregate	100	Gasoline	6.18E-05	5.68E-05	6.80E-05	0.003136608	0.000159598	0.066738365	4.65E-06	3.52E-06	6.45E-07	9.55E-07	2726.55	821.25	1.96	60772.5
Sacramento	2027 Construction and Mining - Misc - Cranes	Aggregate	175	Gasoline	3.29E-06	3.03E-06	3.62E-06	0.000159037	1.15E-05	0.004385626	3.14E-07	2.38E-07	4.36E-08	6.01E-08	171.55	32.85	0.03	4106.25
Sacramento	2027 Construction and Mining - Misc - Cranes	Aggregate	50	Gasoline	3.37E-05	3.10E-05	3.71E-05	0.002753842	4.70E-05	0.016874165	1.16E-06	8.79E-07	2.05E-07	2.85E-07	813.95	408.8	0.97	15125.6
Sacramento	2027 Construction and Mining - Misc - Crushing/Proc. Equipment	Aggregate	15	Gasoline	2.80E-05	2.83E-05	3.09E-05	0.000973032	2.09E-05	3.84E-08	1.25E-05	9.41E-06	1.55E-08	2.14E-08	60.68072038	0	0.576199646	0
Sacramento	2027 Construction and Mining - Misc - Crushing/Proc. Equipment	Aggregate	25	Gasoline	0.000034378	3.47E-05	3.78E-05	0.00119959	2.25E-05	4.46E-08	1.45E-05	1.09E-05	1.90E-08	2.62E-08	74.78446828	0	0.376454204	0
Sacramento	2027 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	100	Gasoline	3.39E-06	3.12E-06	3.73E-06	0.000139941	1.00E-05	0.005720473	3.99E-07	3.01E-07	5.53E-08	8.18E-08	233.6	80.3	0.74	5299.8
Sacramento	2027 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	15	Gasoline	0.000629856	0.000636156	0.000693118	0.017507938	0.000469684	6.92E-07	0.000224082	0.000169306	2.85E-07	3.94E-07	1108.147508	0	41.68961132	0
Sacramento	2027 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	25	Gasoline	0.000259448	0.000262042	0.000285508	0.007253864	0.00016942	2.70E-07	8.75E-05	6.61E-05	1.17E-07	1.62E-07	458.9285858	0	7.708348918	0
Sacramento	2027 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	25	Diesel	9.86E-06	1.19E-05	1.42E-05	4.05E-05	7.50E-05	0.000108381	2.52E-06	1.90E-06	1.03E-09	8.86E-10	3.525284525	0	1.424898917	0
Sacramento	2027 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	5	Gasoline	0.00016992	0.000171619	0.000186987	0.003828826	7.69E-05	1.44E-07	1.82E-06	1.37E-06	6.53E-08	9.01E-08	246.5289224	0	19.54691933	0
Sacramento	2027 Construction and Mining - Misc - Excavators	Aggregate	25	Diesel	0.000070328	8.46E-05	0.000101098	0.000288715	0.000534537	0.000772751	1.80E-05	1.36E-05	7.33E-09	6.32E-09	25.13510669	0	2.234313296	0
Sacramento	2027 Construction and Mining - Misc - Other	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.47876903	0
Sacramento	2027 Construction and Mining - Misc - Other	Aggregate	15	Diesel	0.0001715	0.000206277	0.000246535	0.001082012	0.001291791	0.002476366	4.54E-05	3.43E-05	2.35E-08	2.02E-08	80.54819594	0	18.58219585	0
Sacramento	2027 Construction and Mining - Misc - Other	Aggregate	175	Gasoline	5.48E-05	5.04E-05	6.03E-05	0.004663684	0.000181942	0.141263293	1.01E-05	7.65E-06	1.40E-06	1.97E-06	5628.3	1029.3	2.76	129691.8
Sacramento	2027 Construction and Mining - Misc - Other	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.47876903	0
Sacramento	2027 Construction and Mining - Misc - Other	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.47876903	0
Sacramento	2027 Construction and Mining - Misc - Other	Aggregate	25	Diesel	3.69E-05	4.43E-05	5.30E-05	0.000151364	0.000280241	0.000405128	9.42E-06	7.12E-06	3.84E-09	3.31E-09	13.17751866	0	2.947782142	0
Sacramento	2027 Construction and Mining - Misc - Other	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.47876903	0
Sacramento	2027 Construction and Mining - Misc - Pavers	Aggregate	25	Diesel	1.86E-05	2.23E-05	2.67E-05	7.63E-05	0.000141179	0.000204095	4.75E-06	3.59E-06	1.94E-09	1.67E-09	6.638540206	0	0.88405228	0
Sacramento	2027 Construction and Mining - Misc - Paving Equipment	Aggregate	100	Gasoline	1.40E-05	1.29E-05	1.55E-05	0.00071392	3.56E-05	0.031508802	2.20E-06	1.66E-06	3.04E-07	4.31E-07	1230.05	343.1	1.98	22644.6
Sacramento	2027 Construction and Mining - Misc - Paving Equipment	Aggregate	15	Gasoline	0.013266526	0.013399192	0.014599002	0.41092057	0.009895512	1.62E-05	0.005259322	0.00397371	6.60E-06	9.11E-06	25811.44832	0	455.9123762	0
Sacramento	2027 Construction and Mining - Misc - Paving Equipment	Aggregate	25	Gasoline	0.00068438	0.000691224	0.000753118	0.021311994	0.000446974	7.93E-07	0.000256984	0.000194166	3.41E-07	4.70E-07	1338.205419	0	10.12593429	0
Sacramento	2027 Construction and Mining - Misc - Paving Equipment	Aggregate	25	Diesel	3.14E-05	3.78E-05	4.52E-05	0.000129013	0.00023886	0.000345306	8.03E-06	6.07E-06	3.28E-09	2.82E-09	11.23170277	0	2.188835106	0
Sacramento	2027 Construction and Mining - Misc - Paving Equipment	Aggregate	5	Gasoline	0.003601766	0.003637784	0.003963524	0.086726102	0.00163073	3.26E-06	4.11E-05	3.11E-05	1.45E-06	2.00E-06	5551.93115	0	269.6693656	0
Sacramento	2027 Construction and Mining - Misc - Paving Equipment	Aggregate	50	Gasoline	7.99E-05	7.35E-05	8.79E-05	0.006095476	0.000127835	0.069315138	4.78E-06	3.61E-06	8.43E-07	1.05E-06	2996.65	1335.9	7.65	49428.3
Sacramento	2027 Construction and Mining - Misc - Plate Compactors	Aggregate	15	Gasoline	0.004685041	0.004731891	0.005155602	0.144054218	0.003497016	5.71E-06	0.001848582	0.001396708	2.32E-06	3.21E-06	9053.040812	0	213.4829014	0
Sacramento	2027 Construction and Mining - Misc - Plate Compactors	Aggregate	15	Diesel	6.68E-05	8.04E-05	9.61E-05	0.000421638	0.000503385	0.00096499	0.000017703	1.34E-05	9.16E-09	7.89E-09	31.38800949	0	19.51099531	0
Sacramento	2027 Construction and Mining - Misc - Plate Compactors	Aggregate	5	Gasoline	0.002592808	0.002618736	0.002853226	0.06098285	0.00117394	2.30E-06	0.000028923	2.19E-05	1.02E-06	1.41E-06	3911.75963	0	192.1123273	0
Sacramento	2027 Construction and Mining - Misc - Rollers	Aggregate	100	Gasoline	0.000292428	0.000268976	0.0003218	0.015850342	0.0007158	0.25101537	1.75E-05	1.32E-05	2.43E-06	3.67E-06	10486.45	2303.15	3.7	172736.25
Sacramento	2027 Construction and Mining - Misc - Rollers	Aggregate	15	Gasoline	0.001326754	0.001340022	0.001460012	0.043411544	0.000989774	1.71E-06	0.000555618	0.000419802	6.94E-07	9.58E-07	2717.108266	0	32.8560117	0
Sacramento	2027 Construction and Mining - Misc - Rollers	Aggregate	15	Diesel	0.000242338	0.00029148	0.000348365	0.001528934	0.001825362	0.003499224	6.42E-05	4.85E-05	3.32E-08	2.86E-08	113.8184598	0	41.6891186	0
Sacramento	2027 Construction and Mining - Misc - Rollers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.040008644	0
Sacramento	2027 Construction and Mining - Misc - Rollers	Aggregate	25	Gasoline	0.001997728	0.002017704	0.002198378	0.065686298	0.001304848	2.44E-06	0.000792058	0.000598444	1.05E-06	1.44E-06	4109.994652	0	22.18623032	0
Sacramento	2027 Construction and Mining - Misc - Rollers	Aggregate	25	Diesel	0.000220589	0.00026532	0.000317101	0.000905577	0.001676618	0.002423795	5.64E-05	4.26E-05	2.30E-08	1.98E-08	78.83821966	0	17.34450136	0
Sacramento	2027 Construction and Mining - Misc - Rollers	Aggregate	5	Gasoline	0.000149127	0.000150618	0.000164105	0.004190984	0.000067508	1.58E-07	1.99E-06	1.50E-06	6.91E-08	9.53E-08	265.0496464	0	20.3197739	0
Sacramento	2027 Construction and Mining - Misc - Rollers	Aggregate	50	Gasoline	0.000164579	0.000151379	0.000181109	0.014369015	0.000211453	0.0666177	4.59E-06	3.47E-06	8.10E-07	1.19E-06	3394.5	1222.75	1.96	45241.75
Sacramento	2027 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	100	Gasoline	0.000536489	0.000493462	0.000590373	0.027207539	0.001386419	0.580838979	4.05E-05	3.06E-05	5.61E-06	8.30E-06	23688.5	4650.1	11.2	395258.5
Sacramento	2027 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	175	Gasoline	2.49E-05	2.29E-05	2.73E-05	0.001204197	8.68E-05	0.033229557	2.38E-06	1.80E-06	3.30E-07	4.71E-07	1343.2	116.8	0.32	16585.6
Sacramento	2027 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	50	Gasoline	4.56E-05	4.20E-05	5.02E-05	0.003721441	6.36E-05	0.022874575	1.58E-06	1.19E-06	2.78E-07	3.81E-07	1087.7	313.9	0.68	14753.3
Sacramento	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	100	Gasoline	0.000282894	0.000260206	0.000311308	0.016085174	0.000718539	0.305585116	2.13E-05	1.61E-05	2.95E-06	4.40E-06	12552.35	3361.65	6.56	242038.8
Sacramento	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.064094588	0
Sacramento	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.064094588	0
Sacramento	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.064094588	0
Sacramento	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25	Diesel	1.29E-05	0.000015525	1.86E-05	5.30E-05	9.81E-05	0.000141826	3.30E-06	2.49E-06	1.35E-09	1.16E-09	4.613152313	0	0.580902898	0
Sacramento	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.064094588	0
Sacramento	2027 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	50	Gasoline	5.33E-05	4.90E-05	5.87E-05	0.004749926	7.15E-05	0.025858202	1.78E-06	1.35E-06	3.14E-07	4.44E-07	1266.55	511	0.99	20440
Sacramento	2027 Construction and Mining - Misc - Signal Boards	Aggregate	15	Gasoline	0.000166047	0.000167708	0.000182725	0.005634736	0.000123886	2.23E-07	7.21E-05	5.45E-05	8.99E-08	1.24E-07	351.8735114	0	4.272255316	0
Sacramento	2027 Construction and Mining - Misc - Signal Boards	Aggregate	15	Diesel	0.001044717	0.001256564	0.001501797	0.006591213	0.007869111	0.015085104	0.00027674	0.000209092	1.43E-07	1.23E-07	490.6697232	0	170.6036167	0
Sacramento	2027 Construction and Mining - Misc - Signal Boards	Aggregate	5	Gasoline	8.99E-06	9.08E-06	9.89E-06	0.00023963	4.07E-06	9.02E-09	1.14E-07	8.59E-08	3.93E-09	5.43E-09	15.21496533	0	0.605140208	0
Sacramento	2027 Construction and Mining - Misc - Signal Boards	Aggregate	50	Diesel	1.26E-05	1.50E-05	1.82E-05	0.000164844	0.000133354	0.022779698	2.74E-06	2.52E-06	2.91E-07	1.86E-07	740.95	456.25	0.85	16881.25
Sacramento	2027 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	100	Gasoline	0.000251566	0.000231391	0.000276833	0.01320349	0.000638436	0.542709903	3.78E-05	2.86E-05	5.24E-06	7.48E-06	21352.5	4996.85	16.12	399748
Sacramento	2027 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	15	Gasoline	6.31E-05	6.37E-05	6.94E-05	0.001829624	4.70E-05	7.23E-08	2.34E-05	1.77E-05	2.94E-08	4.06E-08	115.4471014	0	0.924742074	0
Sacramento	2027 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.070058556	0
Sacramento	2027 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	25	Gasoline	0.005442844	0.005497272	0.005989518	0.163485388	0.00355456	6.08E-06	0.001971338	0.001489454	2.62E-06	3.61E-06	10290.54948	0	57.36174844	0
Sacramento	2027 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	25	Diesel	0.00360108	0.004331307	0.00517661	0.014779889	0.027378067	0.039562528	0.000926398	0.000699945	3.75E-07	3.23E-07	1286.841265	0	228.1787978	0
Sacramento	2027 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.070058556	0
Sacramento	2027 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	50	Gasoline	0.000437653	0.000402553	0.000481611	0.034312025	0.00068819	0.3669937	2.53E-05	1.91E-05	4.46E-06	5.60E-06	15990.65	8358.5	26.95	267472
Sacramento	2027 Construction and Mining - Misc - Surfacing Equipment	Aggregate	15	Gasoline	0.008327018	0.008410288	0.009163374	0.220558012	0.006208768	8.71E-06	0.002822894	0.002132854	3.59E-06	4.95E-06	14011.05838	0	146.4449149	0
Sacramento	2027 Construction and Mining - Misc - Surfacing Equipment	Aggregate	25	Gasoline	0.000285358	0.000288212	0.00031402	0.007599184	0.000186326	2.83E-07	9.16E-05	6.92E-05	1.23E-07	1.70E-07	482.5404758	0	2.001543512	0
Sacramento	2027 Construction and Mining - Misc - Surfacing Equipment	Aggregate	5	Gasoline	0.000860454	0.00086906	0.000946878	0.01937002	0.000389602	7.29E-07	9.19E-06	6.94E-06	3.25E-07	4.49E-07	1247.296718	0	49.31473352	0
Sacramento	2027 Construction and Mining - Misc - Tampers/Rammers	Aggregate	15	Gasoline	0.000886815	0.000895683	0.000975885	0.034375578	0.000687856	1.51E-06	0.000489919	0.000370162	5.56E-07	7.67E-07	2130.243099	0	118.625801	0
Sacramento	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	100	Gasoline	0.000177083	0.000162881	0.000194869	0.012441349	0.000455914	0.214097497	1.49E-05	1.13E-05	2.07E-06	3.11E-06	8869.5	3029.5	3.46	190858.5

Sacramento	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.161973476	0
Sacramento	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.161973476	0
Sacramento	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.161973476	0
Sacramento	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25	Diesel	0.000336669	0.000404938	0.000483966	0.001382113	0.002558893	0.003699252	8.61E-05	6.50E-05	3.51E-08	3.02E-08	120.3247365	0	16.42725265	0
Sacramento	2027 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.161973476	0
Sacramento	2027 Construction and Mining - Misc - Trenchers	Aggregate	100	Gasoline	0.00022273	0.000204867	0.000245101	0.011243017	0.000577646	0.244522497	1.70E-05	1.29E-05	2.36E-06	3.48E-06	9946.25	2398.05	5.95	158271.3
Sacramento	2027 Construction and Mining - Misc - Trenchers	Aggregate	15	Gasoline	0.002397382	0.002421356	0.002638172	0.07765269	0.001788424	3.07E-06	0.000993866	0.000750922	1.24E-06	1.71E-06	4863.387334	0	35.4918253	0
Sacramento	2027 Construction and Mining - Misc - Trenchers	Aggregate	15	Diesel	9.56E-05	0.000114943	0.000137376	0.000602926	0.00071982	0.001379897	2.53E-05	1.91E-05	1.31E-08	1.13E-08	44.88358717	0	13.80449925	0
Sacramento	2027 Construction and Mining - Misc - Trenchers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.03930353	0
Sacramento	2027 Construction and Mining - Misc - Trenchers	Aggregate	25	Gasoline	0.004121234	0.004162446	0.004535166	0.13415203	0.002691806	4.99E-06	0.00161763	0.00122221	2.14E-06	2.95E-06	8399.266464	0	27.50806214	0
Sacramento	2027 Construction and Mining - Misc - Trenchers	Aggregate	25	Diesel	0.000327712	0.000394165	0.000471091	0.001345342	0.002490815	0.003600836	8.38E-05	6.33E-05	3.42E-08	2.94E-08	117.1235593	0	11.74567363	0
Sacramento	2027 Construction and Mining - Misc - Trenchers	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.03930353	0
Sacramento	2027 Construction and Mining - Misc - Trenchers	Aggregate	50	Gasoline	0.000667024	0.000613529	0.000734019	0.054155903	0.000934157	0.33871722	2.34E-05	1.76E-05	4.12E-06	5.65E-06	16136.65	7219.7	17.98	216591
Sacramento	2027 Construction and Mining - Nurse Rig Other	Aggregate	175	Diesel	3.65E-07	4.41E-07	5.25E-07	6.02E-06	3.46E-06	0.001039648	2.62E-07	2.41E-07	9.85E-09	0	33.78353167	18.60308786	0.032803853	669.711163
Sacramento	2027 Construction and Mining - Off-Highway Tractors	Aggregate	100	Diesel	0.000179512	0.000217209	0.000258497	0.002358998	0.001692389	0.380702654	0.000126814	0.000116669	3.61E-06	0	12370.99915	5954.155256	9.415548932	219830.687
Sacramento	2027 Construction and Mining - Off-Highway Tractors	Aggregate	175	Diesel	0.000679572	0.000822282	0.000978584	0.012789563	0.004232717	2.05571982	0.00019671	0.000180973	1.95E-05	0	66800.9742	21016.83906	20.8323504	1326389.781
Sacramento	2027 Construction and Mining - Off-Highway Tractors	Aggregate	300	Diesel	0.000314009	0.000379951	0.000452173	0.002141139	0.002220714	0.923400732	0.000103397	9.51E-05	8.75E-06	0	30006.0679	6443.614858	8.139402083	603025.5836
Sacramento	2027 Construction and Mining - Off-Highway Tractors	Aggregate	50	Diesel	0.000480192	0.000581032	0.000691477	0.003862097	0.003101141	0.461679415	0.000145097	0.00013349	4.37E-06	0	15002.35315	16113.45794	26.37937781	258464.3773
Sacramento	2027 Construction and Mining - Off-Highway Tractors	Aggregate	600	Diesel	0.000724044	0.000876093	0.001042623	0.0051665	0.003568801	2.435030191	0.000171218	0.00015752	2.31E-05	0	79126.73088	9689.501294	10.56978838	1603000.001
Sacramento	2027 Construction and Mining - Off-Highway Tractors	Aggregate	75	Diesel	0.000237421	0.000287279	0.000341886	0.002442988	0.002496908	0.401535022	9.99E-05	9.19E-05	3.80E-06	0	13047.95059	8698.366402	14.24446446	222489.4012
Sacramento	2027 Construction and Mining - Off-Highway Tractors	Aggregate	750	Diesel	5.99E-05	7.25E-05	8.63E-05	0.000445913	0.00031889	0.196687105	1.82E-05	1.68E-05	1.86E-06	0	6391.381794	503.2883519	0.689032936	127992.9366
Sacramento	2027 Construction and Mining - Off-Highway Tractors	Aggregate	9999	Diesel	4.81E-05	5.82E-05	6.93E-05	0.000360348	0.000727468	0.177486314	1.67E-05	1.54E-05	1.68E-06	0	5767.448734	180.1342218	0.230254828	125067.0217
Sacramento	2027 Construction and Mining - Off-Highway Trucks	Aggregate	100	Diesel	4.55E-06	5.51E-06	6.56E-06	6.32E-05	3.90E-05	0.010438292	2.72E-06	2.51E-06	9.89E-08	0	339.194107	186.4748895	0.295234677	6048.346867
Sacramento	2027 Construction and Mining - Off-Highway Trucks	Aggregate	175	Diesel	0.000188542	0.000228135	0.0002715	0.003193619	0.001434348	0.534848845	7.60E-05	6.99E-05	5.07E-06	0	17380.00652	5765.357818	6.36506074	345651.5418
Sacramento	2027 Construction and Mining - Off-Highway Trucks	Aggregate	300	Diesel	0.000459806	0.000556365	0.00066212	0.003093751	0.00362557	1.245920511	0.000182113	0.000167544	1.18E-05	0	40486.40438	9315.735467	12.63702767	813202.7098
Sacramento	2027 Construction and Mining - Off-Highway Trucks	Aggregate	50	Diesel	1.65E-05	2.00E-05	2.38E-05	0.000160902	0.00013481	0.019566291	5.62E-06	5.17E-06	1.85E-07	0	635.8100548	1061.148779	1.705800356	11337.46039
Sacramento	2027 Construction and Mining - Off-Highway Trucks	Aggregate	600	Diesel	0.002567231	0.003106349	0.003696812	0.019270381	0.012901135	9.111987104	0.000597484	0.000549685	8.63E-05	0	296095.6107	35972.86729	43.3474106	5931350.791
Sacramento	2027 Construction and Mining - Off-Highway Trucks	Aggregate	75	Diesel	1.23E-05	1.49E-05	1.77E-05	0.00014032	0.000130779	0.023834302	4.22E-06	3.88E-06	2.26E-07	0	774.4997888	462.9923352	0.853082554	11952.9632
Sacramento	2027 Construction and Mining - Off-Highway Trucks	Aggregate	750	Diesel	0.000313927	0.000379852	0.000452055	0.002591202	0.002338658	1.133085132	0.000109194	0.000100459	1.07E-05	0	36819.79904	3252.059111	5.630303267	850653.2655
Sacramento	2027 Construction and Mining - Off-Highway Trucks	Aggregate	9999	Diesel	0.001161062	0.001404885	0.001671929	0.008698632	0.018610894	4.298408084	0.000413815	0.00038071	4.07E-05	0	139677.5206	6559.380969	9.823971508	2965685.92
Sacramento	2027 Construction and Mining - Other Construction Equipment	Aggregate	100	Diesel	0.000140042	0.000169451	0.000201661	0.002102589	0.001427646	0.371738907	0.000104923	9.65E-05	3.52E-06	0	12079.72063	5554.552143	17.03475787	199759.7405
Sacramento	2027 Construction and Mining - Other Construction Equipment	Aggregate	175	Diesel	0.00035991	0.000435491	0.00051827	0.006657853	0.003181381	1.170425354	0.000145852	0.000134184	1.11E-05	0	38033.17609	13368.45202	29.99858976	736181.254
Sacramento	2027 Construction and Mining - Other Construction Equipment	Aggregate	300	Diesel	0.000326582	0.000395164	0.000470278	0.002635863	0.00290984	1.108915367	0.000135614	0.000124765	1.05E-05	0	36034.39833	7185.185795	18.65764092	700672.9194
Sacramento	2027 Construction and Mining - Other Construction Equipment	Aggregate	50	Diesel	0.000211595	0.00025603	0.000304697	0.001947594	0.001707881	0.276126645	7.09E-05	6.53E-05	2.62E-06	0	8972.783512	9263.318864	30.05242647	151577.2416
Sacramento	2027 Construction and Mining - Other Construction Equipment	Aggregate	600	Diesel	0.000852951	0.001032071	0.00122825	0.007903817	0.006348152	3.483802949	0.000287377	0.000264387	3.30E-05	0	113206.7846	13375.8907	32.11161297	2278070.511
Sacramento	2027 Construction and Mining - Other Construction Equipment	Aggregate	75	Diesel	0.000202122	0.000244568	0.000291056	0.002706668	0.002708541	0.475567582	8.25E-05	7.59E-05	4.50E-06	0	15453.65156	9419.491887	29.00725806	256792.5685
Sacramento	2027 Construction and Mining - Other Construction Equipment	Aggregate	750	Diesel	0.000109871	0.000132944	0.000158215	0.001071022	0.000824047	0.548548151	3.82E-05	3.51E-05	5.20E-06	0	17825.16786	1324.467901	3.512598741	359700.9054
Sacramento	2027 Construction and Mining - Other Construction Equipment	Aggregate	9999	Diesel	0.000149835	0.000181301	0.000215763	0.001409336	0.002979346	0.721994201	6.40E-05	5.89E-05	6.84E-06	0	23461.32754	973.9399328	2.560407014	477080.1102
Sacramento	2027 Construction and Mining - Other Material Handling Equipment	Aggregate	100	Diesel	5.13E-05	6.20E-05	7.38E-05	0.000691812	0.000501389	0.117902626	3.75E-05	3.45E-05	1.12E-06	0	3831.266413	1875.11575	4.790519451	66167.12063
Sacramento	2027 Construction and Mining - Other Material Handling Equipment	Aggregate	175	Diesel	0.000158656	0.000191974	0.000228465	0.002818041	0.001396682	0.484436905	6.54E-05	6.02E-05	4.59E-06	0	15741.86174	5966.685302	11.64804032	308694.4684
Sacramento	2027 Construction and Mining - Other Material Handling Equipment	Aggregate	300	Diesel	0.000143316	0.000173413	0.000206375	0.001101243	0.001082963	0.494667413	5.11E-05	4.70E-05	4.69E-06	0	16074.30388	3409.146348	7.285029914	318516.1837
Sacramento	2027 Construction and Mining - Other Material Handling Equipment	Aggregate	50	Diesel	3.55E-05	4.30E-05	5.12E-05	0.000371449	0.000318925	0.054248113	1.19E-05	1.09E-05	5.14E-07	0	1762.801911	2108.83548	6.102910661	28596.4803
Sacramento	2027 Construction and Mining - Other Material Handling Equipment	Aggregate	600	Diesel	0.000218319	0.000264166	0.000314379	0.001846908	0.001431293	0.874977585	6.40E-05	5.89E-05	8.29E-06	0	28432.54927	3568.364993	7.021661588	565968.3245
Sacramento	2027 Construction and Mining - Other Material Handling Equipment	Aggregate	75	Diesel	2.97E-05	3.60E-05	4.28E-05	0.0003869	0.000389153	0.065335687	1.21E-05	1.11E-05	6.19E-07	0	2123.094546	1443.232598	3.838424175	37280.41183
Sacramento	2027 Construction and Mining - Other Material Handling Equipment	Aggregate	750	Diesel	3.08E-05	3.72E-05	4.43E-05	0.000310879	0.000269296	0.095066426	1.50E-05	1.38E-05	9.01E-07	0	3089.200113	223.5561495	0.623273207	61239.0623
Sacramento	2027 Construction and Mining - Other Material Handling Equipment	Aggregate	9999	Diesel	7.22E-05	8.73E-05	0.000103948	0.000617382	0.001347915	0.321392351	3.04E-05	2.79E-05	3.04E-06	0	10443.70052	534.3881033	1.148134855	207031.7245
Sacramento	2027 Construction and Mining - Pavers	Aggregate	100	Diesel	9.54E-05	0.000115421	0.00013736	0.001382124	0.000958805	0.234385449	6.88E-05	6.33E-05	2.22E-06	0	7616.396045	3793.661769	8.694575185	133457.6961
Sacramento	2027 Construction and Mining - Pavers	Aggregate	175	Diesel	0.00025137	0.000304158	0.000361973	0.004611264	0.002010269	0.778346499	8.91E-05	8.20E-05	7.37E-06	0	25292.50527	8508.667702	15.38957034	500030.0089
Sacramento	2027 Construction and Mining - Pavers	Aggregate	300	Diesel	0.000245992	0.00029765	0.000354228	0.001907226	0.001623712	0.942310844	6.55E-05	6.03E-05	8.93E-06	0	30620.55528	6349.331636	11.3843609	607479.7841
Sacramento	2027 Construction and Mining - Pavers	Aggregate	50	Diesel	5.08E-05	6.15E-05	7.32E-05	0.000350915	0.000287491	0.044436123	1.48E-05	1.37E-05	4.21E-07	0	1443.959584	1560.142237	4.363336304	24236.44541
Sacramento	2027 Construction and Mining - Pavers	Aggregate	600	Diesel	3.98E-05	4.82E-05	5.74E-05	0.000325088	0.000226096	0.165754304	1.02E-05	9.40E-06	1.57E-06	0	5386.215025	685.4507872	1.181874232	108861.3841
Sacramento	2027 Construction and Mining - Pavers	Aggregate	75	Diesel	0.000116846	0.000141384	0.000168258	0.001292422	0.001369497	0.216453888	5.09E-05	4.68E-05	2.05E-06	0	7033.706864	4405.564848	11.31848273	122437.1735
Sacramento	2027 Construction and Mining - Pavers	Aggregate	750	Diesel	1.29E-06	1.56E-06	1.86E-06	1.32E-05	4.47E-06	0.006802085	3.35E-07	3.08E-07	6.44E-08	0	221.0349527	16.55974348	0.032803853	4381.708125
Sacramento	2027 Construction and Mining - Pavers	Aggregate	9999	Diesel	4.20E-05	5.08E-05	6.05E-05	0.000304508	0.000742751	0.156057749	1.71E-05	1.57E-05	1.48E-06	0	5071.123793	123.1922014	0.229626971	100527.9213
Sacramento	2027 Construction and Mining - Paving Equipment	Aggregate	100	Diesel	4.67E-05	5.65E-05	6.72E-05	0.000764202	0.000464476	0.135550641	3.36E-05	3.09E-05	1.28E-06	0	4404.741726	2330.042663	5.416675983	72407.47931
Sacramento	2027 Construction and Mining - Paving Equipment	Aggregate	175	Diesel	0.000243782	0.000294976	0.000351045	0.005113383	0.001668764	0.863491503	7.54E-05	6.94E-05	8.18E-06	0	28059.30703	11381.96925	17.48854636	553336.6915
Sacramento	2027 Construction and Mining - Paving Equipment	Aggregate	300	Diesel	0.000104917	0.000126949	0.00015108	0.000821813	0.000742658	0.389275983	3.23E-05	2.97E-05	3.69E-06	0	12649.59097	2976.924769	5.54667109	250353.4544
Sacramento	2027 Construction and Mining - Paving Equipment	Aggregate	50	Diesel	7.03E-05	8.51E-05	0.000101276	0.000775899	0.000640163	0.108491477	2.09E-05	1.92E-05	1.03E-06	0	3525.449482	4642.737381	12.07238309	61594.22135
Sacramento	2027 Construction and Mining - Paving Equipment	Aggregate	600	Diesel	0.000218879	0.000264844	0.000315186	0.001821676	0.001015916	0.916038284	5.34E-05	4.91E-05	8.68E-06	0	29766.82384	4630.219826	8.008057292	593563.9543
Sacramento	2027 Construction and Mining - Paving Equipment	Aggregate	75	Diesel	3.91E-05	4.73E-05	5.63E-05	0.000479453	0.000486161	0.08071015	1.51E-05	1.39E-05	7.65E-07	0	2622.690411	1941.028104	4.756683556	45747.23478
Sacramento	2027 Construction and Mining - Paving Equipment	Aggregate	750	Diesel	4.33E-05	5.24E-05	6.23E-05	0.000387209	0.00025461	0.198064854	1.46E-05	1.34E-05	1.88E-06	0	6436.151999	557.1329461	1.082527149	127587.6922
Sacramento	2027 Construction and Mining - Paving Equipment	Aggregate	9999	Diesel	3.31E-05	4.00E-05	4.76E-05	0.000239262	0.000548635	0.124159039	1.32E-05	1.21E-05	1.18E-06	0	4034.569623	222.3905873	0.426450089	79979.68775
Sacramento	2027 Construction and Mining - Rollers	Aggregate	100	Diesel	0.000279388	0.000338059	0.000402319	0.003902264	0.002739248	0.676857515	0.000204625	0.000188255	6.41E-06	0	21994.60303	11258.92643	29.60185584	366960.3551
Sacramento	2027 Construction and Mining - Rollers	Aggregate	175	Diesel	0.00108058	0.001307501	0.001556034	0.021932819	0.007952777	3.750830345	0.000355563	0.000327118	3.55E-05	0	121883.8865	47511.87002	80.19669651	2396490.404
Sacramento	2027 Construction and Mining - Rollers	Aggregate	300	Diesel	9.66E-05	0.000116835	0.000139043	0.000798307	0.000805409	0.326386374	3.90E-05	3.59E-05	3.09E-06	0	10605.98218	2428.983229	5.32339539	206275.713
Sacramento	2027 Construction and Mining - Rollers	Aggregate	50	Diesel	0.000846869	0.001024711	0.001219491	0.007834228	0.006471715	1.099394469	0.00025576	0.000235299	1.04E-05	0	35725.01507	44330.09243	122.7059382	588762.6733
Sacramento	2027 Construction and Mining - Rollers	Aggregate	600	Diesel	6.55E-05	7.92E-05	9.43E-05	0.000599606	0.000451459	0.258228223	2.06E-05	1.90E-05	2.45E-06	0	8391.171167	1141.520562	2.300412236	172631.5187
Sacramento	2027 Construction and Mining - Rollers	Aggregate	75	Diesel	0.000200965	0.000243168	0.000289389	0.002544804	0.002567935	0.437366484	7.91E-05	7.28E-05	4.14E-06	0	14212.30022	9323.777661	24.93521993	239162.9041
Sacramento	2027 Construction and Mining - Rollers	Aggregate	750	Diesel	1.57E-06	1.90E-06	2.26E-06	1.18E-05	1.25E-05	0.0063312	5.40E-07	4.97E-07	6.00E-08	0	205.7334381	14.96871851	0.032803853	4078.377046
Sacramento	2027 Construction and Mining - Rollers	Aggregate	9999	Diesel	6.58E-05	7.97E-05	9.48E-05	0.00053765	0.001090237	0.279313114	2.61E-05	2.40E-05	2.65E-06	0	9076.328379	202.689035	0.426450089	179925.4884
Sacramento	2027 Construction and Mining - Rough Terrain Forklifts	Aggregate	100	Diesel	0.000278263	0.000336699	0.000400699	0.005320648	0.00295148	0.953840618	0.000212536	0.000195533	9.04E-06	0	30995.21731	15210.24104	47.58266298	524028.2859
Sacramento	2027 Construction and Mining - Rough Terrain Forklifts	Aggregate	175	Diesel	0.001539577	0.001862889	0.002216991	0.034310858	0.012056711	5.979506348	0.000498685	0.00045879	5.66E-05	0	194305.102	79273.8646	166.919567	3836625.062
Sacramento	2027 Construction and Mining - Rough Terrain Forklifts	Aggregate	300	Diesel	1.22E-05	1.48E-05	1.76E-05	0.000110887	9.64E-05	0.051296336	4.27E-06	3.93E-06	4.86E-07	0	1666.8834	388.9448554	1.017219364	32506.47966
Sacramento	2027 Construction and Mining - Rough Terrain Forklifts	Aggregate	50	Diesel	1.97E-05	2.38E-05	2.83E-05	0.00021531	0.000190643	0.033251387	5.90E-06	5.43E-06	3.15E-07	0	1080.509621	1091.027429	4.067677772	19267.13007
Sacramento	2027 Construction and Mining - Rough Terrain Forklifts	Aggregate	600	Diesel	2.85E-06	3.45E-06	4.11E-06	2.72E-05	1.92E-05	0.014504814	6.67E-07	6.13E-07	1.37E-07	0	471.3364465	69.22613917	0.164025719	9337.787308
Sacramento	2027 Construction and Mining - Rough Terrain Forklifts	Aggregate	75	Diesel	0.000419785	0.00050794	0.00060449	0.007569252	0.006775579	1.325441077	8.38E-05	7.71E-05	1.26E-05	0	43070.43905	26940.20732	83.09738353	758265.6166
Sacramento	2027 Construction and Mining - Rough Terrain Forklifts	Aggregate	750	Diesel	6.98E-07	8.45E-07	1.01E-06	8.96E-06	1.51E-06	0.004780088	1.24E-07	1.14E-07	4.53E-08	0	155.3298049	12.31173694	0.032810307	3077.934235
Sacramento	2027 Construction and Mining - Rubber Tired Dozers	Aggregate	100	Diesel	2.16E-05	2.62E-05	3.11E-05	0.000274213	0.00019778	0.047108806	1.67E-05	1.54E-05	4.46E-07	0	1530.808875	732.8720609	1.641340461	25409.72487
Sacramento	2027 Construction and Mining - Rubber Tired Dozers	Aggregate	175	Diesel	5.73E-05	6.93E-05	8.25E-05	0.000856561	0.000522309	0.142483165	2.53E-05	2.33E-05	1.35E-06	0	4630.01532	1600.236311	2.723920045	91339.08451
Sacramento	2027 Construction and Mining - Rubber Tired Dozers	Aggregate	300	Diesel	5.82E-05	7.04E-05	8.38E-05	0.000443395	0.000408657	0.176715981	2.19E-05	2.02E-05	1.67E-06	0	5742.416642	1255.320895	2.199504125	114321.7498
Sacramento	2027 Construction and Mining - Rubber Tired Dozers	Aggregate	50	Diesel	4.18E-06	5.05E-06	6.01E-06	5.80E-05	3.89E-05	0.012301834	1.15E-06	1.05E-06	1.17E-07	0	399.7502389	229.0375621	0.592468543	3561.80601
Sacramento	2027 Construction and Mining - Rubber Tired Dozers	Aggregate	600	Diesel	0.000287282	0.000347611	0.000413686	0.002758332	0.002132113	0.959152594	0.000108423	9.97E-05	9.09E-06	0	31167.83089	4410.961251	8.031875479	687728.7013
Sacramento	2027 Construction and Mining - Rubber Tired Dozers	Aggregate	75	Diesel	1.14E-05	1.37E-05	1.64E-05	0.00013022	0.000138877	0.023626272	5.24E-06	4.82E-06	2.24E-07	0	767.7398348	458.3925782	0.985680293	11332.94078
Sacramento	2027 Construction and Mining - Rubber Tired Dozers	Aggregate	750	Diesel	6.65E-06	8.05E-06	9.58E-06	6.07E-05	3.88E-05	0.02913834	2.05E-06	1.89E-06	2.76E-07	0	946.8554552	85.23046105	0.164421341	22814.19155
Sacramento	2027 Construction and Mining - Rubber Tired Dozers	Aggregate	9999	Diesel	2.01E-05	2.44E-05	2.90E-05	0.000158648	0.000407846	0.077709965	1.03E-05	9.45E-06	7.36E-07	0	2525.198856	95.87895329	0.164019265	50058.5279
Sacramento	2027 Construction and Mining - Rubber Tired Loaders	Aggregate	100	Diesel	0.000315378	0.000381607	0.000454144	0.004855626	0.003019651	0.819098875	0.000231071	0.000212585	7.76E-06	0	26616.76084	14747.42906	27.37049089	458329.7323
Sacramento	2027 Construction and Mining - Rubber Tired Loaders	Aggregate	175	Diesel	0.00219074	0.002650795	0.003154665	0.036749386	0.017560519	6.134314712	0.000849868	0.000781878	5.81E-05	0	199335.6268	74220.49981	102.2389535	3938107.851
Sacramento	2027 Construction and Mining - Rubber Tired Loaders	Aggregate	300	Diesel	0.003358281	0.00406352	0.004835925	0.025013593	0.020835031	11.44022878	0.000936085	0.000861198	0.000108371	0	371752.2302	91146.27995	129.414563	7396387.008
Sacramento	2027 Construction and Mining - Rubber Tired Loaders	Aggregate	50	Diesel	7.03E-05	8.50E-05	0.000101179	0.000531401	0.000413142	0.063888302	2.16E-05	1.99E-05	6.05E-07	0	2076.061532	2467.330745	5.05280492	35009.74338
Sacramento	2027 Construction and Mining - Rubber Tired Loaders	Aggregate	600	Diesel	0.002425631	0.002935014	0.003492909	0.019196967	0.013126194	8.788602177	0.000616584	0.000567257	8.33E-05	0	285587.1611	41648.26443	57.50222021	5751493.564
Sacramento	2027 Construction and Mining - Rubber Tired Loaders	Aggregate	75	Diesel	0.000263449	0.000318774	0.000379367	0.003005659	0.003006353	0.498473721	0.000102855	9.46E-05	4.72E-06	0	16197.99053	11574.25793	22.54287312	276784.3248
Sacramento	2027 Construction and Mining - Rubber Tired Loaders	Aggregate	750	Diesel	6.22E-05	7.53E-05	8.96E-05	0.000606446	0.0004857	0.228568713	2.34E-05	2.16E-05	2.17E-06	0	7427.380218	777.7798295	1.584798974	190744.9867
Sacramento	2027 Construction and Mining - Rubber Tired Loaders	Aggregate	9999	Diesel	0.000177539	0.000214823	0.000255657	0.001460411	0.003049948	0.748154682	6.31E-05	5.80E-05	7.09E-06	0	24311.41692	1470.810576	2.331472245	502733.1613
Sacramento	2027 Construction and Mining - Scrapers	Aggregate	100	Diesel	8.38E-06	1.01E-05	1.21E-05	0.000133716	8.86E-05	0.024440366	5.91E-06	5.44E-06	2.32E-07	0	794.1939454	316.2854787	1.017915655	12516.61803
Sacramento	2027 Construction and Mining - Scrapers	Aggregate	175	Diesel	0.000109302	0.000132255	0.000157394	0.001286806	0.001199289	0.20993097	6.81E-05	6.27E-05	1.99E-06	0	6821.743485	1794.303058	6.169391195	128742.6091
Sacramento	2027 Construction and Mining - Scrapers	Aggregate	300	Diesel	0.000871543	0.001054566	0.001255021	0.00756475	0.008318183	2.927896182	0.000412753	0.000379733	2.77E-05	0	95142.49727	15883.5509	48.71949875	1822128.821
Sacramento	2027 Construction and Mining - Scrapers	Aggregate	50	Diesel	2.19E-06	2.65E-06	3.15E-06	1.43E-05	1.07E-05	0.002362964	5.92E-07	5.44E-07	2.24E-08	0	76.78492623	40.84008894	0.164306231	811.5418803
Sacramento	2027 Construction and Mining - Scrapers	Aggregate	600	Diesel	0.002678748	0.003241285	0.003857398	0.031562627	0.023282291	10.41539037	0.001099657	0.001011684	9.87E-05	0	338449.9271	33859.94077	101.7247389	7085322.787
Sacramento	2027 Construction and Mining - Scrapers	Aggregate	75	Diesel	1.22E-05	1.48E-05	1.76E-05	0.000113717	0.000143242	0.01976088	7.25E-06	6.67E-06	1.87E-07	0	642.1332328	337.5136798	1.279897731	10505.05526
Sacramento	2027 Construction and Mining - Scrapers	Aggregate	750	Diesel	0.000307945	0.000372614	0.000443441	0.003843131	0.00230729	1.62454156	0.00010912	0.00010039	1.54E-05	0	52789.76141	4135.671665	15.36385231	1224143.612
Sacramento	2027 Construction and Mining - Skid Steer Loaders	Aggregate	100	Diesel	0.001126573	0.001363154	0.001622266	0.021905814	0.012468662	3.699073907	0.000886629	0.000815699	3.50E-05	0	120202.052	68668.73691	146.7418516	2128643.01
Sacramento	2027 Construction and Mining - Skid Steer Loaders	Aggregate	175	Diesel	0.000275384	0.000333214	0.000396553	0.006456983	0.001643698	1.070804855	5.53E-05	5.09E-05	1.01E-05	0	34795.99059	16588.18915	25.42493201	687412.1123
Sacramento	2027 Construction and Mining - Skid Steer Loaders	Aggregate	300	Diesel	2.67E-05	3.23E-05	3.84E-05	0.000194214	0.000181962	0.088048548	8.32E-06	7.65E-06	8.34E-07	0	2861.152931	738.8264816	1.377761826	56867.2395
Sacramento	2027 Construction and Mining - Skid Steer Loaders	Aggregate	50	Diesel	0.000809563	0.000979572	0.001165771	0.0075297	0.006222046	1.036991317	0.00023649	0.000217571	9.82E-06	0	33697.21375	37227.45038	96.52051259	578290.6384
Sacramento	2027 Construction and Mining - Skid Steer Loaders	Aggregate	600	Diesel	1.56E-05	1.89E-05	2.25E-05	0.000117836	8.65E-05	0.060924686	3.96E-06	3.64E-06	5.77E-07	0	1979.758295	224.4250482	0.393646236	39245.93328
Sacramento	2027 Construction and Mining - Skid Steer Loaders	Aggregate	75	Diesel	0.002985486	0.003612438	0.0042991	0.043088081	0.038776244	7.234431268	0.000745261	0.00068564	6.85E-05	0	235084.1062	167615.0402	376.0180351	4157009.625
Sacramento	2027 Construction and Mining - Skid Steer Loaders	Aggregate	750	Diesel	1.82E-06	2.20E-06	2.62E-06	1.14E-05	2.11E-05	0.006065019	6.70E-07	6.17E-07	5.75E-08	0	197.0838521	16.44738203	0.032803853	3906.911128
Sacramento	2027 Construction and Mining - Skid Steer Loaders	Aggregate	9999	Diesel	0.000107278	0.000129807	0.000154481	0.00091159	0.001817608	0.447119711	4.16E-05	3.83E-05	4.24E-06	0	14529.23301	342.1412379	0.721684766	288021.6796
Sacramento	2027 Construction and Mining - Spray Truck	Aggregate	100	Diesel	3.88E-06	4.70E-06	5.59E-06	4.40E-05	3.42E-05	0.007278148	2.91E-06	2.67E-06	6.89E-08	0	236.5046806	140.4809526	0.262430824	4217.238196
Sacramento	2027 Construction and Mining - Spray Truck	Aggregate	175	Diesel	8.08E-06	9.78E-06	1.16E-05	0.000146431	5.94E-05	0.023003145	3.09E-06	2.85E-06	2.18E-07	0	747.4912021	254.5995073	0.426450089	14817.96537
Sacramento	2027 Construction and Mining - Spray Truck	Aggregate	300	Diesel	9.17E-06	1.11E-05	1.32E-05	5.37E-05	8.26E-05	0.021628408	4.15E-06	3.82E-06	2.05E-07	0	702.8188975	147.4806011	0.229718159	13866.14578
Sacramento	2027 Construction and Mining - Spray Truck	Aggregate	50	Diesel	1.15E-05	1.39E-05	1.65E-05	0.000136543	0.000116595	0.016401823	5.03E-06	4.63E-06	1.55E-07	0	532.9800873	734.8670595	1.508977238	9503.845657
Sacramento	2027 Construction and Mining - Spray Truck	Aggregate	600	Diesel	2.63E-05	3.18E-05	3.78E-05	0.000209781	0.000128193	0.088109666	6.55E-06	6.02E-06	8.35E-07	0	2863.138966	361.6270431	0.524861648	56757.71691
Sacramento	2027 Construction and Mining - Spray Truck	Aggregate	75	Diesel	4.74E-06	5.73E-06	6.82E-06	6.14E-05	5.87E-05	0.010031046	1.61E-06	1.48E-06	9.50E-08	0	325.9606026	240.1173296	0.459253942	5812.373354
Sacramento	2027 Construction and Mining - Spreader Tractor Trailer	Aggregate	50	Diesel	6.52E-07	7.89E-07	9.39E-07	7.09E-06	6.05E-06	0.000951034	1.66E-07	1.53E-07	9.01E-09	0	30.90401269	57.46601383	0.131215412	551.0655534
Sacramento	2027 Construction and Mining - Spreader Tractor Trailer	Aggregate	600	Diesel	5.35E-06	6.47E-06	7.70E-06	3.87E-05	4.40E-05	0.020076853	1.56E-06	1.44E-06	1.90E-07	0	652.4008275	104.8049593	0.196823118	12932.93197
Sacramento	2027 Construction and Mining - Spreader Truck	Aggregate	100	Diesel	4.68E-06	5.66E-06	6.74E-06	6.96E-05	4.99E-05	0.01159963	3.99E-06	3.67E-06	1.10E-07	0	376.9319929	192.8197537	0.426450089	6721.270775
Sacramento	2027 Construction and Mining - Spreader Truck	Aggregate	175	Diesel	3.72E-06	4.50E-06	5.36E-06	8.74E-05	1.61E-05	0.013889822	8.97E-07	8.25E-07	1.32E-07	0	451.3521908	168.5860674	0.196823118	8947.424549
Sacramento	2027 Construction and Mining - Spreader Truck	Aggregate	300	Diesel	3.06E-06	3.70E-06	4.40E-06	2.00E-05	2.12E-05	0.009758058	8.36E-07	7.69E-07	9.24E-08	0	317.0897945	64.06953961	0.098411559	6285.860731
Sacramento	2027 Construction and Mining - Spreader Truck	Aggregate	50	Diesel	2.11E-07	2.55E-07	3.03E-07	2.43E-06	1.76E-06	0.000274701	6.74E-08	6.20E-08	2.60E-09	0	8.926465926	16.75499634	0.032803853	159.1724653
Sacramento	2027 Construction and Mining - Spreader Truck	Aggregate	600	Diesel	2.68E-05	3.24E-05	3.86E-05	0.000237661	0.000172038	0.092691305	8.63E-06	7.94E-06	8.78E-07	0	3012.020136	388.7890919	0.65607706	59709.07742
Sacramento	2027 Construction and Mining - Spreader Truck	Aggregate	75	Diesel	5.32E-07	6.44E-07	7.67E-07	9.34E-06	8.23E-06	0.001625955	2.37E-07	2.18E-07	1.54E-08	0	52.83567993	33.50428663	0.065607706	942.14054
Sacramento	2027 Construction and Mining - Surfacing Equipment	Aggregate	100	Diesel	8.84E-06	1.07E-05	1.27E-05	0.000146764	8.39E-05	0.027924037	6.45E-06	5.94E-06	2.65E-07	0	907.3964597	484.8021078	1.019018062	12562.52703
Sacramento	2027 Construction and Mining - Surfacing Equipment	Aggregate	175	Diesel	3.52E-05	4.26E-05	5.07E-05	0.000584838	0.000304046	0.09962974	1.54E-05	1.42E-05	9.44E-07	0	3237.485779	1584.94767	2.46122984	63204.23343
Sacramento	2027 Construction and Mining - Surfacing Equipment	Aggregate	300	Diesel	3.66E-05	4.43E-05	5.27E-05	0.000269819	0.000301852	0.115941231	1.36E-05	1.25E-05	1.10E-06	0	3767.530522	1028.276741	1.873040785	73516.41909
Sacramento	2027 Construction and Mining - Surfacing Equipment	Aggregate	50	Diesel	1.17E-05	1.42E-05	1.69E-05	8.88E-05	7.14E-05	0.011723	3.52E-06	3.24E-06	1.11E-07	0	380.9409354	527.3758593	1.115829108	5827.019103
Sacramento	2027 Construction and Mining - Surfacing Equipment	Aggregate	600	Diesel	0.000175482	0.000212333	0.000252694	0.001408016	0.00099409	0.656584823	4.76E-05	4.38E-05	6.22E-06	0	21335.83839	3631.278239	5.611574775	426114.3171
Sacramento	2027 Construction and Mining - Surfacing Equipment	Aggregate	75	Diesel	9.71E-06	1.17E-05	1.40E-05	0.000117145	0.000109364	0.020130191	3.36E-06	3.09E-06	1.91E-07	0	654.1340721	527.6754872	1.083453771	10118.48204
Sacramento	2027 Construction and Mining - Surfacing Equipment	Aggregate	750	Diesel	6.67E-05	8.07E-05	9.60E-05	0.000533392	0.000448511	0.277813211	2.23E-05	2.05E-05	2.63E-06	0	9027.588767	941.72246	1.673166515	179445.1343
Sacramento	2027 Construction and Mining - Surfacing Equipment	Aggregate	9999	Diesel	2.94E-05	3.55E-05	4.23E-05	0.000252129	0.000507829	0.122575511	1.10E-05	1.01E-05	1.16E-06	0	3983.112623	327.6371981	0.65864744	89380.09772
Sacramento	2027 Construction and Mining - Tank Truck	Aggregate	100	Diesel	6.77E-07	8.19E-07	9.75E-07	1.80E-05	6.74E-06	0.002823638	5.88E-07	5.41E-07	2.67E-08	0	91.7546167	51.25702949	0.065607706	1636.124381
Sacramento	2027 Construction and Mining - Tank Truck	Aggregate	175	Diesel	1.88E-06	2.27E-06	2.70E-06	2.45E-05	2.06E-05	0.004032434	1.03E-06	9.50E-07	3.82E-08	0	131.0346458	50.8687781	0.164019265	2597.578189
Sacramento	2027 Construction and Mining - Tank Truck	Aggregate	300	Diesel	6.20E-05	7.51E-05	8.93E-05	0.000420129	0.00036285	0.196813878	1.54E-05	1.41E-05	1.86E-06	0	6395.501318	1454.581292	2.066642739	126781.8494
Sacramento	2027 Construction and Mining - Tank Truck	Aggregate	600	Diesel	2.42E-05	2.92E-05	3.48E-05	0.00015918	0.000151178	0.07919658	7.25E-06	6.67E-06	7.50E-07	0	2573.506696	374.9763399	0.557665501	51016.16312
Sacramento	2027 Construction and Mining - Tanker Truck Trailer	Aggregate	100	Diesel	1.07E-06	1.29E-06	1.54E-06	2.72E-05	1.13E-05	0.004192164	9.71E-07	8.94E-07	3.97E-08	0	136.225115	76.09965568	0.098411559	2429.101009
Sacramento	2027 Construction and Mining - Tanker Truck Trailer	Aggregate	175	Diesel	2.14E-06	2.59E-06	3.09E-06	3.62E-05	1.38E-05	0.005861023	5.85E-07	5.38E-07	5.55E-08	0	190.4549578	70.03584087	0.098411559	3775.502589
Sacramento	2027 Construction and Mining - Tanker Truck Trailer	Aggregate	300	Diesel	4.85E-07	5.87E-07	6.99E-07	4.67E-06	5.78E-07	0.002307935	4.95E-08	4.56E-08	2.19E-08	0	74.99674149	21.49660615	0.032803853	1486.705282
Sacramento	2027 Construction and Mining - Tanker Truck Trailer	Aggregate	50	Diesel	9.86E-07	1.19E-06	1.42E-06	9.37E-06	7.94E-06	0.001204586	2.46E-07	2.26E-07	1.14E-08	0	39.14323499	51.4990226	0.098411559	697.9834196
Sacramento	2027 Construction and Mining - Tanker Truck Trailer	Aggregate	600	Diesel	1.41E-06	1.70E-06	2.03E-06	1.30E-05	1.82E-06	0.006611665	1.42E-07	1.31E-07	6.26E-08	0	214.8472062	23.69558654	0.032803853	4259.044725
Sacramento	2027 Construction and Mining - Tanker Truck Trailer	Aggregate	75	Diesel	6.45E-07	7.80E-07	9.28E-07	8.81E-06	7.24E-06	0.001409809	8.36E-08	7.69E-08	1.34E-08	0	45.81200021	34.37519177	0.065607706	816.8976472
Sacramento	2027 Construction and Mining - Telescopic Handler	Aggregate	100	Diesel	1.14E-05	1.38E-05	1.65E-05	0.000334297	0.000143012	0.058799499	1.02E-05	9.36E-06	5.57E-07	0	1910.699969	1224.165081	3.674031536	34070.68676
Sacramento	2027 Construction and Mining - Telescopic Handler	Aggregate	175	Diesel	7.37E-05	8.92E-05	0.000106147	0.001882742	0.000529311	0.326449461	1.95E-05	1.79E-05	3.09E-06	0	10608.03219	4930.907216	10.16919443	210289.3695
Sacramento	2027 Construction and Mining - Telescopic Handler	Aggregate	300	Diesel	1.86E-06	2.25E-06	2.67E-06	1.87E-05	3.57E-06	0.009337032	2.35E-07	2.16E-07	8.84E-08	0	303.4084676	85.37771623	0.196823118	6014.647601
Sacramento	2027 Construction and Mining - Telescopic Handler	Aggregate	50	Diesel	1.89E-06	2.29E-06	2.73E-06	2.58E-05	2.30E-05	0.004267996	4.29E-07	3.94E-07	4.04E-08	0	138.6892826	181.5201344	0.65607706	2473.040866
Sacramento	2027 Construction and Mining - Telescopic Handler	Aggregate	600	Diesel	7.49E-07	9.07E-07	1.08E-06	8.39E-06	1.19E-06	0.004407683	8.91E-08	8.20E-08	4.18E-08	0	143.2284163	14.91230356	0.032803853	2839.302598
Sacramento	2027 Construction and Mining - Telescopic Handler	Aggregate	75	Diesel	3.53E-05	4.27E-05	5.09E-05	0.000684943	0.000600001	0.119892515	5.04E-06	4.64E-06	1.14E-06	0	3895.928188	2856.857469	8.594609486	69470.32558
Sacramento	2027 Construction and Mining - Telescopic Handler	Aggregate	750	Diesel	7.61E-07	9.20E-07	1.10E-06	9.12E-06	1.51E-06	0.004845128	1.47E-07	1.36E-07	4.59E-08	0	157.4432937	12.2395789	0.032803853	3121.092619
Sacramento	2027 Construction and Mining - Telescopic Handler	Aggregate	9999	Diesel	7.48E-06	9.05E-06	1.08E-05	7.01E-05	0.000188631	0.03737225	3.53E-06	3.25E-06	3.54E-07	0	1214.417778	23.6020885	0.065607706	24074.13027
Sacramento	2027 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	100	Diesel	0.004123021	0.004988856	0.005937151	0.067057337	0.040513916	11.36368112	0.002988186	0.002749131	0.000107646	0	369264.8005	199594.1063	415.5763837	6461944.12
Sacramento	2027 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	175	Diesel	0.003652125	0.004419071	0.00525906	0.07084142	0.026618517	11.83742423	0.001148366	0.001056496	0.000112134	0	384659.1654	161822.9213	246.5433398	7572934.271
Sacramento	2027 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	25	Diesel	2.01E-07	2.43E-07	2.89E-07	2.14E-06	1.60E-06	0.000236943	1.03E-07	9.47E-08	2.24E-09	0	7.699493588	16.13321764	0.065607706	137.2936822
Sacramento	2027 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	300	Diesel	0.001435169	0.001736554	0.002066643	0.010844595	0.009691743	5.007647585	0.000429333	0.000394987	4.74E-05	0	162724.3819	39775.91199	67.86189944	3225083.009
Sacramento	2027 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	50	Diesel	0.001139253	0.001378496	0.001640524	0.008515675	0.006897504	1.090753443	0.000346578	0.000318852	1.03E-05	0	35444.22342	42075.92325	105.9767187	581935.9493
Sacramento	2027 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	600	Diesel	0.001019907	0.001234088	0.001468666	0.008524544	0.006304327	3.804900825	0.000288313	0.000265248	3.60E-05	0	123640.9161	17181.02975	28.91259256	2479142.701
Sacramento	2027 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	75	Diesel	0.002448403	0.002962567	0.0035257	0.028896315	0.029328185	4.842096006	0.000941975	0.000866617	4.59E-05	0	157344.7545	110798.0061	250.3080691	2711572.758
Sacramento	2027 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	750	Diesel	4.69E-05	5.68E-05	6.75E-05	0.000425268	0.000340731	0.174735543	1.83E-05	1.69E-05	1.66E-06	0	5678.061955	442.5626046	0.853398284	114319.0542
Sacramento	2027 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	9999	Diesel	0.000232378	0.000281177	0.000334624	0.001997114	0.003603745	0.692748364	0.000105762	9.73E-05	6.56E-06	0	22510.97894	624.583819	1.148438392	451490.7945
Sacramento	2027 Construction and Mining - Trenchers	Aggregate	100	Diesel	6.68E-05	8.09E-05	9.62E-05	0.000762546	0.00058012	0.130170199	4.50E-05	4.14E-05	1.23E-06	0	4229.90334	1661.514412	5.118766423	72678.60708
Sacramento	2027 Construction and Mining - Trenchers	Aggregate	175	Diesel	7.25E-05	8.78E-05	0.000104438	0.001215879	0.000651836	0.209981451	3.16E-05	2.91E-05	1.99E-06	0	6823.383893	2128.71625	5.118961466	132647.3295
Sacramento	2027 Construction and Mining - Trenchers	Aggregate	300	Diesel	4.51E-05	5.46E-05	6.50E-05	0.000316012	0.000464277	0.122751968	2.20E-05	2.02E-05	1.16E-06	0	3988.846612	709.7681474	1.969654886	79376.7719
Sacramento	2027 Construction and Mining - Trenchers	Aggregate	50	Diesel	0.000248212	0.000300336	0.000357425	0.002288337	0.001987926	0.332919428	7.49E-05	6.89E-05	3.15E-06	0	10818.27488	8879.743405	28.47672331	184941.3877
Sacramento	2027 Construction and Mining - Trenchers	Aggregate	600	Diesel	6.10E-05	7.38E-05	8.78E-05	0.00046924	0.000600219	0.198720786	2.40E-05	2.21E-05	1.88E-06	0	6457.46662	592.0061124	1.740328415	130479.4788
Sacramento	2027 Construction and Mining - Trenchers	Aggregate	75	Diesel	6.79E-05	8.21E-05	9.77E-05	0.000643764	0.000798226	0.10992001	3.86E-05	3.55E-05	1.04E-06	0	3571.869897	1876.985343	6.235386036	58053.13652
Sacramento	2027 Construction and Mining - Trenchers	Aggregate	750	Diesel	2.85E-06	3.45E-06	4.11E-06	1.86E-05	4.25E-05	0.008611752	1.30E-06	1.19E-06	8.16E-08	0	279.8403733	20.12884451	0.098784985	6439.027818
Sacramento	2027 Construction and Mining - Trenchers	Aggregate	9999	Diesel	5.67E-05	6.86E-05	8.16E-05	0.000530296	0.00093335	0.251305347	2.22E-05	2.04E-05	2.38E-06	0	8166.211093	377.9563919	0.885704031	161883.6888
Sacramento	2027 Construction and Mining - Vacuum Truck	Aggregate	100	Diesel	4.15E-06	5.02E-06	5.98E-06	7.72E-05	4.91E-05	0.012326822	3.76E-06	3.46E-06	1.17E-07	0	400.5622179	207.4848284	0.426450089	7142.633629
Sacramento	2027 Construction and Mining - Vacuum Truck	Aggregate	175	Diesel	4.06E-05	4.92E-05	5.85E-05	0.000660772	0.000355146	0.112608866	1.69E-05	1.56E-05	1.07E-06	0	3659.244748	1327.738542	2.165054298	72539.39818
Sacramento	2027 Construction and Mining - Vacuum Truck	Aggregate	300	Diesel	3.71E-05	4.49E-05	5.34E-05	0.000250138	0.000301478	0.124547675	1.17E-05	1.07E-05	1.18E-06	0	4047.198428	885.2119562	1.377761826	80230.03612
Sacramento	2027 Construction and Mining - Vacuum Truck	Aggregate	50	Diesel	5.57E-06	6.75E-06	8.03E-06	4.44E-05	3.58E-05	0.005450293	1.53E-06	1.41E-06	5.16E-08	0	177.1082207	244.5977043	0.557665501	3158.10897
Sacramento	2027 Construction and Mining - Vacuum Truck	Aggregate	600	Diesel	4.81E-05	5.82E-05	6.93E-05	0.000326138	0.000373173	0.168304288	1.44E-05	1.33E-05	1.59E-06	0	5469.077193	857.5588648	1.672996503	108416.7897
Sacramento	2027 Construction and Mining - Vacuum Truck	Aggregate	75	Diesel	3.59E-06	4.35E-06	5.18E-06	4.91E-05	4.26E-05	0.008032516	1.21E-06	1.11E-06	7.61E-08	0	261.018019	187.0811519	0.360842383	4654.348307
Sacramento	2027 Construction and Mining - Water Truck	Aggregate	175	Diesel	1.33E-05	1.61E-05	1.92E-05	0.000198935	0.000119088	0.033214779	5.88E-06	5.41E-06	3.15E-07	0	1079.320028	397.2638503	0.688880913	21314.44495
Sacramento	2027 Construction and Mining - Water Truck	Aggregate	300	Diesel	9.45E-05	0.00011433	0.000136062	0.000599266	0.000941754	0.213404494	4.77E-05	4.39E-05	2.02E-06	0	6934.616264	1567.30705	2.922474959	137073.9993
Sacramento	2027 Construction and Mining - Water Truck	Aggregate	50	Diesel	1.26E-06	1.52E-06	1.81E-06	1.47E-05	1.28E-05	0.001832929	4.21E-07	3.87E-07	1.74E-08	0	59.56133673	76.58181327	0.131215412	1062.069231
Sacramento	2027 Construction and Mining - Water Truck	Aggregate	600	Diesel	0.000283053	0.000342495	0.000407597	0.002066722	0.001946883	0.960270828	8.73E-05	8.04E-05	9.10E-06	0	31204.16809	4023.372886	6.561801056	621113.7137
Sacramento	2027 Construction and Mining - Water Truck	Aggregate	75	Diesel	8.47E-06	1.02E-05	1.22E-05	6.38E-05	9.06E-05	0.010728642	6.06E-06	5.58E-06	1.02E-07	0	348.6291013	240.7775772	0.524861648	5623.142554
Sacramento	2027 Construction and Mining - Water Truck	Aggregate	750	Diesel	7.71E-06	9.33E-06	1.11E-05	7.52E-05	0.000103375	0.015824693	4.22E-06	3.88E-06	1.50E-07	0	514.2261533	42.69852583	0.098411559	10193.81273
Sacramento	2027 Construction and Mining - Water Truck	Aggregate	9999	Diesel	1.36E-05	1.65E-05	1.96E-05	0.000104373	0.000235807	0.054660592	5.10E-06	4.69E-06	5.18E-07	0	1776.205465	113.0918925	0.196823118	35210.78374
Sacramento	2027 Forestry - Extraction	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Extraction	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Extraction	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Extraction	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Extraction	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Extraction	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Extraction	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Extraction	Aggregate	9999	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Maintenance & Construction	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Maintenance & Construction	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Maintenance & Construction	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Maintenance & Construction	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Maintenance & Construction	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Maintenance & Construction	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Maintenance & Construction	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Manufacturing	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Manufacturing	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Manufacturing	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Manufacturing	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Manufacturing	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Forestry - Manufacturing	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Industrial - Aerial Lifts	Aggregate	100	Diesel	2.53E-05	3.06E-05	3.65E-05	0.000647026	0.000304943	0.116342494	2.23E-05	2.05E-05	1.10E-06	0	3780.569641	2684.425908	9.416447443	66888.36889
Sacramento	2027 Industrial - Aerial Lifts	Aggregate	175	Diesel	4.12E-05	4.99E-05	5.94E-05	0.000976723	0.000330476	0.170948301	1.47E-05	1.35E-05	1.62E-06	0	5554.994857	2987.961773	6.667363997	110068.4922
Sacramento	2027 Industrial - Aerial Lifts	Aggregate	300	Diesel	7.32E-07	8.86E-07	1.05E-06	6.99E-06	3.60E-06	0.00361194	1.42E-07	1.30E-07	3.42E-08	0	117.3706081	32.04168373	0.07898693	2326.707794
Sacramento	2027 Industrial - Aerial Lifts	Aggregate	50	Diesel	0.000112047	0.000135577	0.000161348	0.001737334	0.001610681	0.294557102	3.54E-05	3.26E-05	2.79E-06	0	9571.684425	11697.72315	50.01756931	168673.2176
Sacramento	2027 Industrial - Aerial Lifts	Aggregate	600	Diesel	4.48E-07	5.42E-07	6.45E-07	4.09E-06	3.35E-06	0.002148107	1.05E-07	9.67E-08	2.03E-08	0	69.80311419	11.85384185	0.031594772	1383.7489
Sacramento	2027 Industrial - Aerial Lifts	Aggregate	75	Diesel	0.000174252	0.000210845	0.000250924	0.003308944	0.002962825	0.585661665	4.35E-05	4.00E-05	5.55E-06	0	19031.17799	15955.69495	54.5385612	336360.0909
Sacramento	2027 Industrial - Boom	Aggregate	100	Diesel	1.35E-05	1.63E-05	1.94E-05	0.000342853	0.000145278	0.058542019	1.19E-05	1.10E-05	5.55E-07	0	1902.333108	1270.262318	2.559238642	33914.76634

Sacramento	2027 Industrial - Boom	Aggregate	175	Diesel	1.57E-05	1.90E-05	2.27E-05	0.000318249	0.000105202	0.052929669	4.45E-06	4.09E-06	5.01E-07	0	1719.958843	881.0944044	1.137411792	34095.7733
Sacramento	2027 Industrial - Boom	Aggregate	300	Diesel	1.93E-06	2.34E-06	2.78E-06	1.66E-05	9.09E-06	0.007834361	3.86E-07	3.55E-07	7.42E-08	0	254.5789405	71.41621122	0.11077533	5325.229137
Sacramento	2027 Industrial - Boom	Aggregate	50	Diesel	0.000163633	0.000197996	0.000235632	0.002476396	0.00205865	0.380830198	4.15E-05	3.81E-05	3.61E-06	0	12375.14373	13595.22586	33.68002695	220667.6362
Sacramento	2027 Industrial - Boom	Aggregate	600	Diesel	2.62E-06	3.17E-06	3.78E-06	1.77E-05	1.93E-05	0.00785054	1.04E-06	9.60E-07	7.44E-08	0	255.1046615	39.8637885	0.063189544	5057.09235
Sacramento	2027 Industrial - Boom	Aggregate	75	Diesel	0.000238699	0.000288826	0.000343726	0.003817945	0.003278412	0.640307351	3.86E-05	3.55E-05	6.07E-06	0	20806.89908	16141.43541	31.21588504	370970.0847
Sacramento	2027 Industrial - Boom	Aggregate	9999	Diesel	1.09E-06	1.32E-06	1.57E-06	1.01E-05	1.73E-05	0.005138083	3.27E-07	3.00E-07	4.87E-08	0	166.9629096	9.734722534	0.015797386	3309.805661
Sacramento	2027 Industrial - Forklifts	Aggregate	100	Diesel	0.000274221	0.000331808	0.000394879	0.005034662	0.002840997	0.868746425	0.000212124	0.000195154	8.23E-06	0	28230.06663	28835.63697	70.45890705	485955.6523
Sacramento	2027 Industrial - Forklifts	Aggregate	175	Diesel	0.000747966	0.000905039	0.001077071	0.01493887	0.005523017	2.520284592	0.000240287	0.000221064	2.39E-05	0	81897.08752	64167.75156	106.1038367	1620792.066
Sacramento	2027 Industrial - Forklifts	Aggregate	25	Diesel	9.27E-09	1.12E-08	1.33E-08	3.02E-08	2.41E-08	2.18E-06	2.06E-09	1.89E-09	2.07E-11	0	0.070840591	5.263314534	0.015797386	1.263195488
Sacramento	2027 Industrial - Forklifts	Aggregate	300	Diesel	6.96E-05	8.42E-05	0.000100193	0.000523213	0.00051786	0.226938996	2.40E-05	2.21E-05	2.15E-06	0	7374.422276	3424.267806	6.685765978	146942.6822
Sacramento	2027 Industrial - Forklifts	Aggregate	50	Diesel	9.36E-05	0.000113282	0.000134815	0.000946694	0.000775167	0.136690972	2.77E-05	2.54E-05	1.29E-06	0	4441.79699	8452.487833	23.2961633	71567.24077
Sacramento	2027 Industrial - Forklifts	Aggregate	600	Diesel	2.05E-05	2.48E-05	2.95E-05	0.000197139	0.000161604	0.068852828	7.52E-06	6.92E-06	6.52E-07	0	2237.384648	636.0132192	1.264383342	45194.95633
Sacramento	2027 Industrial - Forklifts	Aggregate	75	Diesel	0.00050008	0.000605097	0.000720115	0.007650925	0.006935144	1.302107448	0.000129511	0.00011915	1.23E-05	0	42312.2087	55677.75557	132.7072333	739743.9264
Sacramento	2027 Industrial - Forklifts	Aggregate	750	Diesel	1.00E-06	1.21E-06	1.44E-06	1.02E-05	4.21E-06	0.005245435	2.89E-07	2.66E-07	4.97E-08	0	170.4513241	23.03835402	0.047392158	3378.958589
Sacramento	2027 Industrial - Forklifts	Aggregate	9999	Diesel	2.28E-05	2.76E-05	3.28E-05	0.000182391	0.000412255	0.09512937	8.94E-06	8.22E-06	9.01E-07	0	3091.245471	155.3075332	0.316127526	62971.89847
Sacramento	2027 Industrial - Garbage Refuse	Aggregate	175	Diesel	2.35E-07	2.84E-07	3.38E-07	3.37E-06	2.84E-06	0.000572958	1.34E-07	1.24E-07	5.43E-09	0	18.61838608	8.829746598	0.015797386	369.0834078
Sacramento	2027 Industrial - Garbage Refuse	Aggregate	300	Diesel	6.82E-07	8.25E-07	9.81E-07	5.50E-06	3.75E-06	0.002792542	1.56E-07	1.43E-07	2.65E-08	0	90.74415	20.05882675	0.031594772	1798.875583
Sacramento	2027 Industrial - Garbage Refuse	Aggregate	50	Diesel	3.78E-08	4.58E-08	5.45E-08	6.41E-07	6.09E-07	0.000101084	1.31E-08	1.20E-08	9.58E-10	0	3.284736624	6.16545793	0.015797386	58.57185034
Sacramento	2027 Industrial - Garbage Refuse	Aggregate	600	Diesel	1.02E-05	1.23E-05	1.47E-05	8.09E-05	4.81E-05	0.041455286	2.08E-06	1.91E-06	3.93E-07	0	1347.09676	144.3692056	0.205366018	26704.30512
Sacramento	2027 Industrial - Garbage Refuse	Aggregate	75	Diesel	2.21E-07	2.68E-07	3.19E-07	2.69E-06	2.22E-06	0.000414337	7.08E-08	6.52E-08	3.92E-09	0	13.46395376	8.537794279	0.015797386	240.0827751
Sacramento	2027 Industrial - Garbage Refuse	Aggregate	9999	Diesel	2.09E-06	2.53E-06	3.01E-06	2.02E-05	3.50E-05	0.010346558	7.61E-07	7.00E-07	9.80E-08	0	336.2132061	18.56999125	0.031594772	6664.955561
Sacramento	2027 Industrial - Garbage Transfer	Aggregate	300	Diesel	9.42E-07	1.14E-06	1.36E-06	6.16E-06	7.04E-06	0.002923797	2.55E-07	2.34E-07	2.77E-08	0	95.00929866	21.59174331	0.031594772	1883.426177
Sacramento	2027 Industrial - Garbage Transfer	Aggregate	600	Diesel	1.64E-06	1.98E-06	2.36E-06	1.43E-05	4.33E-06	0.007142422	2.67E-07	2.46E-07	6.77E-08	0	232.0942591	22.52603855	0.031594772	4600.943374
Sacramento	2027 Industrial - Misc - Aerial Lifts	Aggregate	100	Gasoline	0.000158072	0.000145395	0.000173949	0.009016921	0.000402744	0.302545017	2.11E-05	1.59E-05	2.92E-06	4.20E-06	12001.2	4193.85	11.59	280987.95
Sacramento	2027 Industrial - Misc - Aerial Lifts	Aggregate	15	Gasoline	2.53E-05	2.56E-05	2.79E-05	0.000720128	1.89E-05	2.84E-08	9.22E-06	6.96E-06	1.16E-08	1.60E-08	45.50443588	0	0.42041915	0
Sacramento	2027 Industrial - Misc - Aerial Lifts	Aggregate	15	Diesel	2.78E-05	3.34E-05	3.99E-05	0.000175244	0.00020922	0.000401075	7.36E-06	5.56E-06	3.81E-09	3.28E-09	13.04568916	0	6.079535345	0
Sacramento	2027 Industrial - Misc - Aerial Lifts	Aggregate	15	Electric	3.04E-06	2.75E-07	3.01E-06	0.000107016	2.93E-06	9.83E-09	2.73E-07	2.06E-07	2.24E-10	2.02E-09	5.759969205	0	0.145260676	0
Sacramento	2027 Industrial - Misc - Aerial Lifts	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.132483402	0
Sacramento	2027 Industrial - Misc - Aerial Lifts	Aggregate	25	Gasoline	0.001416946	0.001431116	0.001559262	0.037557216	0.000925196	1.40E-06	0.000452872	0.00034217	6.07E-07	8.38E-07	2385.707552	0	14.1340431	0
Sacramento	2027 Industrial - Misc - Aerial Lifts	Aggregate	25	Diesel	5.18E-05	6.23E-05	7.44E-05	0.000212397	0.000393665	0.000568602	1.35E-05	1.02E-05	5.40E-09	4.65E-09	18.49478299	0	8.626349232	0
Sacramento	2027 Industrial - Misc - Aerial Lifts	Aggregate	25	Electric	0.000259225	2.35E-05	0.000256605	0.006577817	0.000180821	5.78E-07	1.77E-05	1.34E-05	1.41E-08	1.27E-07	361.4216997	0	5.848815079	0
Sacramento	2027 Industrial - Misc - Aerial Lifts	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.132483402	0
Sacramento	2027 Industrial - Misc - Aerial Lifts	Aggregate	50	Gasoline	0.00019949	0.000183491	0.000219527	0.01683435	0.00029857	0.150707833	1.04E-05	7.85E-06	1.83E-06	2.36E-06	6730.6	4193.85	11.59	138397.05
Sacramento	2027 Industrial - Misc - Forklifts	Aggregate	100	Gasoline	0.011164186	0.010268818	0.012285506	1.097060635	0.054690614	12.0305926	0.000838802	0.000633761	0.000116232	0.000182864	521986.5	244922.3	135.97	17144561
Sacramento	2027 Industrial - Misc - Forklifts	Aggregate	100	Nat Gas	0	0	0.00206429	0.916232094	0.093680683	19.22027101	0.001709329	0	0	0	1073735.1	449209.15	249.33	31444640.5
Sacramento	2027 Industrial - Misc - Forklifts	Aggregate	175	Gasoline	0.000586136	0.000539128	0.000645007	0.038744264	0.003283908	0.891907887	6.39E-05	4.83E-05	8.86E-06	1.27E-05	36131.35	8949.8	4.96	1306670.8
Sacramento	2027 Industrial - Misc - Forklifts	Aggregate	175	Nat Gas	0	0	9.33E-05	0.053215846	0.004471316	1.467019568	0.000130467	0	0	0	80471.55	16439.6	9.14	2400181.6
Sacramento	2027 Industrial - Misc - Forklifts	Aggregate	25	Gasoline	8.94E-06	9.03E-06	9.84E-06	0.000747206	5.01E-06	2.02E-07	1.81E-08	1.37E-08	1.14E-08	1.58E-08	44.9656542	0	0.107863336	0
Sacramento	2027 Industrial - Misc - Forklifts	Aggregate	25	Electric	4.73E-05	4.28E-06	4.68E-05	0.000679328	1.90E-05	5.25E-08	2.10E-06	1.58E-06	1.53E-09	1.38E-08	39.41345915	0	0.201881082	0
Sacramento	2027 Industrial - Misc - Forklifts	Aggregate	50	Gasoline	0.005299937	0.004874882	0.005832257	0.641854033	0.012559134	2.030758443	0.000139999	0.000105777	2.47E-05	4.06E-05	115796.25	69788	38.74	2861308
Sacramento	2027 Industrial - Misc - Forklifts	Aggregate	50	Nat Gas	0	0	0.000349476	0.054342757	0.014126551	3.207574558	0.000285261	0	0	0	171177.7	127987.25	71.04	5247477.25
Sacramento	2027 Industrial - Misc - Other General Industrial Equipment	Aggregate	100	Gasoline	4.93E-05	4.53E-05	5.42E-05	0.003751435	0.000289499	0.086818007	6.05E-06	4.57E-06	8.39E-07	1.23E-06	3514.95	872.35	1.23	68915.65
Sacramento	2027 Industrial - Misc - Other General Industrial Equipment	Aggregate	15	Gasoline	0.000292569	0.000295496	0.000321955	0.017320552	0.000151303	6.80E-06	1.46E-06	1.10E-06	2.69E-07	3.72E-07	1053.498396	0	14.62839194	0
Sacramento	2027 Industrial - Misc - Other General Industrial Equipment	Aggregate	15	Diesel	1.60E-05	1.93E-05	2.30E-05	0.000113353	0.00013533	0.000250526	4.76E-06	3.60E-06	2.38E-09	2.05E-09	8.148795009	0	1.489697262	0
Sacramento	2027 Industrial - Misc - Other General Industrial Equipment	Aggregate	175	Gasoline	6.96E-06	6.40E-06	7.66E-06	0.000644078	5.73E-05	0.017997378	1.29E-06	9.75E-07	1.79E-07	2.51E-07	715.4	76.65	0.1	13337.1
Sacramento	2027 Industrial - Misc - Other General Industrial Equipment	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.013502736	0
Sacramento	2027 Industrial - Misc - Other General Industrial Equipment	Aggregate	25	Gasoline	0.000259574	0.00026217	0.000285644	0.022906944	0.000145287	6.20E-06	5.54E-07	4.19E-07	3.50E-07	4.83E-07	1376.604367	0	4.913121202	0
Sacramento	2027 Industrial - Misc - Other General Industrial Equipment	Aggregate	25	Diesel	4.61E-05	5.55E-05	6.63E-05	0.000189351	0.000350572	0.000506803	1.18E-05	8.91E-06	4.81E-09	4.14E-09	16.484666	0	1.537571479	0
Sacramento	2027 Industrial - Misc - Other General Industrial Equipment	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.013502736	0
Sacramento	2027 Industrial - Misc - Other General Industrial Equipment	Aggregate	50	Gasoline	0.000159679	0.000146873	0.000175718	0.015859242	0.00036256	0.101464516	6.99E-06	5.29E-06	1.23E-06	1.69E-06	4810.7	2646.25	3.73	79387.5
Sacramento	2027 Industrial - Misc - Other Material Handling Equipment	Aggregate	100	Gasoline	8.94E-05	8.22E-05	9.84E-05	0.005463297	0.000449133	0.120026368	8.37E-06	6.32E-06	1.16E-06	1.71E-06	4883.7	1781.2	4.68	96184.8
Sacramento	2027 Industrial - Misc - Other Material Handling Equipment	Aggregate	50	Gasoline	3.75E-06	3.45E-06	4.13E-06	0.000336284	8.12E-06	0.00208286	1.44E-07	1.08E-07	2.53E-08	3.58E-08	102.2	14.6	0.04	598.6
Sacramento	2027 Industrial - Misc - Sweepers/Scrubbers	Aggregate	100	Gasoline	0.000243044	0.000223552	0.000267455	0.015323189	0.001566431	0.526043729	3.67E-05	2.77E-05	5.08E-06	7.30E-06	20848.8	4657.4	9.02	316703.2
Sacramento	2027 Industrial - Misc - Sweepers/Scrubbers	Aggregate	15	Gasoline	0.00011852	0.000119705	0.000130424	0.007317926	5.97E-05	3.01E-06	3.03E-07	2.29E-07	1.13E-07	1.57E-07	444.4452372	0	6.501670824	0
Sacramento	2027 Industrial - Misc - Sweepers/Scrubbers	Aggregate	15	Diesel	6.36E-06	7.66E-06	9.15E-06	4.51E-05	5.38E-05	9.96E-05	1.89E-06	1.43E-06	9.45E-10	8.14E-10	3.240338646	0	0.695712424	0
Sacramento	2027 Industrial - Misc - Sweepers/Scrubbers	Aggregate	175	Gasoline	1.88E-06	1.73E-06	2.07E-06	0.000206139	1.86E-05	0.00612393	4.39E-07	3.32E-07	6.08E-08	8.44E-08	240.9	29.2	0.07	4088
Sacramento	2027 Industrial - Misc - Sweepers/Scrubbers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.009369664	0
Sacramento	2027 Industrial - Misc - Sweepers/Scrubbers	Aggregate	25	Gasoline	0.000260274	0.000262876	0.000286416	0.024879332	0.000145677	6.73E-06	6.02E-07	4.55E-07	3.79E-07	5.23E-07	1492.318455	0	6.463520234	0
Sacramento	2027 Industrial - Misc - Sweepers/Scrubbers	Aggregate	25	Diesel	9.24E-06	1.11E-05	1.33E-05	3.79E-05	7.02E-05	0.000101548	2.36E-06	1.78E-06	9.64E-10	8.30E-10	3.303037456	0	0.528585011	0
Sacramento	2027 Industrial - Misc - Sweepers/Scrubbers	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.009369664	0
Sacramento	2027 Industrial - Misc - Sweepers/Scrubbers	Aggregate	50	Gasoline	0.000416312	0.000382923	0.000458126	0.035901047	0.00091721	0.327964192	2.26E-05	1.71E-05	3.99E-06	5.12E-06	14603.65	5584.5	10.82	195457.5
Sacramento	2027 Industrial - Mower	Aggregate	100	Diesel	2.66E-05	3.22E-05	3.84E-05	0.00051893	0.000312455	0.085166089	2.28E-05	2.10E-05	8.07E-07	0	2767.486934	1442.561488	2.622518272	49345.10766
Sacramento	2027 Industrial - Mower	Aggregate	175	Diesel	7.54E-06	9.13E-06	1.09E-05	0.000160171	5.13E-05	0.026006865	1.85E-06	1.70E-06	2.46E-07	0	845.097631	363.0222908	0.584741097	16896.97212
Sacramento	2027 Industrial - Mower	Aggregate	300	Diesel	3.65E-07	4.41E-07	5.25E-07	2.16E-06	4.55E-06	0.001093636	1.50E-07	1.38E-07	1.04E-08	0	35.53790878	10.59382301	0.015797386	704.4892302
Sacramento	2027 Industrial - Mower	Aggregate	50	Diesel	0.000200647	0.000242783	0.000288932	0.002219712	0.001770719	0.276152701	6.72E-05	6.19E-05	2.62E-06	0	8973.630184	11958.70096	25.08697661	159625.7881
Sacramento	2027 Industrial - Mower	Aggregate	75	Diesel	8.48E-05	0.000102581	0.000122079	0.001138104	0.000981452	0.183834868	2.06E-05	1.89E-05	1.74E-06	0	5973.746105	4853.145763	9.525823758	106520.9795
Sacramento	2027 Industrial - Mower	Aggregate	9999	Diesel	1.54E-05	1.86E-05	2.22E-05	9.83E-05	0.00024866	0.04919683	6.91E-06	6.36E-06	4.66E-07	0	1598.659578	57.75955663	0.126379088	31691.18539
Sacramento	2027 Industrial - Other General Industrial Equipment	Aggregate	100	Diesel	3.15E-05	3.81E-05	4.53E-05	0.000443991	0.000311685	0.07454258	2.40E-05	2.21E-05	7.06E-07	0	2422.27413	1470.570399	3.619062721	42949.45169
Sacramento	2027 Industrial - Other General Industrial Equipment	Aggregate	175	Diesel	7.78E-05	9.41E-05	0.000112016	0.001378068	0.000641803	0.231507569	3.11E-05	2.87E-05	2.19E-06	0	7522.87884	3377.016437	5.925645055	150136.4177
Sacramento	2027 Industrial - Other General Industrial Equipment	Aggregate	300	Diesel	5.31E-05	6.42E-05	7.64E-05	0.000366348	0.00044872	0.153807	2.12E-05	1.95E-05	1.46E-06	0	4997.985309	1259.191662	2.65488479	100299.5776
Sacramento	2027 Industrial - Other General Industrial Equipment	Aggregate	50	Diesel	0.000168929	0.000204404	0.000243257	0.001478994	0.001280959	0.191412635	5.54E-05	5.10E-05	1.81E-06	0	6219.986955	9241.796805	23.25655519	109094.6468
Sacramento	2027 Industrial - Other General Industrial Equipment	Aggregate	600	Diesel	0.00013471	0.000162999	0.000193983	0.001103688	0.000976058	0.486104992	4.36E-05	4.01E-05	4.60E-06	0	15796.06652	2431.465933	4.761477446	332287.6308
Sacramento	2027 Industrial - Other General Industrial Equipment	Aggregate	75	Diesel	4.80E-05	5.81E-05	6.92E-05	0.000615712	0.000613954	0.103311569	2.08E-05	1.91E-05	9.79E-07	0	3357.127467	2906.146569	6.809906375	59395.02574
Sacramento	2027 Industrial - Other General Industrial Equipment	Aggregate	750	Diesel	3.02E-05	3.65E-05	4.34E-05	0.000235919	0.000241476	0.113424286	1.10E-05	1.02E-05	1.07E-06	0	3685.741966	324.437889	0.711002638	73683.98426
Sacramento	2027 Industrial - Other General Industrial Equipment	Aggregate	9999	Diesel	4.85E-05	5.87E-05	6.99E-05	0.000365316	0.000865342	0.184914816	2.04E-05	1.88E-05	1.75E-06	0	6008.839199	323.8855232	0.63189544	119116.8149
Sacramento	2027 Industrial - Other Truck	Aggregate	100	Diesel	2.52E-06	3.05E-06	3.63E-06	6.43E-05	2.56E-05	0.010518481	2.19E-06	2.02E-06	9.96E-08	0	341.7998692	209.536411	0.31594772	6094.811571
Sacramento	2027 Industrial - Other Truck	Aggregate	175	Diesel	2.71E-05	3.28E-05	3.91E-05	0.00052797	0.000153924	0.083643738	6.15E-06	5.66E-06	7.92E-07	0	2718.017862	940.8817702	1.011303618	54430.76205
Sacramento	2027 Industrial - Other Truck	Aggregate	300	Diesel	5.18E-05	6.27E-05	7.46E-05	0.000341281	0.000375659	0.151433962	1.62E-05	1.49E-05	1.43E-06	0	4920.873001	1115.796809	1.437894217	98700.44764
Sacramento	2027 Industrial - Other Truck	Aggregate	50	Diesel	6.21E-06	7.51E-06	8.94E-06	6.97E-05	5.31E-05	0.008590764	1.73E-06	1.59E-06	8.14E-08	0	279.1583853	464.8175223	0.805666686	4977.81863
Sacramento	2027 Industrial - Other Truck	Aggregate	600	Diesel	0.000177944	0.000215312	0.00025624	0.001175119	0.000926841	0.55640296	4.51E-05	4.15E-05	5.27E-06	0	18080.41125	2278.173764	3.681270685	361062.5921
Sacramento	2027 Industrial - Other Truck	Aggregate	75	Diesel	1.02E-05	1.24E-05	1.47E-05	0.000119066	0.000118706	0.019387046	3.98E-06	3.66E-06	1.84E-07	0	629.9854283	448.7368668	0.71088237	11233.59844
Sacramento	2027 Industrial - Other Truck	Aggregate	750	Diesel	1.60E-05	1.93E-05	2.30E-05	8.44E-05	0.000138125	0.04271946	5.87E-06	5.40E-06	4.05E-07	0	1388.176306	104.9875974	0.379137264	27518.64955
Sacramento	2027 Industrial - Other Truck	Aggregate	9999	Diesel	1.41E-05	1.70E-05	2.02E-05	9.65E-05	0.000225588	0.048344689	5.15E-06	4.74E-06	4.58E-07	0	1570.969095	38.10231849	0.063189544	31142.26037
Sacramento	2027 Industrial - Railcars or Track Cars	Aggregate	100	Diesel	3.89E-07	4.70E-07	5.60E-07	5.89E-06	2.92E-06	0.000998139	1.90E-07	1.75E-07	9.46E-09	0	32.43468534	16.70012011	0.031594772	578.3597752
Sacramento	2027 Industrial - Railcars or Track Cars	Aggregate	175	Diesel	8.64E-06	1.05E-05	1.24E-05	0.000154439	6.75E-05	0.024978949	3.10E-06	2.86E-06	2.37E-07	0	811.6953087	290.9612859	0.505679415	16348.91001
Sacramento	2027 Industrial - Railcars or Track Cars	Aggregate	300	Diesel	7.40E-06	8.95E-06	1.07E-05	5.65E-05	3.52E-05	0.027408937	1.57E-06	1.45E-06	2.60E-07	0	890.6581898	210.2669103	0.31594772	17656.05023
Sacramento	2027 Industrial - Railcars or Track Cars	Aggregate	50	Diesel	1.93E-07	2.33E-07	2.78E-07	1.30E-06	1.05E-06	0.000172756	3.12E-08	2.87E-08	1.64E-09	0	5.613750544	8.362716051	0.015797386	100.1017111
Sacramento	2027 Industrial - Railcars or Track Cars	Aggregate	600	Diesel	2.52E-06	3.05E-06	3.63E-06	2.19E-05	6.29E-06	0.011208618	4.01E-07	3.69E-07	1.06E-07	0	364.2259933	60.19659877	0.094784316	7220.269803
Sacramento	2027 Industrial - Railcars or Track Cars	Aggregate	75	Diesel	4.77E-07	5.77E-07	6.87E-07	8.34E-06	6.94E-06	0.001452067	5.88E-08	5.41E-08	1.38E-08	0	47.18517417	40.63979023	0.079111392	799.9536308
Sacramento	2027 Industrial - Railcars or Track Cars	Aggregate	9999	Diesel	1.46E-06	1.76E-06	2.10E-06	1.01E-05	2.87E-05	0.004791023	7.93E-07	7.30E-07	4.54E-08	0	155.6851202	10.57510723	0.015797386	3086.239294
Sacramento	2027 Industrial - Sweepers/Scrubbers	Aggregate	100	Diesel	3.05E-05	3.70E-05	4.40E-05	0.000532688	0.000323165	0.093732452	2.40E-05	2.21E-05	8.88E-07	0	3045.852385	1404.127736	4.600978799	53418.06515
Sacramento	2027 Industrial - Sweepers/Scrubbers	Aggregate	175	Diesel	7.37E-06	8.91E-06	1.06E-05	0.000123083	7.56E-05	0.0212125	3.66E-06	3.37E-06	2.01E-07	0	689.3038785	251.0288858	0.632185595	13743.6376
Sacramento	2027 Industrial - Sweepers/Scrubbers	Aggregate	300	Diesel	6.71E-06	8.12E-06	9.67E-06	5.85E-05	4.70E-05	0.028874915	2.02E-06	1.86E-06	2.74E-07	0	938.2954029	186.2596803	0.458124194	18729.72071
Sacramento	2027 Industrial - Sweepers/Scrubbers	Aggregate	50	Diesel	5.18E-05	6.27E-05	7.46E-05	0.000530955	0.000474835	0.081138821	1.60E-05	1.47E-05	7.69E-07	0	2636.620131	2927.5144	11.07749855	44759.39576
Sacramento	2027 Industrial - Sweepers/Scrubbers	Aggregate	600	Diesel	1.26E-06	1.52E-06	1.81E-06	1.31E-05	9.57E-06	0.004615199	4.99E-07	4.59E-07	4.37E-08	0	149.9716809	20.0743114	0.047392158	2972.978367
Sacramento	2027 Industrial - Sweepers/Scrubbers	Aggregate	75	Diesel	2.60E-05	3.14E-05	3.74E-05	0.000411528	0.000388975	0.071898026	8.34E-06	7.67E-06	6.81E-07	0	2336.33891	1301.041106	4.282808182	41005.20151
Sacramento	2027 Industrial - Sweepers/Scrubbers	Aggregate	9999	Diesel	1.51E-06	1.83E-06	2.17E-06	1.73E-05	3.07E-05	0.009142623	6.53E-07	6.00E-07	8.66E-08	0	297.0911435	5.819580539	0.015797386	5889.415506
Sacramento	2027 Industrial - Tow Tractor	Aggregate	600	Diesel	5.05E-07	6.11E-07	7.27E-07	3.96E-06	5.42E-06	0.002099143	1.57E-07	1.45E-07	1.99E-08	0	68.21203335	8.49910718	0.015797386	1352.207952
Sacramento	2027 Industrial - Yard Goat	Aggregate	100	Diesel	4.69E-06	5.68E-06	6.76E-06	6.59E-05	3.95E-05	0.010800375	2.63E-06	2.42E-06	1.02E-07	0	350.9600747	181.3916159	0.189568632	6258.151967
Sacramento	2027 Industrial - Yard Goat	Aggregate	175	Diesel	0.000510021	0.000617126	0.000734431	0.009240709	0.003191181	1.452271628	0.000136017	0.000125135	1.38E-05	0	47191.81991	14784.34039	11.83281468	937328.5157
Sacramento	2027 Industrial - Yard Goat	Aggregate	300	Diesel	0.000299944	0.000362932	0.000431919	0.001995287	0.001522189	0.903894019	7.17E-05	6.60E-05	8.56E-06	0	29372.19385	7571.038158	6.935901101	584781.2114
Sacramento	2027 Industrial - Yard Goat	Aggregate	50	Diesel	2.06E-06	2.49E-06	2.96E-06	2.35E-05	1.81E-05	0.002519521	7.61E-07	7.00E-07	2.39E-08	0	81.87228585	121.307161	0.221163404	1459.90739
Sacramento	2027 Industrial - Yard Goat	Aggregate	600	Diesel	2.44E-05	2.95E-05	3.51E-05	0.000152693	0.000132832	0.075118418	5.58E-06	5.13E-06	7.12E-07	0	2440.986105	339.1879116	0.316190009	49933.28342
Sacramento	2027 Industrial - Yard Goat	Aggregate	75	Diesel	2.82E-06	3.41E-06	4.06E-06	2.91E-05	3.01E-05	0.004518447	1.04E-06	9.55E-07	4.28E-08	0	146.8277097	115.885634	0.142176474	2618.1614
Sacramento	2027 Industrial - Yard Goat	Aggregate	9999	Diesel	4.98E-06	6.03E-06	7.17E-06	3.01E-05	7.28E-05	0.015571664	1.67E-06	1.53E-06	1.48E-07	0	506.0039423	15.24069971	0.015797386	10030.81892
Sacramento	2027 Lawn and Garden - Misc - Chainsaws	Aggregate	2	Gasoline	0.205614247	0.207736389	0.226280543	0.582759474	0.006578	3.118671253	0.002477	0.001869	0.00004543	0.00006269	177241.5378	0	42172.46133	0
Sacramento	2027 Lawn and Garden - Misc - Chainsaws	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	26111.24647	0
Sacramento	2027 Lawn and Garden - Misc - Chainsaws	Aggregate	5	Gasoline	0.1681	0.169748753	0.184915914	0.540264769	0.006026	2.891295486	0.002296	0.001733	0.00004124	0.00005698	161377.4762	0	30005.25446	0
Sacramento	2027 Lawn and Garden - Misc - Chainsaws	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	18577.87214	0
Sacramento	2027 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	2	Gasoline	0.1791	0.1808	0.197044419	0.313808947	0.006414	1.67928452	0.001333	0.001007	0.0000267	0.00003697	104330.6325	0	22708.2484	0
Sacramento	2027 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	14059.90194	0
Sacramento	2027 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	5	Gasoline	0.166	0.167733921	0.182711851	0.290973337	0.005946	1.556851416	0.001234	0.000933	0.00002477	3.41E-05	96724.33455	0	16156.67548	0
Sacramento	2027 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	10003.46962	0
Sacramento	2027 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	15	Gasoline	0.000228	0.000231	0.000251	0.0126	0.0000922	0.027857243	4.59E-07	0.000000347	4.64E-07	0.000000641	1808.547306	0	186.9865199	0
Sacramento	2027 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	69.45815895	0
Sacramento	2027 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	2	Gasoline	0.0000711	0.0000718	0.0000782	0.000925	0.00000769	0.00216	0.000000034	2.57E-08	3.95E-08	5.45E-08	144.17408	0	64.68482797	0
Sacramento	2027 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	24.0278768	0
Sacramento	2027 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	25	Diesel	0.00000645	0.00000776	0.00000927	0.0000265	0.000049	0.006476938	0.00000165	0.00000125	6.15E-08	0.000000053	210.6738864	0	0.502035924	0
Sacramento	2027 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	5	Gasoline	0.000267	0.000269	0.000294	0.0126	0.0000969	0.029432936	4.64E-07	0.000000351	4.88E-07	0.000000673	1870.05146	0	297.3355799	0
Sacramento	2027 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	110.4485071	0
Sacramento	2027 Lawn and Garden - Misc - Lawn Mowers	Aggregate	15	Gasoline	0.0004564	0.0004608	0.0005025	0.031308663	0.0002095	0.06602	0.000003271	0.000002477	0.000001147	0.000001582	4356.319369	0	619.4147851	0
Sacramento	2027 Lawn and Garden - Misc - Lawn Mowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	276.9672598	0
Sacramento	2027 Lawn and Garden - Misc - Lawn Mowers	Aggregate	2	Gasoline	0.00002906	2.93E-05	0.00003196	0.0006648	0.00001411	0.001798	0.000001369	1.04E-06	3.07E-08	4.24E-08	109.64362	0	41.23256764	0
Sacramento	2027 Lawn and Garden - Misc - Lawn Mowers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	18.43686471	0
Sacramento	2027 Lawn and Garden - Misc - Lawn Mowers	Aggregate	25	Gasoline	0.0003778	0.0003812	0.0004152	0.0264	0.0001306	0.05556	0.000002761	0.000002082	9.42E-07	1.30E-06	3668.819193	0	168.6365439	0
Sacramento	2027 Lawn and Garden - Misc - Lawn Mowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	75.4047249	0
Sacramento	2027 Lawn and Garden - Misc - Lawn Mowers	Aggregate	5	Gasoline	0.09863	0.09962	0.10863	4.9131036	0.061433683	13.4810326	0.0005625	0.0004257	0.0002158	0.0002976	803614.2275	0	169347.1869	0
Sacramento	2027 Lawn and Garden - Misc - Lawn Mowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	75722.48426	0
Sacramento	2027 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	15	Gasoline	0.002301	0.002324	0.002533	0.1652	0.001731	0.426571322	0.00000652	0.00000493	6.70E-06	0.00000924	25893.80019	0	1387.471589	0
Sacramento	2027 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	2	Gasoline	0.25917	0.261957805	0.28535	1.610021154	0.011208	6.790676522	0.0036694	0.0027732	0.00009729	0.0001343	381384.2032	0	46028.00097	0
Sacramento	2027 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	111206.2451	0
Sacramento	2027 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	25	Gasoline	4.92E-05	0.00004973	5.41E-05	0.003595	0.00005463	0.013762	1.62E-07	1.22E-07	1.86E-07	2.58E-07	730.3630444	0	13.99063753	0
Sacramento	2027 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	5	Gasoline	0.355494488	0.359031183	0.391180657	1.321426671	0.0087542	8.630112218	0.00547059	0.004128	0.000113333	0.000156402	445590.316	0	22346.647	0
Sacramento	2027 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	59844.27677	0
Sacramento	2027 Lawn and Garden - Misc - Other	Aggregate	15	Gasoline	0.001248	0.001261	0.001373	0.0697	0.000457	0.18118203	0.00000323	0.000002437	0.00000283	0.00000391	11004.72677	0	1377.926357	0
Sacramento	2027 Lawn and Garden - Misc - Other	Aggregate	15	Diesel	0.00000242	0.00000291	0.00000348	0.0000171	0.0000205	0.00283523	0.00000072	0.000000544	2.69E-08	2.32E-08	92.22087419	0	0.387787728	0
Sacramento	2027 Lawn and Garden - Misc - Other	Aggregate	25	Gasoline	0.0002208	0.0002228	0.000243	0.02046	0.0001519	0.0429	0.000000766	0.000000579	0.000000721	0.000000996	2831.482145	0	118.8261532	0
Sacramento	2027 Lawn and Garden - Misc - Other	Aggregate	25	Diesel	0.000000444	0.000000534	0.000000638	0.00000182	0.00000337	0.000446004	0.000000113	8.57E-08	4.23E-09	3.65E-09	14.50706883	0	0.0459	0
Sacramento	2027 Lawn and Garden - Misc - Other	Aggregate	5	Gasoline	0.000629	0.000635	0.000692	0.0316	0.000247	0.0715	0.000001175	0.000000887	0.00000121	0.00000167	4603.446239	0	1121.993103	0
Sacramento	2027 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Gasoline	0.00473	0.004775	0.005205	0.262983251	0.003845	0.771496584	0.00001757	0.000013361	1.15E-05	1.59E-05	44805.07005	0	1202.890775	0
Sacramento	2027 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Diesel	0.0006202	0.0007456	0.0008924	0.004391	0.005244	0.726578875	0.000184	0.00013974	0.000006897	0.000005942	23633.26442	0	836.6493375	0
Sacramento	2027 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	72.92423176	0
Sacramento	2027 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Gasoline	0.158806473	0.160441398	0.174797748	9.647631664	0.082352	20.01255428	0.000473496	0.000358376	0.000339985	0.000468758	1332544.88	0	14020.09329	0
Sacramento	2027 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Diesel	0.001877	0.002253	0.002693	0.007691	0.014244	1.880734419	0.000479	0.0003613	0.00001787	0.0000154	61174.21705	0	1705.151139	0
Sacramento	2027 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	832.9726208	0
Sacramento	2027 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	5	Gasoline	0.000551	0.0005565	0.000606	0.0194869	0.0002261	0.04561	1.06E-06	8.02E-07	7.62E-07	1.05E-06	2912.890866	0	195.7956521	0
Sacramento	2027 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	11.86994513	0
Sacramento	2027 Lawn and Garden - Misc - Snowblowers	Aggregate	15	Gasoline	0.000823	0.000831	0.000905	0.06201	0.0003998	0.1082	0.000001973	0.000001491	0.000002134	0.00000294	7775.091706	0	1898.806183	0
Sacramento	2027 Lawn and Garden - Misc - Snowblowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	189.0925736	0
Sacramento	2027 Lawn and Garden - Misc - Snowblowers	Aggregate	25	Gasoline	0.0000026	0.000002623	0.000002867	0.0002651	0.000001872	0.0004636	8.44E-09	6.38E-09	8.74E-09	1.21E-08	33.16884641	0	3.911031895	0
Sacramento	2027 Lawn and Garden - Misc - Snowblowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0.389480029	0
Sacramento	2027 Lawn and Garden - Misc - Snowblowers	Aggregate	5	Gasoline	0.0003708	0.0003743	0.0004077	0.01948	0.0001589	0.0445	7.36E-07	5.56E-07	0.000000743	0.000001025	2849.327238	0	1427.526789	0
Sacramento	2027 Lawn and Garden - Misc - Snowblowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	142.1602251	0
Sacramento	2027 Lawn and Garden - Misc - Tillers	Aggregate	15	Gasoline	0.0009154	0.0009248	0.001007	0.058464275	0.0005634	0.148392792	0.000002433	1.84E-06	2.36E-06	3.25E-06	9079.943016	0	1506.590435	0
Sacramento	2027 Lawn and Garden - Misc - Tillers	Aggregate	2	Gasoline	0.00387534	0.00390739	0.00425737	0.0112512	0.000069054	0.065391	6.37E-06	4.81E-06	1.04E-06	1.44E-06	3603.365684	0	2038.696697	0
Sacramento	2027 Lawn and Garden - Misc - Tillers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	634.4649976	0
Sacramento	2027 Lawn and Garden - Misc - Tillers	Aggregate	5	Gasoline	0.0005682	0.0005734	0.0006253	0.028992	0.00018696	0.06767	9.76E-07	7.38E-07	1.13E-06	1.56E-06	4296.729561	0	1012.718375	0
Sacramento	2027 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	15	Gasoline	0.00005166	5.21E-05	0.00005679	0.002855	0.00001995	0.007375	1.13E-07	8.51E-08	1.18E-07	1.63E-07	449.0985685	0	55.32274427	0
Sacramento	2027 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	2	Gasoline	0.380611896	0.384437871	0.418823319	2.114786407	0.02265	11.11623468	0.0032993	0.0024992	0.00015053	0.00020772	588085.6914	0	123709.5593	0
Sacramento	2027 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	186817.2309	0
Sacramento	2027 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	25	Gasoline	0.00005755	0.00005812	0.00006334	0.002888	0.00002412	0.01137	1.28E-07	9.65E-08	1.54E-07	2.13E-07	600.7348743	0	25.46602474	0
Sacramento	2027 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	5	Gasoline	0.013986	0.014121	0.015385	0.252823381	0.0015808	0.8587855	0.00016918	0.00012788	0.000012393	0.000017117	48667.52882	0	3988.945495	0
Sacramento	2027 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	3012.132419	0
Sacramento	2027 Lawn and Garden - Misc - Wood Splitters	Aggregate	15	Gasoline	0.017651156	0.0177795	0.0193866	0.919820316	0.0090796	2.344685426	6.63E-05	0.00005014	0.000037084	0.000051155	143661.4139	0	4939.839586	0
Sacramento	2027 Lawn and Garden - Misc - Wood Splitters	Aggregate	2	Gasoline	0.00034412	0.00034814	0.00037933	0.0092978	0.0001912	0.021509	5.90E-07	4.45E-07	3.69E-07	5.09E-07	1393.574049	0	132.302727	0
Sacramento	2027 Lawn and Garden - Misc - Wood Splitters	Aggregate	25	Gasoline	1.05E-05	0.000010552	1.16E-05	0.00063319	4.60E-06	0.00151769	4.07E-08	3.08E-08	2.43E-08	3.35E-08	95.22281347	0	1.075627029	0
Sacramento	2027 Lawn and Garden - Misc - Wood Splitters	Aggregate	5	Gasoline	0.00110494	0.00111499	0.00121543	0.052675	0.00039175	0.124012982	3.39E-06	2.57E-06	2.05E-06	2.82E-06	7855.315506	0	475.9671265	0
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	100	Gasoline	0.001728205	0.001589603	0.001901784	0.092066199	0.004376468	1.738964344	0.000121245	9.16E-05	1.68E-05	2.51E-05	71510.8	18965.4	39.23	1327578
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	15	Gasoline	0.120581645	0.121787461	0.132692744	7.863102599	0.074159109	15.49992561	0.00020059	0.000265486	0.000269619	0.000372174	1054666.609	0	9833.085935	0
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	15	Diesel	1.96E-05	2.36E-05	2.82E-05	0.000122296	0.000147801	0.020204347	4.13E-06	5.46E-06	1.92E-07	1.65E-07	657.1821561	0	2.483856844	0
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	120875.2969	0
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	175	Gasoline	0.000181291	0.000166752	0.0001995	0.008098251	0.000595821	0.217793691	1.56E-05	1.18E-05	2.16E-06	3.07E-06	8752.7	1262.9	2.65	169228.6
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	25	Gasoline	0.001692306	0.001709229	0.00186228	0.247788012	0.002496082	0.377174447	4.63E-06	6.13E-06	7.33E-06	1.01E-05	28811.02216	0	101.771682	0
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	25	Diesel	8.15E-05	9.81E-05	0.000117186	0.000331961	0.000616896	0.080802125	1.64E-05	2.17E-05	7.67E-07	6.61E-07	2628.232202	0	4.981211062	0
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	640.4185948	0
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	5	Gasoline	0.025550095	0.025805596	0.02811632	1.047195354	0.007640749	2.472291179	2.93E-05	3.88E-05	4.02E-05	5.54E-05	156912.7984	0	3706.186525	0
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	45559.08487	0
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	50	Gasoline	0.000582518	0.0005358	0.000641026	0.049637162	0.000782561	0.271186269	1.87E-05	1.41E-05	3.30E-06	4.66E-06	13300.6	5850.95	12.1	204783.25
Sacramento	2027 Light Commercial - Misc - Air Compressors	Aggregate	50	Diesel	0.000520056	0.000618909	0.00074888	0.005805004	0.004362884	0.694949101	0.000120275	0.000110653	8.74E-06	5.69E-06	22604.45	22162.8	27.23	820023.6
Sacramento	2027 Light Commercial - Misc - Gas Compressors	Aggregate	100	Nat Gas	0	0	0.00022022	0.11431587	0.008677453	2.7337259	0	0	0	0	151274.25	15625.65	1.84	1375057.2
Sacramento	2027 Light Commercial - Misc - Gas Compressors	Aggregate	175	Nat Gas	0	0	6.14E-05	0.023252784	0.002322046	0.71146097	0	0	0	0	38846.95	2518.5	0.29	367701
Sacramento	2027 Light Commercial - Misc - Gas Compressors	Aggregate	300	Nat Gas	0	0	4.72E-05	0.026756635	0.002244279	0.73325204	0	0	0	0	40233.95	2014.8	0.24	423108
Sacramento	2027 Light Commercial - Misc - Gas Compressors	Aggregate	50	Nat Gas	0	0	4.04E-05	0.00714849	0.00146632	0.48647266	0	0	0	0	25849.3	7559.15	0.89	241892.8
Sacramento	2027 Light Commercial - Misc - Gas Compressors	Aggregate	600	Nat Gas	0	0	6.65E-05	0.037682259	0.003160693	1.0326634	0	0	0	0	56662.6	1762.95	0.2	595877.1
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	100	Gasoline	0.000590246	0.000542908	0.000649529	0.027470461	0.003654916	1.165968321	8.13E-05	6.14E-05	1.13E-05	1.61E-05	45818.45	8836.65	76.91	733441.95
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	100	Nat Gas	0	0	2.90E-06	0.002383484	0.000224499	0.075597088	0	0	0	0	4117.2	657	5.72	54531
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	15	Gasoline	0.111956986	0.113076555	0.123201833	6.242334552	0.058295006	15.88433099	0.000204921	0.000271219	0.000248482	0.000342997	972887.2648	0	22363.19617	0
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	15	Diesel	0.001024269	0.001231971	0.001472403	0.007150033	0.008660434	1.179639555	0.000243552	0.000322348	1.12E-05	9.64E-06	38369.86523	0	247.5521607	0
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	175	Gasoline	6.07E-05	5.58E-05	6.68E-05	0.006147339	0.000630626	0.188470242	1.35E-05	1.02E-05	1.87E-06	2.63E-06	7504.4	835.85	7.27	122034.1
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	175	Nat Gas	0	0	3.21E-06	0.002854285	0.000303566	0.11024083	0	0	0	0	5949.5	543.85	4.76	79402.1
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	2	Gasoline	0.344086092	0.347526953	0.378645755	5.894489188	0.100586762	12.80696026	0.000407593	0.000539461	0.000226846	0.00031313	867929.8511	0	53990.42381	0
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	16157.85212	0
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	25	Gasoline	0.003937337	0.003976711	0.004332799	0.3700263	0.002253296	0.571602017	7.14E-06	9.45E-06	1.11E-05	1.53E-05	43519.37048	0	428.8269032	0
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	25	Diesel	0.001489885	0.001792003	0.002141733	0.006116875	0.011362779	1.48665204	0.000304322	0.000402779	1.41E-05	1.22E-05	48355.98992	0	181.066738	0
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	5	Gasoline	0.032237148	0.032559519	0.035475014	1.501341166	0.007327682	3.170257058	4.23E-05	5.60E-05	5.45E-05	7.53E-05	210433.4051	0	12362.43023	0
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	50	Gasoline	0.002913815	0.002680127	0.003206476	0.207384886	0.006237202	2.354016277	0.000162284	0.000122614	2.86E-05	3.57E-05	101820.4	45730.85	398.14	1463387.2
Sacramento	2027 Light Commercial - Misc - Generator Sets	Aggregate	50	Diesel	0.000955146	0.001136703	0.00137541	0.01243328	0.011203453	1.915514476	0.000270248	0.000248628	2.42E-05	1.57E-05	62305.5	44621.25	132.17	1472501.25
Sacramento	2027 Light Commercial - Misc - Pressure Washers	Aggregate	15	Gasoline	0.040625925	0.041032184	0.044706353	2.9779431	0.020706766	5.817693682	7.42E-05	9.83E-05	0.000101063	0.000139504	396813.2091	0	13158.43782	0
Sacramento	2027 Light Commercial - Misc - Pressure Washers	Aggregate	15	Diesel	9.74E-06	1.17E-05	1.40E-05	6.80E-05	8.23E-05	0.011226787	2.31E-06	3.06E-06	1.07E-07	9.18E-08	365.1711282	0	11.46263877	0
Sacramento	2027 Light Commercial - Misc - Pressure Washers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	24957.20841	0
Sacramento	2027 Light Commercial - Misc - Pressure Washers	Aggregate	2	Gasoline	2.39E-05	2.41E-05	2.63E-05	0.000497726	8.14E-06	0.001122928	1.36E-08	1.79E-08	1.91E-08	2.64E-08	74.16504412	0	9.613995599	0
Sacramento	2027 Light Commercial - Misc - Pressure Washers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	18.23457276	0
Sacramento	2027 Light Commercial - Misc - Pressure Washers	Aggregate	25	Gasoline	0.00063836	0.000644743	0.000702477	0.052241903	0.000313936	0.102058738	1.30E-06	1.72E-06	1.77E-06	2.44E-06	6951.571028	0	87.30546195	0
Sacramento	2027 Light Commercial - Misc - Pressure Washers	Aggregate	25	Diesel	3.77E-06	4.53E-06	5.42E-06	1.55E-05	2.87E-05	0.003765749	7.65E-07	1.01E-06	3.57E-08	3.08E-08	122.4876579	0	2.637232942	0
Sacramento	2027 Light Commercial - Misc - Pressure Washers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	165.5896117	0
Sacramento	2027 Light Commercial - Misc - Pressure Washers	Aggregate	5	Gasoline	0.0754962	0.076251162	0.083078961	3.799357247	0.030719888	8.57207545	0.000103495	0.000136978	0.000141126	0.000194807	552227.0644	0	34385.61382	0

Sacramento	2027 Portable Equipment - Non-Rental Generator	Aggregate	75	Diesel	0.000875482	0.001059334	0.001260695	0.013010564	0.009345722	1.752545168	0.000197605	0.000181797	1.62E-05	1.43E-05	57004.63469	55051.70261	38.84592721	3488481.998
Sacramento	2027 Portable Equipment - Non-Rental Generator	Aggregate	750	Diesel	0.00069398	0.00077365	0.000920707	0.00391276	0.003886719	1.810228165	0.000206577	0.000190051	1.68E-05	1.48E-05	58880.8763	5161.09712	3.641805676	3603301.347
Sacramento	2027 Portable Equipment - Non-Rental Generator	Aggregate	9999	Diesel	0.003407053	0.004122534	0.004906156	0.024611486	0.047901939	11.56459258	0.000978769	0.000900468	0.000107091	9.46E-05	376158.8503	18924.02277	13.35328748	23019591.03
Sacramento	2027 Portable Equipment - Non-Rental Other	Aggregate	100	Diesel	0.000143843	0.00017405	0.000207133	0.006100644	0.002352024	0.956626962	0.000166319	0.000153013	8.86E-06	7.83E-06	31115.98576	21690.57776	65.55250217	1904188.26
Sacramento	2027 Portable Equipment - Non-Rental Other	Aggregate	175	Diesel	0.000548083	0.000663181	0.00078924	0.022963418	0.004456806	4.128944569	0.00017074	0.000157081	3.83E-05	3.38E-05	134301.2329	63063.34645	190.5878304	8216760.386
Sacramento	2027 Portable Equipment - Non-Rental Other	Aggregate	300	Diesel	0.000929998	0.000354528	0.000421918	0.002833792	0.002639921	1.353538024	0.000112205	0.000103229	1.25E-05	1.11E-05	44026.22084	11648.64361	35.20412154	2694248.98
Sacramento	2027 Portable Equipment - Non-Rental Other	Aggregate	600	Diesel	0.000322883	0.000390689	0.000464952	0.003281331	0.002991749	1.58407918	0.000112828	0.000103802	1.47E-05	1.30E-05	51524.98014	7631.869953	23.06476928	3153146.523
Sacramento	2027 Portable Equipment - Non-Rental Other	Aggregate	75	Diesel	0.000177352	0.000214596	0.000255387	0.0042343	0.003294862	0.66389515	5.85E-05	5.38E-05	6.15E-06	5.43E-06	21594.36527	20485.54566	61.9160865	1321498.768
Sacramento	2027 Portable Equipment - Non-Rental Other	Aggregate	750	Diesel	6.90E-05	8.34E-05	9.93E-05	0.001026286	0.000383906	0.548624572	2.18E-05	2.01E-05	5.08E-06	4.49E-06	17844.98562	1606.709464	4.855740902	1092049.996
Sacramento	2027 Portable Equipment - Non-Rental Other	Aggregate	9999	Diesel	0.002595093	0.003140063	0.003736934	0.029625928	0.050487151	15.14857415	0.000692394	0.000637002	0.000140336	0.000123956	492734.1968	10041.93415	30.34838064	30153589.87
Sacramento	2027 Portable Equipment - Non-Rental Pump	Aggregate	100	Diesel	0.000112814	0.000136505	0.000162452	0.003680546	0.001820171	0.579768325	0.000115933	0.000106659	5.37E-06	4.74E-06	18857.99131	13686.22636	41.27379766	1154042.361
Sacramento	2027 Portable Equipment - Non-Rental Pump	Aggregate	175	Diesel	0.000228098	0.000275999	0.000328462	0.007980982	0.00237579	1.427686943	8.04E-05	7.39E-05	1.32E-05	1.17E-05	46438.04571	22944.55595	69.19430785	2841844.13
Sacramento	2027 Portable Equipment - Non-Rental Pump	Aggregate	300	Diesel	5.28E-05	6.39E-05	7.60E-05	0.00066148	0.000448697	0.344963146	1.45E-05	1.34E-05	3.20E-06	2.82E-06	11220.53711	3220.288555	9.711481803	686657.1803
Sacramento	2027 Portable Equipment - Non-Rental Pump	Aggregate	50	Diesel	1.69E-05	2.05E-05	2.43E-05	0.000100534	8.87E-05	0.010102833	5.70E-06	5.24E-06	1.02E-07	9.03E-08	358.8624167	402.5360693	1.219353225	19754.23418
Sacramento	2027 Portable Equipment - Non-Rental Pump	Aggregate	600	Diesel	0.000270664	0.000327504	0.000389756	0.003467371	0.0010222	1.817507206	5.21E-05	4.79E-05	1.68E-05	1.49E-05	59117.64	8453.257456	25.49263973	3617790.449
Sacramento	2027 Portable Equipment - Non-Rental Pump	Aggregate	75	Diesel	0.000157953	0.000191123	0.000227452	0.003786373	0.003041385	0.599021158	6.59E-05	6.06E-05	5.55E-06	4.90E-06	19484.22382	18910.19526	57.05495559	1192365.575
Sacramento	2027 Portable Equipment - Non-Rental Compressor	Aggregate	100	Diesel	2.56E-05	3.10E-05	3.69E-05	0.000980409	0.000272312	0.142933463	2.34E-05	2.15E-05	1.32E-06	1.17E-06	4640.163975	3378.535629	6.009676127	284512.3896
Sacramento	2027 Portable Equipment - Non-Rental Compressor	Aggregate	175	Diesel	0.000145408	0.000175943	0.000209387	0.007571221	0.000643397	1.39401774	2.28E-05	2.10E-05	1.29E-05	1.14E-05	45342.89528	20946.9209	37.63199199	2774824.797
Sacramento	2027 Portable Equipment - Rental Compressor	Aggregate	300	Diesel	0.000110548	0.000133763	0.000159189	0.001859016	0.000223693	0.993870678	1.65E-05	1.52E-05	9.21E-06	8.13E-06	32327.40359	8108.48551	14.56722271	1978322.746
Sacramento	2027 Portable Equipment - Rental Compressor	Aggregate	600	Diesel	0.000313646	0.000379512	0.00045165	0.003807787	0.000502772	1.957422137	3.57E-05	3.28E-05	1.81E-05	1.60E-05	63668.62088	7432.778384	13.35328748	3896294.38
Sacramento	2027 Portable Equipment - Rental Compressor	Aggregate	75	Diesel	2.43E-05	2.95E-05	3.51E-05	0.00057344	0.000434958	0.089624946	3.67E-06	3.37E-06	8.30E-07	7.33E-07	2915.210045	2702.828503	4.855740902	178400.5427
Sacramento	2027 Portable Equipment - Rental Compressor	Aggregate	750	Diesel	0.000164616	0.000199185	0.000237047	0.002177803	0.000896556	1.139469567	4.72E-05	4.34E-05	1.06E-05	9.32E-06	37063.26526	3378.535629	6.069676127	2268140.728
Sacramento	2027 Portable Equipment - Rental Generator	Aggregate	100	Diesel	0.000719457	0.000870542	0.001036017	0.020726265	0.00512918	2.831016347	0.004681831	0.004419284	2.62E-05	2.32E-05	92083.81935	66805.20293	40.05986244	5635204.012
Sacramento	2027 Portable Equipment - Rental Generator	Aggregate	175	Diesel	0.000886049	0.001072119	0.00127591	0.029422142	0.002742262	4.818905874	0.000106862	9.83E-05	4.46E-05	3.94E-05	156743.446	70018.11246	46.12953857	9592144.441
Sacramento	2027 Portable Equipment - Rental Generator	Aggregate	300	Diesel	0.000661656	0.000800603	0.000952784	0.005871817	0.001358096	2.607515056	6.88E-05	6.31E-05	2.41E-05	2.13E-05	84814.04414	25796.1467	16.99509316	5190319.485
Sacramento	2027 Portable Equipment - Rental Generator	Aggregate	600	Diesel	0.0012327	0.001491566	0.001775087	0.011207565	0.001908181	5.34313451	0.000130052	0.000119646	4.95E-05	4.37E-05	173794.9107	25796.1467	16.99509316	10635633.76
Sacramento	2027 Portable Equipment - Rental Generator	Aggregate	75	Diesel	0.000482791	0.000584177	0.000695218	0.008393921	0.006058607	1.202000843	5.09E-05	4.68E-05	1.11E-05	9.84E-06	39097.20571	3685.163814	24.27870451	2392610.689
Sacramento	2027 Portable Equipment - Rental Generator	Aggregate	750	Diesel	0.000516764	0.000625285	0.000744141	0.002721811	0.003963043	1.259238978	0.000198643	0.000182751	1.17E-05	1.03E-05	40958.97741	3685.163814	2.427870451	2506544.532
Sacramento	2027 Portable Equipment - Rental Generator	Aggregate	9999	Diesel	0.000398	0.00048158	0.000573121	0.003850557	0.007209163	1.529075902	0.000159561	0.000146796	1.42E-05	1.25E-05	49735.90115	3685.163814	2.427870451	3043661.217
Sacramento	2027 Portable Equipment - Rental Other	Aggregate	100	Diesel	6.68E-05	8.09E-05	9.62E-05	0.002010041	0.000456237	0.266376178	4.54E-05	4.17E-05	2.47E-06	2.18E-06	8664.356844	6374.374144	4.855740902	530227.99
Sacramento	2027 Portable Equipment - Rental Other	Aggregate	175	Diesel	0.000281802	0.00034098	0.000405794	0.0062792	0.001855562	0.964926096	6.51E-05	5.99E-05	8.94E-06	7.90E-06	31385.92981	12748.74829	9.711481803	1920707.881
Sacramento	2027 Portable Equipment - Rental Other	Aggregate	75	Diesel	0.000155012	0.000187564	0.000223217	0.002430104	0.001737532	0.334738206	2.04E-05	1.88E-05	3.10E-06	2.74E-06	10887.95285	11155.15475	8.497546578	666304.1998
Sacramento	2027 Portable Equipment - Rental Other	Aggregate	100	Diesel	0.000262139	0.000317188	0.00037748	0.008182396	0.002080743	1.116883595	0.000197076	0.00018131	1.03E-05	9.14E-06	36328.6165	27350.42595	26.70657496	2223182.823
Sacramento	2027 Portable Equipment - Rental Pump	Aggregate	175	Diesel	0.000233044	0.000279563	0.000332704	0.006116672	0.001763095	0.977732894	5.16E-05	4.74E-05	9.06E-06	8.00E-06	31802.49359	16161.61533	15.78115793	1946200.111
Sacramento	2027 Portable Equipment - Rental Pump	Aggregate	300	Diesel	0.000342293	0.000414175	0.000492902	0.002575469	0.00172212	1.158567505	8.37E-05	7.70E-05	1.07E-05	9.48E-06	37684.45949	11188.81062	10.92541703	2306155.618
Sacramento	2027 Portable Equipment - Rental Pump	Aggregate	600	Diesel	9.43E-05	0.000114088	0.000135775	0.000860483	0.000111101	0.410709115	8.48E-06	7.80E-06	3.80E-06	3.36E-06	13359.04119	2486.402359	2.427870451	817526.0655
Sacramento	2027 Portable Equipment - Rental Pump	Aggregate	75	Diesel	0.000169678	0.00020531	0.000244336	0.003964889	0.003184633	0.618515668	8.24E-05	7.58E-05	5.73E-06	5.06E-06	20118.31726	17404.81651	16.99509316	1233169.851
Sacramento	2027 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	120	Gasoline	0.003948956	0.003988446	0.004345585	0.084486684	0.002088942	1.623585164	0.000205331	0.000155139	2.02E-05	2.34E-05	66256.34667	0	2059.314021	0
Sacramento	2027 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	15	Gasoline	0.001803419	0.001821453	0.001984552	0.023957105	0.000495446	0.350009903	5.54E-05	4.18E-05	4.84E-06	5.27E-06	14693.41444	0	687.9258873	0
Sacramento	2027 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	25	Gasoline	0.001040971	0.001051379	0.001145523	0.010014663	0.000190271	0.136080527	2.45E-05	1.85E-05	1.94E-06	2.09E-06	5797.932674	0	321.3372597	0
Sacramento	2027 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	50	Gasoline	0.008625722	0.00871198	0.009492082	0.169935189	0.003730524	2.962548652	0.000372643	0.000281552	3.61E-05	4.34E-05	121578.9187	0	4876.969525	0
Sacramento	2027 Recreational - Golf Carts	Aggregate	120	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Recreational - Golf Carts	Aggregate	15	Gasoline	0.001872961	0.001891691	0.00206108	0.052749067	0.00147926	0.640767814	0.000142646	0.000107777	5.38E-06	9.58E-06	27234.59376	0	726.4129158	0
Sacramento	2027 Recreational - Golf Carts	Aggregate	25	Gasoline	0.000554951	0.000560501	0.000610689	0.015629354	0.000438299	0.189857131	4.23E-05	3.19E-05	1.59E-06	2.83E-06	8069.509248	0	121.0688193	0
Sacramento	2027 Recreational - Golf Carts	Aggregate	5	Gasoline	4.32E-05	4.36E-05	4.75E-05	0.001227456	3.42E-05	0.005780612	3.29E-06	2.49E-06	1.71E-07	1.17E-07	330.4626246	0	17.29554561	0
Sacramento	2027 Recreational - Golf Carts	Aggregate	50	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Recreational - Minibikes	Aggregate	120	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Recreational - Minibikes	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Recreational - Minibikes	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Recreational - Minibikes	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Recreational - Minibikes	Aggregate	50	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Recreational - Off-Road Motorcycles Active	Aggregate	120	Gasoline	0.006873309	0.006942041	0.007563657	0.036572132	0.000257023	0.277920619	0.000100302	7.58E-05	4.76E-06	5.18E-06	13403.81299	0	453.3584294	0
Sacramento	2027 Recreational - Off-Road Motorcycles Active	Aggregate	15	Gasoline	0.000627044	0.000633316	0.000690024	0.007478004	9.19E-05	0.053170108	1.61E-05	1.22E-05	1.49E-06	1.11E-06	2503.018691	0	122.5292979	0
Sacramento	2027 Recreational - Off-Road Motorcycles Active	Aggregate	25	Gasoline	0.00188154	0.001912476	0.002083725	0.004462458	2.15E-05	0.0208885	2.30E-05	1.73E-05	7.06E-07	5.62E-07	1287.437774	0	54.24267628	0
Sacramento	2027 Recreational - Off-Road Motorcycles Active	Aggregate	5	Gasoline	0.001996613	0.002016579	0.002197151	0.013723325	6.19E-05	0.074466478	5.73E-05	4.33E-05	2.02E-06	1.71E-06	3841.601816	0	184.8732088	0
Sacramento	2027 Recreational - Off-Road Motorcycles Active	Aggregate	50	Gasoline	0.009073492	0.009164226	0.009984825	0.029340317	0.000233498	0.212085916	0.000114537	8.65E-05	5.10E-06	4.52E-06	10810.79517	0	382.4586386	0
Sacramento	2027 Recreational - Snowmobiles Active	Aggregate	120	Gasoline	0	0	0	0	0	0	0	0	0	1.26E-08	0	0	0	0
Sacramento	2027 Recreational - Snowmobiles Active	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Recreational - Snowmobiles Active	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	1.05E-08	0	0	0	0
Sacramento	2027 Recreational - Snowmobiles Active	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2027 Recreational - Snowmobiles Active	Aggregate	50	Gasoline	0	0	0	0	0	0	0	0	0	8.18E-08	0	0	0	0
Sacramento	2027 Transport Refrigeration Unit - Instate Genset	Aggregate	25	Diesel	0.00023519	0.00240279	0.000338559	0.000261099	0.00364926	0.583335807	0.000092324	8.50E-05	915.7	1.31E-08	18974.03	40309.15	51.53	0
Sacramento	2027 Transport Refrigeration Unit - Instate Genset	Aggregate	50	Diesel	0.000105845	0.0016186	0.00022804	0.00017987	0.001648267	0.286707915	0.000022149	2.04E-05	450.16	6.43E-09	9328.61	18055.58	23.03	0
Sacramento	2027 Transport Refrigeration Unit - Instate Trailer	Aggregate	25	Diesel	0.00471195	0.0480767	0.00678325	0.00523424	0.04773896	7.629084142	0.001114233	0.001025524	11976.65	1.71E-07	248149.47	378192.1	213.89	0
Sacramento	2027 Transport Refrigeration Unit - Instate Trailer	Aggregate	50	Diesel	0.006773726	0.0662593	0.009745185	0.007520974	0.06058172	11.43360385	0.000676108	0.00062226	17949.28	2.56E-07	371898.21	498007.47	281.69823	0
Sacramento	2027 Transport Refrigeration Unit - Instate Truck	Aggregate	23	Diesel	0.000479478	0.00483226	0.00068157	0.000525872	0.00610411	0.9755183	0.000314332	0.000289199	1531.35	2.19E-08	31730.46	57235.52	105.18	0
Sacramento	2027 Transport Refrigeration Unit - Out-Of-State Genset	Aggregate	25	Diesel	0.000212165	0.002167647	0.000305677	0.000235795	0.003199433	0.511506973	8.25E-05	7.60E-05	802.93837	1.15E-08	16637.67	35345.71	284.9729	0
Sacramento	2027 Transport Refrigeration Unit - Out-Of-State Genset	Aggregate	50	Diesel	0.00010676	0.0010886	0.00015374	0.00011849	0.00102879	0.183428293	2.23E-05	2.05E-05	287.88	4.11E-09	5966.33	11430.12	92.08	0
Sacramento	2027 Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	25	Diesel	0.004572902	0.046683127	0.006580523	0.005083258	0.047278563	7.557452377	0.001145093	0.001054144	11864.22	1.69E-07	245819.52	374641.09	1377.25	0
Sacramento	2027 Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	50	Diesel	0.0020821	0.02128	0.0029997	0.0023166	0.01678	3.00122109	0.00027714	0.00025502	4711.48	6.73E-08	97620.03	130970	483.4	0
Sacramento	2027 Transport Refrigeration Unit - Railcar TRU	Aggregate	25	Diesel	0.000200219	0.00204358	0.000288357	0.000222486	0.00211103	0.337305542	5.59E-05	5.14E-05	529.45	7.56E-09	10971.46	16721.1	51	0
Sacramento	2027 Transport Refrigeration Unit - Railcar TRU	Aggregate	50	Diesel	4.25E-05	0.000434215	6.13E-05	4.73E-05	0.000372786	0.073598453	3.24E-06	2.98E-06	115.48	1.65E-09	2393.92	3250.19	9.89526	0

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	Equipment Type	Horsepower	Gas				Diesel				Natural Gas				
		HP	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	Fuel (Gal/Yr)	Population	Hrs/Yr	Gal/Hr	
Air Compressors25	Air Compressors	25	29193.63728	103.1171388	0	0	2641.280314	5.006156793	0	0	0	0	0	0	
Air Compressors50	Air Compressors	50	13012.25	11.83	5715.9	2.276500639	22089.8	26.62	21673.7	1.019198383	0	0	0	0	
Air Compressors75	Air Compressors	75	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors100	Air Compressors	100	69919.4	38.39	18549.3	3.769382133	0	0	0	0	0	0	0	0	
Air Compressors175	Air Compressors	175	8555.6	2.58	1244.65	6.873900293	0	0	0	0	0	0	0	0	
Air Compressors300	Air Compressors	300	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors600	Air Compressors	600	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors750	Air Compressors	750	0	0	0	0	0	0	0	0	0	0	0	0	
Air Compressors9999	Air Compressors	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Aerial Lifts25	Aerial Lifts	25	2334.222552	13.82769861	0	0	18.07089124	8.429661302	0	0	0	0	0	0	
Aerial Lifts50	Aerial Lifts	50	6602.85	11.35	4098.95	1.610863758	10014.00724	50.0289303	11678.4384	0.857478277	0	0	0	0	
Aerial Lifts75	Aerial Lifts	75	0	0	0	0	19393.87584	54.55206419	15926.86218	1.217683409	0	0	0	0	
Aerial Lifts100	Aerial Lifts	100	11749.35	11.35	4098.95	2.866429207	3943.045888	9.422324812	2690.719691	1.465424251	0	0	0	0	
Aerial Lifts175	Aerial Lifts	175	0	0	0	0	5563.805845	6.670171515	2986.766963	1.862818865	0	0	0	0	
Aerial Lifts300	Aerial Lifts	300	0	0	0	0	116.8552819	0.07898693	31.89620679	3.663610619	0	0	0	0	
Aerial Lifts600	Aerial Lifts	600	0	0	0	0	69.73006517	0.031594772	11.83610861	5.891299875	0	0	0	0	
Bore/Drill rigs25	Bore/Drill rigs	25	408.0339568	4.588558038	0	0	25.21118275	3.966556333	0	0	0	0	0	0	
Bore/Drill rigs50	Bore/Drill rigs	50	240.9	0.85	83.95	2.869565217	1550.467183	2.690162896	1269.066488	1.221738339	0	0	0	0	
Bore/Drill rigs75	Bore/Drill rigs	75	0	0	0	0	5624.130672	6.266882113	3030.664795	1.855741579	0	0	0	0	
Bore/Drill rigs100	Bore/Drill rigs	100	2730.2	3.96	419.75	6.504347826	4338.833605	3.31413503	1705.161037	2.544530112	0	0	0	0	
Bore/Drill rigs175	Bore/Drill rigs	175	941.7	0.98	98.55	9.555555556	29866.70292	13.13240138	8494.68728	3.515927301	0	0	0	0	
Bore/Drill rigs300	Bore/Drill rigs	300	0	0	0	0	35110.00021	10.27550412	6341.224667	5.536785409	0	0	0	0	
Bore/Drill rigs600	Bore/Drill rigs	600	0	0	0	0	50414.84964	8.829207472	5114.552263	9.857138425	0	0	0	0	
Bore/Drill rigs750	Bore/Drill rigs	750	0	0	0	0	20903.78195	2.297452069	1302.861764	16.04451257	0	0	0	0	
Bore/Drill rigs9999	Bore/Drill rigs	9999	0	0	0	0	6728.02511	0.5581132	324.9989687	20.70168141	0	0	0	0	
Cement and Mortar Mixers25	Cement and Mortar Mixers	25	182.2626025	2.645757886	0	0	7.20948087	2.791979678	0	0	0	0	0	0	
Cement and Mortar Mixers50	Cement and Mortar Mixers	50	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers75	Cement and Mortar Mixers	75	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers100	Cement and Mortar Mixers	100	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers175	Cement and Mortar Mixers	175	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers300	Cement and Mortar Mixers	300	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers600	Cement and Mortar Mixers	600	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers750	Cement and Mortar Mixers	750	0	0	0	0	0	0	0	0	0	0	0	0	
Cement and Mortar Mixers9999	Cement and Mortar Mixers	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws25	Concrete/Industrial Saws	25	6071.605682	29.10401566	0	0	4.929303326	1.030908029	0	0	0	0	0	0	
Concrete/Industrial Saws50	Concrete/Industrial Saws	50	5482.3	3.24	1981.95	2.76611418	1722.8	2.14	1237.35	1.392330383	0	0	0	0	
Concrete/Industrial Saws75	Concrete/Industrial Saws	75	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws100	Concrete/Industrial Saws	100	5347.25	1.86	1135.15	4.710610932	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws175	Concrete/Industrial Saws	175	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws300	Concrete/Industrial Saws	300	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws600	Concrete/Industrial Saws	600	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws750	Concrete/Industrial Saws	750	0	0	0	0	0	0	0	0	0	0	0	0	
Concrete/Industrial Saws9999	Concrete/Industrial Saws	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Cranes25	Cranes	25	0	0	0	0	103.8358661	0.065607706	10.26911472	10.11147201	0	0	0	0	
Cranes50	Cranes	50	810.3	0.98	412.45	1.96460177	352.0731605	0.853761703	167.2945548	2.10451058	0	0	0	0	
Cranes75	Cranes	75	0	0	0	0	1052.966762	2.527857424	465.4189476	2.262406306	0	0	0	0	
Cranes100	Cranes	100	2711.95	1.97	824.9	3.287610619	2435.98323	4.960751616	970.8482652	2.509128684	0	0	0	0	
Cranes175	Cranes	175	167.9	0	29.2	5.75	16884.59369	22.30331493	5900.661094	2.861474913	0	0	0	0	
Cranes300	Cranes	300	0	0	0	0	49567.39082	50.16090407	12844.31202	3.859092705	0	0	0	0	
Cranes600	Cranes	600	0	0	0	0	66866.09301	40.08334136	10663.26684	6.270694902	0	0	0	0	
Cranes750	Cranes	750	0	0	0	0	10257.12189	4.626606944	1089.161866	9.417444927	0	0	0	0	
Cranes9999	Cranes	9999	0	0	0	0	3377.191644	1.084280831	263.5628079	12.81361233	0	0	0	0	
Crawler Tractors25	Crawler Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0	
Crawler Tractors50	Crawler Tractors	50	0	0	0	0	990.4712799	2.822026419	769.414752	1.287304769	0	0	0	0	
Crawler Tractors75	Crawler Tractors	75	0	0	0	0	7117.270157	11.19075788	3359.794557	2.118364691	0	0	0	0	
Crawler Tractors100	Crawler Tractors	100	0	0	0	0	24534.46094	28.16262918	9978.639653	2.458697958	0	0	0	0	
Crawler Tractors175	Crawler Tractors	175	0	0	0	0	81089.42478	57.82224322	26614.67265	3.046793994	0	0	0	0	
Crawler Tractors300	Crawler Tractors	300	0	0	0	0	97948.34233	46.83944945	20408.82817	4.799312411	0	0	0	0	
Crawler Tractors600	Crawler Tractors	600	0	0	0	0	168062.8378	46.81241253	20587.35573	8.163400876	0	0	0	0	
Crawler Tractors750	Crawler Tractors	750	0	0	0	0	10865.23496	2.138791363	844.5588912	12.86498203	0	0	0	0	
Crawler Tractors9999	Crawler Tractors	9999	0	0	0	0	17033.38092	2.530803317	1004.708866	16.95354893	0	0	0	0	
Crushing/Proc. Equipment25	Crushing/Proc. Equipment	25	73.109568	0.3680036	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment50	Crushing/Proc. Equipment	50	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment75	Crushing/Proc. Equipment	75	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment100	Crushing/Proc. Equipment	100	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment175	Crushing/Proc. Equipment	175	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment300	Crushing/Proc. Equipment	300	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment600	Crushing/Proc. Equipment	600	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment750	Crushing/Proc. Equipment	750	0	0	0	0	0	0	0	0	0	0	0	0	
Crushing/Proc. Equipment9999	Crushing/Proc. Equipment	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Dumpers/Tenders25	Dumpers/Tenders	25	449.3084778	7.54454993	0	0	3.566822839	1.441688443	0	0	0	0	0	0	
Dumpers/Tenders100	Dumpers/Tenders	100	237.25	0.71	76.65	3.095238095	0	0	0	0	0	0	0	0	
Excavators25	Excavators	25	0	0	0	0	77.35075809	2.29358198	12.94445363	5.975590805	0	0	0	0	
Excavators50	Excavators	50	0	0	0	0	89938.0305	245.1610011	114266.8784	0.78708749	0	0	0	0	
Excavators75	Excavators	75	0	0	0	0	69705.00587	101.4045651	51915.72122	1.342656988	0	0	0	0	
Excavators100	Excavators	100	0	0	0	0	55280.76716	53.38481259	27949.64052	1.977870417	0	0	0	0	
Excavators175	Excavators	175	0	0	0	0	304392.3049	151.6851517	107695.3983	2.82641886	0	0	0	0	
Excavators300	Excavators	300	0	0	0	0	323307.2679	113.0227202	72295.0266	4.472054069	0	0	0	0	
Excavators600	Excavators	600	0	0	0	0	370155.622	78.7939162	52054.62114	7.110908002	0	0	0	0	
Excavators750	Excavators	750	0	0	0	0	10513.10369	1.643104159	874.1364043	12.02684574	0	0	0	0	
Excavators9999	Excavators	9999	0	0	0	0	50861.09191	3.054749781	1742.517313	29.18828498	0	0	0	0	
Forklifts25	Forklifts	25	44.42175374	0.106560112	0	0	9.630071564	0.015797386	5.165249596	1.86439617	0	0	0	0	
Forklifts50	Forklifts	50	110109.55	38.53	68550.65	1.606250998	12806.56095	36.09140417	18729.82063	0.683752461	167126.2	69.5	125180.4	1.335082808	
Forklifts75	Forklifts	75	0	0	0	0	126220.2646	246.4180576	97742.06686	1.291360707	0	0	0	0	
Forklifts100	Forklifts	100	526673.1	144.2	244199.6	2.156732034	76901.57679	126.5534195	54570.11869	1.409225023	1045925.75	243.86	439350.5	2.380618094	
Forklifts175	Forklifts	175	36569.35	5.17	8869.5	4.123045267	282472.7464	274.9690291	146396.684	1.929502354	78500.55	8.92	16081.9	4.88129823	
Forklifts300	Forklifts	300	0	0	0	0	9019.359718	7.703255165	3807.37929	2.368915475	0	0	0	0	
Forklifts600	Forklifts	600	0	0	0	0	2691.490312	1.42868322	704.7238516	3.81921274	0	0	0	0	
Forklifts750	Forklifts	750	0	0	0	0	324.4329136	0.080199441	35.2043378	9.215708457	0	0	0	0	
Forklifts9999	Forklifts	9999	0	0	0	0	3094.719156	0.316102797	154.8615691	19.9837776	0	0	0	0	
Generator Sets25	Generator Sets	25	44273.65164	436.125872	0	0	48581.61665	181.9170656	0	0	0	0	0	0	
Generator Sets50	Generator Sets	50	99528.2	389.41	44716.15	2.225777488	60874.7	129.19	43621.15	1.395531755	0	0	0	0	
Generator Sets75	Generator Sets	75	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets100	Generator Sets	100	44800.1	75.19	8635.9	5.187658495	0	0	0	0	4033.25	5.61	646.05	6.242937853	
Generator Sets175	Generator Sets	175	7336.5	7.08	810.3	9.054054054	0	0	0	0	5818.1	4.66	525.6	11.06944444	
Generator Sets300	Generator Sets	300	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets600	Generator Sets	600	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets750	Generator Sets	750	0	0	0	0	0	0	0	0	0	0	0	0	
Generator Sets9999	Generator Sets	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Graders25	Graders	25	0	0	0	0	0	0	0	0	0	0	0	0	
Graders50	Graders	50	0	0	0	0	679.7400977	1.213915394	323.2746062	2.102670871	0	0	0	0	
Graders75	Graders	75	0	0	0	0	1555.743822	2.331392306	579.5120615	2.684575396	0	0	0	0	
Graders100	Graders	100	0	0	0	0	3066.343962	4.037051783	1091.140666	2.810218753	0	0	0	0	
Graders175	Graders	175	0	0	0	0	40404.57614	34.39618728	11425.88932	3.536230311	0	0	0	0	
Graders300	Graders	300	0	0	0	0	119288.9519	64.35007915	25016.98696	4.768318107	0	0	0	0	
Graders600	Graders	600	0	0	0	0	28399.94487	9.517158135	4002.636297	7.095309881	0	0	0	0	
Graders750	Graders	750	0	0	0	0	1073.471424	0.196823118	73.52962773	14.59916849	0	0	0	0	
Graders9999	Graders	9999	0	0	0	0	763.1989444	0.131215412	49.13562191	15.53249791	0	0	0	0	
Off-Highway Tractors25	Off-Highway Tractors	25	0	0	0	0	0	0	0	0	0	0	0	0	
Off-Highway Tractors50	Off-Highway Tractors	50	0	0	0	0	17095.83774	26.38530901	16160.29407	1.0578915	0	0	0	0	
Off-Highway Tractors75	Off-Highway Tractors	75	0	0	0	0	13661.59991	14.24656666	8696.197007	1.570985558	0	0	0	0	
Off-Highway Tractors100	Off-Highway Tractors	100	0	0	0	0	12577.58733	9.416666647	5960.373918	2.110201055	0	0	0	0	
Off-Highway Tractors175	Off-Highway Tractors	175	0	0	0	0	66410.85295	20.83534858	20980.09095	3.165422548	0	0	0	0	
Off-Highway Tractors300	Off-Highway Tractors	300	0	0	0	0	29603.17052	8.140736792	6455.057034	4.586043216	0	0	0	0	
Off-Highway Tractors600	Off-Highway Tractors	600	0	0	0	0	78245.9446	10.57072012	9676.751261	8.085972501	0	0	0	0	
Off-Highway Tractors750	Off-Highway Tractors	750	0	0	0	0	6372.177923	0.689010585	500.951017	12.72016167	0	0	0	0	
Off-Highway Tractors9999	Off-Highway Tractors	9999	0	0	0	0	5750.410712	0.230242913	178.8426833	32.15345803	0	0	0	0	
Off-Highway Trucks25	Off-Highway Trucks	25	0	0	0	0	0	0	0	0	0	0	0	0	
Off-Highway Trucks50	Off-Highway Trucks	50	0	0	0	0	664.238036	1.705940809	1066.06798	0.62307287	0	0	0	0	
Off-Highway Trucks75	Off-Highway Trucks	75	0	0	0	0	793.5703766	0.853112982	460.5813038	1.722975662	0	0	0	0	
Off-Highway Trucks100	Off-Highway Trucks	100	0	0	0	0	340.2457219	0.295234677	187.0705561	1.818809592	0	0	0	0	
Off-Highway Trucks175	Off-Highway Trucks	175	0	0	0	0	17334.37798	6.36745928	5787.459137	2.995162051	0	0	0	0	
Off-Highway Trucks300	Off-Highway Trucks	300	0	0	0	0	39782.69218	12.63713543	9337.460999	4.260547079	0	0	0	0	
Off-Highway Trucks600	Off-Highway Trucks	600	0	0	0	0	291611.0416	43.35916992	35942.90489	8.113174005	0	0	0	0	
Off-Highway Trucks750	Off-Highway Trucks	750	0	0	0	0	36656.52717	5.631146215	3261.109277	11.24050869	0	0	0	0	
Off-Highway Trucks9999	Off-Highway Trucks	9999	0	0	0	0	132540.3363	9.832665923	6556.044365	20.21650997	0	0	0	0	
Pavers25	Pavers	25	1353.328998	4.643187378	0	0	6.709700371	0.893528651	0	0	0	0	0	0	
Pavers50	Pavers	50	2573.25	2.8	1095	2.35	1751.295915	4.363523211	1563.704252	1.119966204	0	0	0	0	
Pavers75	Pavers	75	0	0	0	0	7567.743581	11.31936371	4403.69719	1.71849772	0	0	0	0	
Pavers100	Pavers	100	2295.85	1.55	616.85	3.721893491	7943.346895	8.696173175	3799.484927	2.090637823	0	0	0	0	
Pavers175	Pavers	175	0	0	0	0	25567.02901	15.39070305	8492.093957	3.010686073	0	0	0	0	
Pavers300	Pavers	300	0	0	0	0	30530.54385	11.38580736	6342.35886	4.81375219	0	0	0	0	
Pavers600	Pavers	600	0	0	0	0	5378.901876	1.181805765	685.3021798	7.848949025	0	0	0	0	
Pavers750	Pavers	750	0	0	0	0	219.9158507	0.032803853	16.47590135	13.34772806	0	0	0	0	
Pavers9999	Pavers	9999	0	0	0	0	5049.851884	0.229626971	122.6762441	41.16405683	0	0	0	0	
Paving Equipment25	Paving Equipment	25	1309.866008	9.911426706	0	0	11.35783737	2.213416225	0	0	0	0	0	0	
Paving Equipment50	Paving Equipment	50	3003.95	7.66	1339.55	2.242506812	3801.360886	12.07373446	4630.138391	0.821003729	0	0	0	0	
Paving Equipment75	Paving Equipment	75	0	0	0	0	2819.655188	4.757297617	1944.293161	1.450221214	0	0	0	0	
Paving Equipment100	Paving Equipment	100	1244.65	1.96	343.1	3.627659574	4648.217195	5.418441729	2338.7728	1.987459917	0	0	0	0	
Paving Equipment175	Paving Equipment	175	0	0	0	0	28148.73659	17.49064723	11369.12829	2.475892247	0	0	0	0	
Paving Equipment300	Paving Equipment	300	0	0	0	0	12624.60355	5.5472135	2977.523527	4.23996769	0	0	0	0	
Paving Equipment600	Paving Equipment	600	0	0	0	0	29670.00973	8.008369691	4617.541907	6.425498745	0	0	0	0	
Paving Equipment750	Paving Equipment	750	0	0	0	0	6405.865989	1.082527149	554.5667609	11.55111781	0	0	0	0	
Paving Equipment9999	Paving Equipment	9999	0	0	0	0	4017.146954	0.426450089	221.4021383	18.14411995	0	0	0	0	
Rollers25	Rollers	25	4024.889096	21.72593054	0	0	79.97459316	17.59450516	0	0	0	0	0	0	
Rollers50	Rollers	50	3420.05	1.97	1226.4	2.788690476	43045.80675	122.7315068	44298.6068	0.9717192	0	0	0	0	
Rollers75	Rollers	75	0	0	0	0	15291.25998	24.93644236	9308.634115	1.642696425	0	0	0	0	
Rollers100	Rollers	100	10490.1	3.7	2306.8	4.547468354	23876.13289	29.61058339	11305.47139	2.111909541	0	0	0	0	
Rollers175	Rollers	175	0	0	0	0	122975.6353	80.21987578	47459.6942	2.591159454	0	0	0	0	
Rollers300	Rollers	300	0	0	0	0	10687.04667	5.323517976	2442.007141	4.37633719	0	0	0	0	
Rollers600	Rollers	600	0	0	0	0	8365.363852	2.301113085	1146.678989	7.295297055	0	0	0	0	
Rollers750	Rollers	750	0	0	0	0	206.3432871	0.032803853	15.01308981	13.74422519	0	0	0	0	
Rollers9999	Rollers	9999	0	0	0	0	9030.073168	0.426450089	201.6260569	44.78624096	0	0	0	0	
Rough Terrain Forklifts25	Rough Terrain Forklifts	25	0	0	0	0	0	0	0	0	0	0	0	0	
Rough Terrain Forklifts50	Rough Terrain Forklifts	50	1073.1	0.64	292	3.675	1231.582823	4.06818105	1089.064613	1.130862952	0	0	0	0	
Rough Terrain Forklifts75	Rough Terrain Forklifts	75	0	0	0	0	43961.46977	83.10371301	26836.83482	1.638101887	0	0	0	0	
Rough Terrain Forklifts100	Rough Terrain Forklifts	100	23666.6	11.22	4650.1	5.089481947	33972.52925	47.60313408	15246.22022	2.22825912	0	0	0	0	
Rough Terrain Forklifts175	Rough Terrain Forklifts	175	1321.3	0.32	116.8	11.3125	196440.4002	166.9472152	79170.76952	2.481223833	0	0	0	0	
Rough Terrain Forklifts300	Rough Terrain Forklifts	300	0	0	0	0	1671.564207	1.017158499	389.3614175	4.293091539	0	0	0	0	
Rough Terrain Forklifts600	Rough Terrain Forklifts	600	0	0	0	0	464.845049	0.16413857	69.03554315	6.733416263	0	0	0	0	
Rough Terrain Forklifts750	Rough Terrain Forklifts	750	0	0	0	0	154.7013284	0.032807283	12.26326434	12.61502028	0	0	0	0	
Rough Terrain Forklifts9999	Rough Terrain Forklifts	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Rubber Tired Dozers25	Rubber Tired Dozers	25	0	0	0	0	0	0	0	0	0	0	0	0	
Rubber Tired Dozers50	Rubber Tired Dozers	50	0	0	0	0	431.6960934	0.592676425	228.9928938	1.885194279	0	0	0	0	
Rubber Tired Dozers75	Rubber Tired Dozers	75	0	0	0	0	928.0067609	0.986110109	457.911238	2.026608399	0	0	0	0	
Rubber Tired Dozers100	Rubber Tired Dozers	100	0	0	0	0	1648.895108	1.641604553	736.7278451	2.238133279	0	0	0	0	
Rubber Tired Dozers175	Rubber Tired Dozers	175	0	0	0	0	4767.405276	2.723912729	1601.897758	2.976098351	0	0	0	0	
Rubber Tired Dozers300	Rubber Tired Dozers	300	0	0	0	0	5727.57945	2.199274872	1257.8474	4.553477194	0	0	0	0	
Rubber Tired Dozers600	Rubber Tired Dozers	600	0	0	0	0	31631.88445	8.030148468	4476.917293	7.065550328	0	0	0	0	
Rubber Tired Dozers750	Rubber Tired Dozers	750	0	0	0	0	1012.467171	0.16441622	87.41121533	11.58280625	0	0	0	0	
Rubber Tired Dozers9999	Rubber Tired Dozers	9999	0	0	0	0	2497.631332	0.164019265	94.975598	26.29761101	0	0	0	0	
Scrapers25	Scrapers	25	0	0	0	0	0	0	0	0	0	0	0	0	
Scrapers50	Scrapers	50	0	0	0	0	77.3288509	0.164188821	41.87293533	1.846750181	0	0	0	0	
Scrapers75	Scrapers	75	0	0	0	0	804.9435988	1.279897731	338.8150193	2.375761265	0	0	0	0	
Scrapers100	Scrapers	100	0	0	0	0	823.5946444	1.018030547	316.6879347	2.600650527	0	0	0	0	
Scrapers175	Scrapers	175	0	0	0	0	7579.263405	6.169878405	1816.662913	4.17208022	0	0	0	0	
Scrapers300	Scrapers	300	0	0	0	0	96371.26665	48.72067479	16009.64155	6.019576787	0	0	0	0	
Scrapers600	Scrapers	600	0	0	0	0	340880.5205	101.7290592	34212.01095	9.963767432	0	0	0	0	
Scrapers750	Scrapers	750	0	0	0	0	52670.9125	15.36580493	4139.683553	12.72341517	0	0	0	0	
Scrapers9999	Scrapers	9999	0	0	0	0	0	0	0	0	0	0	0	0	
Skid Steer Loaders25	Skid Steer Loaders	25	10088.71057	56.2295951	0	0	1299.969029	230.5193225	0	0	0	0	0	0	
Skid Steer Loaders50	Skid Steer Loaders	50	15990.65	26.95	8358.5	1.913100437	37612.29521	96.52596378	37178.50887	1.011667664	0	0	0	0	
Skid Steer Loaders75	Skid Steer Loaders	75	0	0	0	0	238668.2639	376.0409667	166892.9528	1.430067956	0	0	0	0	
Skid Steer Loaders100	Skid Steer Loaders	100	21352.5	16.12	5000.5	4.270072993	122266.9047	146.7639253	68644.75111	1.781154462	0	0	0	0	
Skid Steer Loaders175	Skid Steer Loaders	175	0	0	0	0	34654.94438	25.42495307	16482.50884	2.102528487	0	0	0	0	
Skid Steer Loaders300	Skid Steer Loaders	300	0	0	0	0	2866.547002	1.377877701	738.9977477	3.878965817	0	0	0	0	
Skid Steer Loaders600	Skid Steer Loaders	600	0	0	0	0	1972.841006	0.393646236	223.6034265	8.822946217	0	0	0	0	
Skid Steer Loaders750	Skid Steer Loaders	750	0	0	0	0	199.5466447	0.032803853	16.65291125	11.98268829	0	0	0	0	
Skid Steer Loaders9999	Skid Steer Loaders	9999	0	0	0	0	14195.02014	0.721684766	339.843282	41.76931219	0	0	0	0	
Surfacing Equipment25	Surfacing Equipment	25	471.7325842	1.956589458	0	0	0	0	0	0	0	0	0	0	
Surfacing Equipment50	Surfacing Equipment	50	0	0	0	0	526.6994706	1.115829108	527.21322	0.999025538	0	0	0	0	
Surfacing Equipment75	Surfacing Equipment	75	0	0	0	0	724.9867702	1.083557731	524.1176634	1.383251931	0	0	0	0	
Surfacing Equipment100	Surfacing Equipment	100	0	0	0	0	913.6566309	1.019115613	483.3747741	1.890162002	0	0	0	0	
Surfacing Equipment175	Surfacing Equipment	175	0	0	0	0	3360.82456	2.461741454	1588.175456	2.116154451	0	0	0	0	
Surfacing Equipment300	Surfacing Equipment	300	0	0	0	0	3763.465974	1.873174209	1029.893486	3.65422835	0	0	0	0	
Surfacing Equipment600	Surfacing Equipment	600	0	0	0	0	21289.01129	5.611727464	3629.10662	5.86618513	0	0	0	0	
Surfacing Equipment750	Surfacing Equipment	750	0	0	0	0	9008.432585	1.67328999	941.931638	9.563785971	0	0	0	0	
Surfacing Equipment9999	Surfacing Equipment	9999	0	0	0	0	3975.428698	0.658676691	327.2901654	12.14649604	0	0	0	0	
Sweepers/Scrubbers25	Sweepers/Scrubbers	25	1459.311532	6.32052589	0	0	3.236838835	0.517991245	0	0	0	0	0	0	FALSE
Sweepers/Scrubbers50	Sweepers/Scrubbers	50	14304.35	10.58	5456.75	2.621404682	2838.096401	11.0813089	2927.830782	0.969351241	0	0	0	0	FALSE
Sweepers/Scrubbers75	Sweepers/Scrubbers	75	0	0	0	0	2349.407761	4.283466954	1297.202049	1.81113479	0	0	0	0	FALSE
Sweepers/Scrubbers100	Sweepers/Scrubbers	100	20403.5	8.82	4558.85	4.475580464	3050.007251	4.601993495	1404.489365	2.17161292	0	0	0	0	FALSE

Sweepers/Scrubbers175	Sweepers/Scrubbers		175	237.25	0.06	29.2	8.125	686.8916243	0.632210968	251.098408	2.735547508	0	0	0	0	FALSE
Sweepers/Scrubbers300	Sweepers/Scrubbers		300	0	0	0	0	930.5065884	0.458124194	185.2360581	5.023355593	0	0	0	0	FALSE
Sweepers/Scrubbers600	Sweepers/Scrubbers		600	0	0	0	0	145.4421646	0.047392158	19.90706953	7.306055991	0	0	0	0	FALSE
Sweepers/Scrubbers750	Sweepers/Scrubbers		750	0	0	0	0	0	0	0	0	0	0	0	0	FALSE
Sweepers/Scrubbers9999	Sweepers/Scrubbers		9999	0	0	0	0	295.5869684	0.015797386	5.79011595	51.05026755	0	0	0	0	FALSE
Tractors/Loaders/Backhoes25	Tractors/Loaders/Backhoes		25	0	0.16222956	0	0	129.5371962	16.71094564	15.95627844	8.118258695	0	0	0	0	
Tractors/Loaders/Backhoes50	Tractors/Loaders/Backhoes		50	0	0	0	0	45457.49543	105.9866794	42138.71002	1.078758591	0	0	0	0	
Tractors/Loaders/Backhoes75	Tractors/Loaders/Backhoes		75	0	0	0	0	170594.6758	250.3265082	110666.6363	1.541518578	0	0	0	0	
Tractors/Loaders/Backhoes100	Tractors/Loaders/Backhoes		100	8858.55	3.46	3029.5	2.924096386	384598.5807	415.671975	199836.449	1.924566728	0	0	0	0	
Tractors/Loaders/Backhoes175	Tractors/Loaders/Backhoes		175	0	0	0	0	387418.2782	246.5675517	161396.2715	2.400416531	0	0	0	0	
Tractors/Loaders/Backhoes300	Tractors/Loaders/Backhoes		300	0	0	0	0	179577.8265	67.87072776	41863.84415	4.289568485	0	0	0	0	
Tractors/Loaders/Backhoes600	Tractors/Loaders/Backhoes		600	0	0	0	0	122584.0108	28.91820088	17168.48819	7.140058545	0	0	0	0	
Tractors/Loaders/Backhoes750	Tractors/Loaders/Backhoes		750	0	0	0	0	5600.043409	0.853398284	440.9427217	12.70016066	0	0	0	0	
Tractors/Loaders/Backhoes9999	Tractors/Loaders/Backhoes		9999	0	0	0	0	21512.60994	1.148539807	621.1022798	34.63617932	0	0	0	0	
Trenchers25	Trenchers		25	8263.808298	27.06408582	0	0	118.4896258	11.88266876	0	0	0	0	0	0	
Trenchers50	Trenchers		50	16169.5	17.98	7223.35	2.238504295	12563.55605	28.48434605	8889.683195	1.413273766	0	0	0	0	
Trenchers75	Trenchers		75	0	0	0	0	4118.100514	6.235784552	1882.110127	2.188023142	0	0	0	0	
Trenchers100	Trenchers		100	9953.55	5.97	2401.7	4.1443769	4643.399246	5.121043741	1669.307402	2.781632215	0	0	0	0	
Trenchers175	Trenchers		175	0	0	0	0	6916.589152	5.119194618	2133.778692	3.241474469	0	0	0	0	
Trenchers300	Trenchers		300	0	0	0	0	3968.692545	1.969611457	708.6369936	5.600459164	0	0	0	0	
Trenchers600	Trenchers		600	0	0	0	0	6433.888893	1.740405749	590.5053294	10.89556448	0	0	0	0	
Trenchers750	Trenchers		750	0	0	0	0	310.5298414	0.098697922	21.25287266	14.61119381	0	0	0	0	
Trenchers9999	Trenchers		9999	0	0	0	0	8082.734869	0.885704031	374.0727342	21.60738843	0	0	0	0	
Welders25	Welders		25	0	0	0	0	24175.05926	74.33738468	0	0	0	0	0	0	
Welders50	Welders		50	31152.75	61.85	12840.7	2.426094372	101418.9	133.05	85442.85	1.186979367	0	0	0	0	
Welders75	Welders		75	0	0	0	0	0	0	0	0	0	0	0	0	
Welders100	Welders		100	43515.3	63.11	13118.1	3.317195326	0	0	0	0	0	0	0	0	
Welders175	Welders		175	5442.15	4.35	897.9	6.06097561	0	0	0	0	0	0	0	0	
Welders300	Welders		300	0	0	0	0	0	0	0	0	0	0	0	0	
Welders600	Welders		600	0	0	0	0	0	0	0	0	0	0	0	0	
Welders750	Welders		750	0	0	0	0	0	0	0	0	0	0	0	0	
Welders9999	Welders		9999	0	0	0	0	0	0	0	0	0	0	0	0	

Model Output: OFFROAD2021 (v1.0.5) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2028
Scenario: All Adopted Rules - Exhaust
Vehicle Classification: OFFROAD2021 Equipment Types
Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	Vehicle Category	Model Year	Horsepower Bi	Fuel	HC_tpd	ROG_tpd	TOG_tpd	CO_tpd	NOx_tpd	CO2_tpd	PM10_tpd	PM2.5_tpd	SOx_tpd	NH3_tpd	Fuel Consumptior	Total_Activity_	Total_Population	Horsepower_Hours_hhpy
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	100	Gasoline	2.32E-07	2.80E-07	3.33E-07	3.67E-06	8.13E-07	0.000119944	9.02E-09	8.30E-09	1.09E-09	9.78E-10	3.887263155	23.06271616	0.01174209	103.7406679
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	100	Diesel	0.009461009	0.011447821	0.013623853	0.096256449	0.080427446	15.74434955	0.006042221	0.005558843	0.000143728	0.000128831	512112.8465	31559.29423	265.4589358	18304687.46
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	175	Gasoline	5.88E-07	7.11E-07	8.47E-07	9.83E-06	4.38E-06	0.000616779	4.64E-08	4.27E-08	5.60E-09	5.03E-09	19.98918462	63.75896716	0.04644369	533.4579245
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	175	Diesel	0.006762127	0.008182174	0.009737463	0.086611102	0.061285605	14.65632991	0.002937635	0.002702624	0.000133857	0.000119929	476723.0814	40924.95496	171.2528342	18943355.17
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	25	Gasoline	4.26E-06	5.15E-06	6.13E-06	6.08E-05	1.08E-06	0.000183954	1.09E-07	1.01E-07	1.55E-09	1.50E-09	5.961751649	235.9520292	0.083542206	159.1032215
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	25	Diesel	0.000538082	0.000651079	0.000774838	0.002203203	0.001611514	0.209776188	9.23E-05	8.50E-05	1.90E-06	1.72E-06	6823.341953	4925.523544	17.7010944	243889.8821
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	300	Diesel	0.003584658	0.004337437	0.005161908	0.025935405	0.025045311	12.17291524	0.001163217	0.00107016	0.000111237	9.96E-05	395945.622	26941.27498	57.02331803	15733533.47
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	50	Gasoline	3.98E-06	4.82E-06	5.74E-06	0.000143785	1.05E-05	0.003595216	2.70E-07	2.49E-07	3.26E-08	2.93E-08	116.5172801	437.2859288	0.410879998	3109.534868
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	50	Diesel	0.01101596	0.013329312	0.015862983	0.048088917	0.036456491	4.731956805	0.002795523	0.002571881	4.30E-05	3.87E-05	153915.2736	26628.88885	204.0485561	5501465.16
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	600	Diesel	0.004776976	0.005780141	0.006878846	0.038303213	0.034005864	16.16393324	0.001548563	0.001424678	0.000147707	0.000132265	525760.5489	22528.71864	43.83317446	20891937.46
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	75	Gasoline	1.71E-07	2.07E-07	2.46E-07	2.99E-06	5.90E-07	9.21E-05	6.93E-09	6.37E-09	8.34E-10	7.51E-10	2.984984284	70.49968588	0.013186097	79.66125416
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	75	Diesel	0.007385294	0.008936206	0.010634823	0.043282242	0.062819146	6.294876231	0.003776913	0.00347476	5.74E-05	5.15E-05	204751.9953	30933.25508	180.3579249	7318545.733
Sacramento	2028	Agricultural - Agricultural Tractors	Aggregate	750	Diesel	0.000149837	0.000181303	0.000215766	0.001318025	0.001392629	0.361862277	6.48E-05	5.96E-05	3.31E-06	2.96E-06	11770.2113	290.9762574	0.74885438	467708.1961
Sacramento	2028	Agricultural - ATVs	Aggregate	100	Gasoline	4.70E-05	5.69E-05	6.78E-05	0.002486836	0.00019605	0.17434003	1.31E-05	1.21E-05	1.59E-06	1.42E-06	5650.182166	301.4123627	6.996994594	180945.9191
Sacramento	2028	Agricultural - ATVs	Aggregate	175	Gasoline	5.21E-05	6.31E-05	7.51E-05	0.00314057	0.0002737	0.24416826	1.84E-05	1.69E-05	2.22E-06	1.99E-06	7913.243648	481.3804673	5.97481408	253419.9973
Sacramento	2028	Agricultural - ATVs	Aggregate	175	Diesel	6.18E-06	7.47E-06	8.89E-06	0.000149656	5.12E-05	0.027240762	2.12E-06	1.95E-06	2.49E-07	2.23E-07	886.054004	792.7632696	0.426462558	42250.53
Sacramento	2028	Agricultural - ATVs	Aggregate	25	Gasoline	0.008422117	0.010190761	0.012127848	0.107387429	0.004688064	0.431908855	0.000378541	0.000348258	3.68E-06	3.52E-06	13997.72444	3397.799592	78.68013262	448274.2354
Sacramento	2028	Agricultural - ATVs	Aggregate	25	Diesel	0.000219119	0.000265134	0.000315532	0.001519659	0.001307195	0.195761975	5.68E-05	5.23E-05	1.78E-06	1.60E-06	6367.504843	8610.34379	17.73512966	273116.0211
Sacramento	2028	Agricultural - ATVs	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	510.3791308	10.18927559	59815.0047
Sacramento	2028	Agricultural - ATVs	Aggregate	50	Gasoline	0.000145233	0.000175732	0.000209135	0.008877501	0.000383284	0.331853739	2.50E-05	2.30E-05	3.02E-06	2.71E-06	10755.04043	2828.270141	36.99687396	344427.9507
Sacramento	2028	Agricultural - ATVs	Aggregate	50	Diesel	0.000325952	0.000394402	0.000469371	0.003006197	0.002469989	0.438166903	8.49E-05	7.81E-05	4.00E-06	3.59E-06	14252.15436	8201.932172	26.21370754	611305.6523
Sacramento	2028	Agricultural - ATVs	Aggregate	75	Gasoline	4.66E-05	5.64E-05	6.71E-05	0.002910261	0.000130582	0.12009147	9.03E-06	8.31E-06	1.09E-06	9.79E-07	3892.041788	1113.640487	7.233183171	124641.8347
Sacramento	2028	Agricultural - Bale Wagons (Self Propelled)	Aggregate	175	Diesel	0.000201711	0.00024407	0.000290464	0.002043	0.001915062	0.338142639	9.36E-05	8.62E-05	3.09E-06	2.77E-06	10998.68807	5931.728074	3.17620394	419568.4675
Sacramento	2028	Agricultural - Bale Wagons (Self Propelled)	Aggregate	300	Diesel	2.33E-05	2.82E-05	3.36E-05	0.000134081	0.000235364	0.054639398	1.02E-05	9.34E-06	4.99E-07	4.47E-07	1777.243182	2309.518321	0.447344857	67796.74013
Sacramento	2028	Agricultural - Balers (Self Propelled)	Aggregate	75	Diesel	8.90E-06	1.08E-05	1.28E-05	7.19E-05	8.31E-05	0.011768583	3.84E-06	3.53E-06	1.07E-07	9.63E-08	382.7940023	398.6569389	0.219316878	13135.0886
Sacramento	2028	Agricultural - Combine Harvesters	Aggregate	175	Diesel	9.56E-05	0.000115721	0.000137717	0.001030084	0.000884898	0.177019161	4.07E-05	3.75E-05	1.62E-06	1.45E-06	5757.861662	657.2058948	2.142779372	247499.3959
Sacramento	2028	Agricultural - Combine Harvesters	Aggregate	300	Diesel	0.000143806	0.000174005	0.00020708	0.000830705	0.001294238	0.324935579	6.11E-05	5.62E-05	2.97E-06	2.66E-06	10569.10504	3294.79175	1.969525267	454308.7787
Sacramento	2028	Agricultural - Combine Harvesters	Aggregate	600	Diesel	0.000397358	0.000480803	0.000572195	0.003081677	0.003916503	0.990352135	0.000160234	0.000147415	9.05E-06	8.10E-06	32212.95673	8644.825045	3.926033594	1384661.144
Sacramento	2028	Agricultural - Combine Harvesters	Aggregate	750	Diesel	0.000532896	0.000644805	0.000767371	0.003890097	0.005664409	1.34260769	0.000228891	0.000210579	1.23E-05	1.10E-05	43670.69237	2221.455488	3.656695972	1877167.354
Sacramento	2028	Agricultural - Combine Harvesters	Aggregate	9999	Diesel	1.28E-05	1.55E-05	1.84E-05	9.53E-05	0.000184655	0.026835525	5.47E-06	5.03E-06	2.45E-07	2.20E-07	872.8729665	1646.267171	0.050809378	37520.09756
Sacramento	2028	Agricultural - Construction Equipment	Aggregate	100	Diesel	0.000217733	0.000263457	0.000313536	0.001970869	0.001863462	0.313156803	0.000141646	0.000130315	2.86E-06	2.56E-06	10185.9795	5469.6929	6.735173923	436898.6387
Sacramento	2028	Agricultural - Construction Equipment	Aggregate	175	Diesel	0.000539324	0.000652582	0.000776626	0.007211973	0.005699002	1.264727749	0.000246804	0.000227059	1.16E-05	1.03E-05	41137.5094	7929.109711	26.46605517	1961597.77
Sacramento	2028	Agricultural - Construction Equipment	Aggregate	300	Diesel	0.000163892	0.000198309	0.000236004	0.000869036	0.001555381	0.308446994	7.52E-05	6.92E-05	2.82E-06	2.52E-06	10032.78462	4561.086758	2.428292961	478402.5178
Sacramento	2028	Agricultural - Construction Equipment	Aggregate	50	Diesel	3.67E-05	4.44E-05	5.28E-05	0.000187389	0.00014564	0.022247923	8.27E-06	7.61E-06	2.02E-07	1.82E-07	723.6530948	1181.01682	0.725563467	31039.04306
Sacramento	2028	Agricultural - Construction Equipment	Aggregate	600	Diesel	0.000115206	0.000139399	0.000165896	0.000938283	0.001094856	0.218377913	5.11E-05	4.70E-05	1.99E-06	1.79E-06	7103.128279	3690.260251	1.132723064	338705.0155
Sacramento	2028	Agricultural - Construction Equipment	Aggregate	75	Diesel	7.07E-05	8.55E-05	0.000101741	0.000570296	0.000659385	0.093384645	3.05E-05	2.80E-05	8.52E-07	7.64E-07	3037.500922	2992.568967	2.52749896	130284.9687
Sacramento	2028	Agricultural - Cotton Pickers	Aggregate	600	Diesel	4.55E-05	5.51E-05	6.56E-05	0.0003346	0.000466884	0.114562092	1.85E-05	1.70E-05	1.05E-06	9.37E-07	3726.334881	2801.720232	0.505290541	160175.0255
Sacramento	2028	Agricultural - Forage & Silage Harvesters	Aggregate	600	Diesel	9.39E-05	0.000113605	0.000135199	0.000827997	0.000828863	0.227325619	3.72E-05	3.42E-05	2.08E-06	1.86E-06	7394.168266	292.502533	0.600975824	317835.3843
Sacramento	2028	Agricultural - Forage & Silage Harvesters	Aggregate	750	Diesel	0.000269257	0.0003258	0.000387729	0.00216381	0.002704973	0.528247105	0.000126654	0.000116522	4.82E-06	4.32E-06	17182.17243	4716.779311	1.311824558	738568.8551
Sacramento	2028	Agricultural - Forage & Silage Harvesters	Aggregate	9999	Diesel	0.000155395	0.000188028	0.000223769	0.001255097	0.002114507	0.273960108	7.09E-05	6.52E-05	2.50E-06	2.24E-06	8911.037585	2296.428922	0.507806945	383037.4124
Sacramento	2028	Agricultural - Forklifts	Aggregate	100	Diesel	0.000279327	0.000337986	0.000402231	0.002558802	0.002076247	0.417652899	0.00015524	0.000142821	3.81E-06	3.42E-06	13584.90005	10461.97373	8.467349673	582685.6741
Sacramento	2028	Agricultural - Forklifts	Aggregate	175	Diesel	6.51E-05	7.87E-05	9.37E-05	0.00070476	0.000598913	0.120689652	2.78E-05	2.56E-05	1.10E-06	9.88E-07	3925.644622	3151.423281	1.905014481	187190.1313
Sacramento	2028	Agricultural - Forklifts	Aggregate	50	Diesel	0.000320427	0.000387717	0.000461415	0.001717364	0.001359303	0.204651427	7.68E-05	7.06E-05	1.86E-06	1.67E-06	6656.650017	9192.606112	8.722351194	285518.0821
Sacramento	2028	Agricultural - Forklifts	Aggregate	75	Diesel	0.000899035	0.001087833	0.001294611	0.007326395	0.008437413	1.199627488	0.000390448	0.000359212	1.09E-05	9.82E-06	39020.00813	15391.56433	30.5924271	1673652.337
Sacramento	2028	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	175	Diesel	4.30E-05	5.20E-05	6.19E-05	0.000480604	0.000383882	0.080710047	1.86E-05	1.71E-05	7.37E-07	6.60E-07	2625.237193	2602.020832	1.073162705	119220.5768
Sacramento	2028	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	300	Diesel	0.000100806	0.000121975	0.000145161	0.000580059	0.001018227	0.236380416	4.39E-05	4.04E-05	2.16E-06	1.93E-06	7688.691557	1930.39219	1.978833949	349168.5397
Sacramento	2028	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	600	Diesel	5.86E-06	7.09E-06	8.44E-06	4.29E-05	6.02E-05	0.01482034	2.38E-06	2.19E-06	1.35E-07	1.21E-07	482.057791	398.656964	0.073105626	21891.8155
Sacramento	2028	Agricultural - Hay Squeeze/Stack Retriever	Aggregate	75	Diesel	3.64E-06	4.40E-06	5.24E-06	2.93E-05	3.39E-05	0.004805652	1.57E-06	1.44E-06	4.38E-08	3.93E-08	156.3123437	1508.358126	0.10661564	6385.30829
Sacramento	2028	Agricultural - Nut Harvester	Aggregate	100	Diesel	0.001145999	0.001386659	0.001650239	0.009774018	0.00890875	1.547659127	0.000690892	0.00063562	1.41E-05	1.27E-05	50340.35343	17632.23411	26.01253882	1946413.477
Sacramento	2028	Agricultural - Nut Harvester	Aggregate	175	Diesel	0.000689984	0.00083488	0.000993577	0.007174821	0.006487023	1.206743344	0.000309769	0.000284987	1.10E-05	9.87E-06	39251.46396	13327.08024	16.14958659	1687208.578
Sacramento	2028	Agricultural - Nut Harvester	Aggregate	25	Diesel	7.79E-05	9.43E-05	0.000112167	0.000398222	0.000337379	0.047279258	1.64E-05	1.51E-05	4.30E-07	3.87E-07	1537.841565	312.3873301	3.790757951	59460.75739
Sacramento	2028	Agricultural - Nut Harvester	Aggregate	300	Diesel	0.000375163	0.000453947	0.000540235	0.00193957	0.00348073	0.653435221	0.000173882	0.000159971	5.97E-06	5.35E-06	21254.13756	3567.047832	4.237102476	913600.6604
Sacramento	2028	Agricultural - Nut Harvester	Aggregate	50	Diesel	0.000452668	0.000547729	0.000651843	0.00227809	0.001738127	0.253741205	0.000108843	0.000100136	2.31E-06	2.08E-06	8253.381959	5562.029401	9.514174267	319117.6217
Sacramento	2028	Agricultural - Nut Harvester	Aggregate	75	Diesel	0.000120309	0.000145574	0.000173246	0.000997418	0.001136844	0.162107419	5.25E-05	4.83E-05	1.48E-06	1.33E-06	5272.830835	3780.821659	3.252649967	203874.3922
Sacramento	2028	Agricultural - Other Harvesters	Aggregate	100	Diesel	0.000563455	0.00068178	0.000811375	0.004889246	0.004242518	0.785791762	0.00032344	0.000297565	7.17E-06	6.43E-06	25559.26842	11013.10516	12.60546517	988250.9975
Sacramento	2028	Agricultural - Other Harvesters	Aggregate	175	Diesel	0.000657584	0.000795677	0.000946921	0.006899916	0.006163159	1.166551446	0.000291865	0.000268516	1.07E-05	9.55E-06	37944.1513	12954.83058	15.25503173	1631014.277
Sacramento	2028	Agricultural - Other Harvesters	Aggregate	300	Diesel	0.000174081	0.000210637	0.000250676	0.001003557	0.001666701	0.4010952	7.49E-05	6.89E-05	3.66E-06	3.28E-06	13046.33159	2596.648284	2.39811109	560791.3786
Sacramento	2028	Agricultural - Other Harvesters	Aggregate	600	Diesel	0.000185724	0.000224726	0.000267442	0.001361149	0.001907077	0.469779957	7.53E-05	6.93E-05	4.29E-06	3.84E-06	15280.42491	2305.672076	1.890967613	656822.9938
Sacramento	2028	Agricultural - Other Harvesters	Aggregate	75	Diesel	9.11E-05	0.000110241	0.000131196	0.000735406	0.000850286	0.120420887	3.93E-05	3.61E-05	1.10E-06	9.85E-07	3916.902567	3417.662121	2.521135459	151447.327
Sacramento	2028	Agricultural - Other Harvesters	Aggregate	750	Diesel	1.59E-05	1.93E-05	2.29E-05	0.000116256	0.000169282	0.04012408	6.84E-06	6.29E-06	3.67E-07	3.28E-07	1305.106743	1508.358172	0.10661564	56099.49485
Sacramento	2028	Agricultural - Sprayers/Spray Rigs	Aggregate	100	Diesel	8.69E-05	0.000105165	0.000125155	0.00075215	0.000656706	0.120684352	5.02E-05	4.61E-05	1.10E-06	9.88E-07	3925.472239	1632.185486	2.158691396	160354.2609
Sacramento	2028	Agricultural - Sprayers/Spray Rigs	Aggregate	175	Diesel	0.000363752	0.00044014	0.000523803	0.003814739	0.003404446	0.645254828	0.000161119	0.000148229	5.89E-06	5.28E-06	20988.05579	11307.73559	8.117766175	953136.0164
Sacramento	2028	Agricultural - Sprayers/Spray Rigs	Aggregate	25	Diesel	3.07E-06	3.71E-06	4.42E-06	1.57E-05	1.33E-05	0.001863105	6.46E-07	5.94E-07	1.69E-08	1.52E-08	60.60080318	997.4910605	0.179841942	2475.523055
Sacramento	2028	Agricultural - Sprayers/Spray Rigs	Aggregate	300	Diesel	0.000425068	0.000514332	0.000612098	0.002236652	0.003998783	0.780697115	0.000195151	0.000179539	7.13E-06	6.39E-06	25393.55598	9045.328345	5.572236943	1153204.131
Sacramento	2028	Agricultural - Sprayers/Spray Rigs	Aggregate	50	Diesel	0.00014373	0.000173914	0.000206972	0.000742445	0.000577985	0.08810509	3.28E-05	3.02E-05	8.02E-07	7.21E-07	2865.774059	6437.486014	3.766496233	117065.936
Sacramento	2028	Agricultural - Sprayers/Spray Rigs	Aggregate	600	Diesel	0.00053892	0.000652093	0.000776045	0.004431408	0.005079326	1.05517264	0.000236173	0.000217279	9.64E-06	8.63E-06	34321.35844	3834.466378	4.985956836	1558644.743
Sacramento	2028	Agricultural - Sprayers/Spray Rigs	Aggregate	75	Diesel	0.001459441	0.001765924	0.002101596	0.010681982	0.013044595	1.636531621	0.000740921	0.000681648	1.49E-05	1.34E-05	53231.08866	5978.758836	47.74325422	2174472.624
Sacramento	2028	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	100	Diesel	0.000201497	0.000243811	0.000290156	0.001839485	0.001471665	0.299316082	0.000111258	0.000102357	2.73E-06	2.45E-06	9735.785541	3283.131248	4.314254524	347990.7085
Sacramento	2028	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	175	Diesel	5.01E-05	6.06E-05	7.21E-05	0.000519478	0.000470881	0.087279888	2.25E-05	2.07E-05	7.97E-07	7.14E-07	2838.932911	2645.884629	0.939762538	112809.5468
Sacramento	2028	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	300	Diesel	9.50E-05	0.000114985	0.000136841	0.000547566	0.000901402	0.217908755	4.08E-05	3.76E-05	1.99E-06	1.78E-06	7087.86808	2709.818182	1.416542215	281647.7902
Sacramento	2028	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	50	Diesel	0.000116909	0.000141459	0.000168348	0.000597682	0.000464523	0.070960274	2.64E-05	2.43E-05	6.46E-07	5.81E-07	2308.108571	657.2058948	2.142779357	82499.7973
Sacramento	2028	Agricultural - Swathers/Windrowers/Hay Conditioners	Aggregate	75	Diesel	7.57E-05	9.16E-05	0.000109031	0.000613259	0.000707631	0.100246461	3.27E-05	3.01E-05	9.15E-07	8.20E-07	3260.693628	1998.400061	2.260977416	116548.4879
Sacramento	2028	Airport Ground Support - A/C Tug Narrow Body	Aggregate	100	Diesel	2.25E-05	2.73E-05	3.25E-05	0.000491968	0.000197623	0.085185221	1.59E-05	1.46E-05	8.07E-07	0	2768.10861	1053.867901	2.083274491	48173.40864
Sacramento	2028	Airport Ground Support - A/C Tug Narrow Body	Aggregate	175	Diesel	6.95E-05	8.41E-05	0.000100069	0.001545012	0.000379168	0.265175912	1.97E-05	1.81E-05	2.51E-06	0	8616.937518	2608.730212	3.516478557	179134.0028
Sacramento	2028	Airport Ground Support - A/C Tug Narrow Body	Aggregate	300	Diesel	2.49E-05	3.01E-05	3.59E-05	0.000239551	0.000106248	0.109940722	4.89E-06	4.50E-06	1.04E-06	0	3572.542938	631.2584708	1.058546309	76499.70273
Sacramento	2028	Airport Ground Support - A/C Tug Narrow Body	Aggregate	50	Diesel	9.75E-06	1.18E-05	1.40E-05	0.00014076	0.000103607	0.023559829	2.66E-06	2.45E-06	2.23E-07	0	765.5807532	549.8557385	1.306680958	9764.720538
Sacramento	2028	Airport Ground Support - A/C Tug Narrow Body	Aggregate	600	Diesel	2.45E-05	2.97E-05	3.53E-05	0.000208283	0.000101458	0.101458037	5.21E-06	4.79E-06	9.61E-07	0	3296.896619	365.5403776	0.559680677	68878.3666
Sacramento	2028	Airport Ground Support - A/C Tug Narrow Body	Aggregate	75	Diesel	7.67E-05	9.28E-05	0.000110423	0.001177161	0.001007514	0.195678584	1.21E-05	1.11E-05	1.85E-06	0	6358.609742	3043.270423	5.991024503	113118.5158
Sacramento	2028	Airport Ground Support - A/C Tug Wide Body	Aggregate	100	Diesel	2.41E-06	2.92E-06	3.47E-06	4.33E-05	2.56E-05	0.007268009	2.18E-06	2.01E-06	6.88E-08	0	236.1752173	95.60023623	0.217287	4166.410212
Sacramento	2028	Airport Ground Support - A/C Tug Wide Body	Aggregate	175	Diesel	3.86E-05	4.67E-05	5.55E-05	0.000841479	0.000230074	0.138687422	1.03E-05	9.48E-06	1.31E-06	0	4506.671971	1159.151152	1.491113822	90653.15782
Sacramento	2028	Airport Ground Support - A/C Tug Wide Body	Aggregate	300	Diesel	8.17E-05	9.89E-05	0.000117713	0.000702053	0.000386188	0.328055784	1.84E-05	1.70E-05	3.11E-06	0	10660.22993	1689.09365	2.798022215	221398.475
Sacramento	2028	Airport Ground Support - A/C Tug Wide Body	Aggregate	50	Diesel	8.91E-07	1.08E-06	1.28E-06	1.22E-05	1.06E-05	0.001858311	3.60E-07	3.31E-07	1.76E-08	0	60.38613231	54.67955826	0.155321839	971.4512695
Sacramento	2028	Airport Ground Support - A/C Tug Wide Body	Aggregate	600	Diesel	7.98E-05	9.66E-05	0.00011493	0.000660459	0.000396305	0.301710358	2.06E-05	1.89E-05	2.86E-06	0	9804.130707	973.0207175	1.490445575	198224.0181
Sacramento	2028	Airport Ground Support - A/C Tug Wide Body	Aggregate	75	Diesel	3.23E-06	3.91E-06	4.66E-06	4.75E-05	4.15E-05	0.007875414	6.38E-07	5.87E-07	7.46E-08	0	255.9129468	125.2072607	0.248328	4563.317105
Sacramento	2028	Airport Ground Support - A/C Tug Wide Body	Aggregate	750	Diesel	3.06E-06	3.71E-06	4.41E-06	2.19E-05	1.55E-05	0.010457927	1.02E-06	9.40E-07	9.91E-08	0	339.8321537	17.89865594	0.031041	6736.696124
Sacramento	2028	Airport Ground Support - AirCraft Tractor	Aggregate	75	Diesel	1.71E-06	2.07E-06	2.46E-06	2.69E-05	2.29E-05	0.004469043	3.65E-07	3.36E-07	4.23E-08	0	145.2223256	112.5577153	0.217287	2589.534958
Sacramento	2028	Airport Ground Support - Baggage Tug	Aggregate	100	Diesel	4.49E-05	5.43E-05	6.47E-05	0.001158924	0.000339082	0.211936563	2.64E-05	2.43E-05	2.01E-06	0	6886.915596	3269.198729	6.693315827	110728.7791
Sacramento	2028	Airport Ground Support - Baggage Tug	Aggregate	300	Diesel	3.76E-06	4.55E-06	5.42E-06	2.73E-05	3.49E-05	0.012046886	1.46E-06	1.35E-06	1.14E-07	0	391.465676	112.6674961	0.186246	7760.258332
Sacramento	2028	Airport Ground Support - Baggage Tug	Aggregate	50	Diesel	2.92E-05	3.53E-05	4.20E-05	0.000429541	0.000343459	0.068906312	8.52E-06	7.84E-06	6.53E-07	0	2239.122615	2108.349314	5.003950084	32294.08612
Sacramento	2028	Airport Ground Support - Baggage Tug	Aggregate	75	Diesel	4.80E-05	5.81E-05	6.91E-05	0.000834013	0.000670438	0.151949407	9.87E-06	9.08E-06	1.44E-06	0	4937.622482	3269.798918	6.562873849	76253.33215
Sacramento	2028	Airport Ground Support - Belt Loader	Aggregate	100	Diesel	1.59E-05	1.92E-05	2.29E-05	0.000482557	0.000120411	0.090270484	9.09E-06	8.36E-06	8.55E-07	0	2933.355141	1533.887071	3.145645478	44813.71215
Sacramento	2028	Airport Ground Support - Belt Loader	Aggregate	175	Diesel	1.60E-06	1.93E-06	2.30E-06	2.83E-05	1.24E-05	0.004934832	5.79E-07	5.33E-07	4.67E-08	0	160.3582143	79.99788869	0.12426348	3190.129306
Sacramento	2028	Airport Ground Support - Belt Loader	Aggregate	300	Diesel	4.70E-07	5.69E-07	6.77E-07	4.35E-06	5.35E-07	0.002124482	4.63E-08	4.26E-08	2.01E-08	0	69.03541472	20.12544609	0.031041	1368.530334
Sacramento	2028	Airport Ground Support - Belt Loader	Aggregate	50	Diesel	3.33E-05	4.03E-05	4.79E-05	0.000475533	0.00038469	0.07280585	8.46E-06	7.78E-06	6.90E-07	0	2365.838795	2789.64252	6.644255907	39825.51715
Sacramento	2028	Airport Ground Support - Belt Loader	Aggregate	75	Diesel	2.81E-05	3.39E-05	4.04E-05	0.000493385	0.000387244	0.092223601	5.86E-06	5.39E-06	8.74E-07	0	2996.822001	2106.300895	4.263464251	43072.16279
Sacramento	2028	Airport Ground Support - Belt Loader	Aggregate	750	Diesel	2.39E-06	2.90E-06	3.45E-06	3.50E-05	3.36E-05	0.001736374	1.73E-06	1.59E-06	1.64E-08	0	56.42376434	5.26363314	0.031041	1118.522042
Sacramento	2028	Airport Ground Support - Bobtail	Aggregate	100	Diesel	3.80E-07	4.60E-07	5.48E-07	5.41E-06	2.32E-06	0.000905992	1.60E-07	1.47E-07	8.58E-09	0	29.4403568	17.73534941	0.031041	524.9663426
Sacramento	2028	Airport Ground Support - Bobtail	Aggregate	175	Diesel	1.55E-06	1.87E-06	2.23E-06	1.88E-05	1.67E-05	0.003250334	9.09E-07	8.36E-07	3.08E-08	0	105.6201722	41.61579614	0.093123	2093.771873
Sacramento	2028	Airport Ground Support - Bobtail	Aggregate	50	Diesel	7.98E-08	9.66E-08	1.15E-07	1.21E-06	1.23E-06	0.000161332	4.62E-08	4.25E-08	1.53E-09	0	5.242521049	5.26363314	0.031041	93.48212457
Sacramento	2028	Airport Ground Support - Bobtail	Aggregate	600	Diesel	1.58E-05	1.92E-05	2.28E-05	0.000121	8.11E-05	0.059110144	4.19E-06	3.85E-06	5.60E-07	0	1920.794448	261.1833601	0.434574	38295.93216
Sacramento	2028	Airport Ground Support - Bobtail	Aggregate	75	Diesel	1.17E-06	1.41E-06	1.68E-06	1.31E-05	1.32E-05	0.002132183	3.13E-07	2.88E-07	2.02E-08	0	69.28566665	55.88460138	0.124164	1235.468825
Sacramento	2028	Airport Ground Support - Cargo Loader	Aggregate	100	Diesel	1.22E-05	1.48E-05	1.76E-05	0.000336701	0.000101503	0.061638636	7.70E-06	7.09E-06	5.84E-07	0	2002.958223	1061.428688	2.210151827	30923.30275
Sacramento	2028	Airport Ground Support - Cargo Loader	Aggregate	175	Diesel	0.000103154	0.000124816	0.000148542	0.002438566	0.000488375	0.41641528	2.35E-05	2.16E-05	3.94E-06	0	13531.48718	6282.25719	7.932668811	270635.1698
Sacramento	2028	Airport Ground Support - Cargo Loader	Aggregate	300	Diesel	8.81E-06	1.07E-05	1.27E-05	8.22E-05	5.34E-05	0.034901263	2.40E-06	2.21E-06	3.31E-07	0	1134.122619	350.4862087	0.590558282	23307.13027
Sacramento	2028	Airport Ground Support - Cargo Loader	Aggregate	50	Diesel	1.84E-06	2.23E-06	2.65E-06	2.43E-05	1.82E-05	0.004232744	8.30E-07	7.64E-07	4.01E-08	0	137.5437679	95.74750313	0.217411702	983.2322899
Sacramento	2028	Airport Ground Support - Cargo Loader	Aggregate	600	Diesel	1.59E-05	1.92E-05	2.28E-05	0.000129962	6.18E-05	0.063334503	3.23E-06	2.98E-06	6.00E-07	0	2058.065734	354.1079176	0.497242324	42323.77806
Sacramento	2028	Airport Ground Support - Cargo Loader	Aggregate	75	Diesel	2.60E-05	3.15E-05	3.74E-05	0.000394633	0.000328764	0.066329949	3.34E-06	3.07E-06	6.28E-07	0	2155.403275	1506.408529	2.981805418	36762.64214
Sacramento	2028	Airport Ground Support - Cargo Tractor	Aggregate	100	Diesel	1.15E-05	1.39E-05	1.65E-05	0.000331618	0.00010436	0.05907182	8.60E-06	7.91E-06	5.60E-07	0	1919.549103	1017.333011	2.053201083	31241.26899
Sacramento	2028	Airport Ground Support - Cargo Tractor	Aggregate	175	Diesel	5.05E-06	6.11E-06	7.27E-06	0.000104257	3.57E-05	0.017869064	1.77E-06	1.63E-06	1.69E-07	0	580.6583526	228.9744108	0.310615193	11605.33491
Sacramento	2028	Airport Ground Support - Cargo Tractor	Aggregate	300	Diesel	9.07E-06	1.10E-05	1.31E-05	7.15E-05	6.48E-05	0.032033842	2.92E-06	2.69E-06	3.03E-07	0	1040.9453	276.4525103	0.496656	21214.55805
Sacramento	2028	Airport Ground Support - Cargo Tractor	Aggregate	50	Diesel	2.50E-05	3.02E-05	3.59E-05	0.00038562	0.000318173	0.060015216	5.55E-06	5.10E-06	5.69E-07	0	1950.204902	2391.429626	5.991287107	34345.30547
Sacramento	2028	Airport Ground Support - Cargo Tractor	Aggregate	600	Diesel	2.67E-06	3.23E-06	3.84E-06	1.83E-05	2.75E-05	0.00951861	8.24E-07	7.58E-07	9.02E-08	0	309.3088896	39.20055171	0.062082	6131.615196
Sacramento	2028	Airport Ground Support - Cargo Tractor	Aggregate	75	Diesel	4.03E-05	4.87E-05	5.80E-05	0.000720026	0.000565356	0.132493358	8.89E-06	8.18E-06	1.26E-06	0	4305.394783	3125.761877	6.253822767	62656.65571
Sacramento	2028	Airport Ground Support - Forklift	Aggregate	100	Diesel	2.02E-05	2.44E-05	2.90E-05	0.000372555	0.000197361	0.062908377	1.41E-05	1.29E-05	5.96E-07	0	2044.21869	1998.443371	3.446651716	34155.40929
Sacramento	2028	Airport Ground Support - Forklift	Aggregate	175	Diesel	4.57E-05	5.53E-05	6.58E-05	0.00087712	0.000301892	0.149488914	1.19E-05	1.10E-05	1.42E-06	0	4857.668353	3789.554087	5.495448549	93962.59533
Sacramento	2028	Airport Ground Support - Forklift	Aggregate	300	Diesel	6.29E-06	7.61E-06	9.05E-06	6.29E-05	3.87E-05	0.021270161	2.11E-06	1.94E-06	2.01E-07	0	691.1775874	292.6508558	0.528810291	13005.28918
Sacramento	2028	Airport Ground Support - Forklift	Aggregate	50	Diesel	3.64E-06	4.40E-06	5.24E-06	5.11E-05	3.63E-05	0.009121096	1.10E-06	1.01E-06	8.64E-08	0	296.3915974	361.3762255	0.777449484	2688.063872
Sacramento	2028	Airport Ground Support - Forklift	Aggregate	600	Diesel	3.85E-06	4.66E-06	5.55E-06	4.10E-05	3.23E-05	0.011536509	1.55E-06	1.43E-06	1.09E-07	0	374.8808729	111.4842366	0.217485367	7542.811938
Sacramento	2028	Airport Ground Support - Forklift	Aggregate	75	Diesel	1.52E-05	1.84E-05	2.18E-05	0.000227433	0.000194026	0.038759578	3.40E-06	3.13E-06	3.67E-07	0	1259.49924	1547.550556	3.104992715	20406.37614
Sacramento	2028	Airport Ground Support - Forklift	Aggregate	750	Diesel	8.06E-07	9.75E-07	1.16E-06	6.76E-06	4.64E-06	0.003577925	2.97E-07	2.74E-07	3.39E-08	0	116.2653016	17.72920494	0.031041	2304.796642
Sacramento	2028	Airport Ground Support - Fuel Truck	Aggregate	300	Diesel	2.95E-06	3.57E-06	4.25E-06	1.80E-05	2.52E-05	0.008607757	9.77E-07	8.99E-07	8.15E-08	0	279.7105512	62.53612357	0.093123	5544.869623
Sacramento	2028	Airport Ground Support - Fuel Truck	Aggregate	600	Diesel	8.53E-07	1.03E-06	1.23E-06	5.20E-06	5.57E-06	0.002765983	2.35E-07	2.16E-07	2.62E-08	0	89.88110782	15.62953493	0.031041	1781.766982
Sacramento	2028	Airport Ground Support - Generator	Aggregate	100	Diesel	9.57E-08	1.16E-07	1.38E-07	1.53E-06	1.17E-06	0.000258895	5.52E-08	5.08E-08	2.45E-09	0	8.412829387	5.26363314	0.031041	150.0135445
Sacramento	2028	Airport Ground Support - Generator	Aggregate	175	Diesel	6.61E-07	8.00E-07	9.52E-07	1.11E-05	6.48E-06	0.001888523	3.14E-07	2.89E-07	1.79E-08	0	61.36790015	21.34267728	0.031041	1216.532605
Sacramento	2028	Airport Ground Support - Lift	Aggregate	100	Diesel	1.28E-05	1.55E-05	1.84E-05	0.000304704	0.000108239	0.057078682	7.43E-06	6.83E-06	5.41E-07	0	1854.781715	930.5468652	2.056866045	26637.33767
Sacramento	2028	Airport Ground Support - Lift	Aggregate	175	Diesel	1.49E-05	1.80E-05	2.14E-05	0.000314273	8.60E-05	0.052921327	3.65E-06	3.36E-06	5.01E-07	0	1719.687759	876.1903083	1.242742337	33898.71665
Sacramento	2028	Airport Ground Support - Lift	Aggregate	300	Diesel	3.01E-06	3.64E-06	4.33E-06	2.74E-05	1.77E-05	0.013367035	7.49E-07	6.89E-07	1.27E-07	0	434.3641492	117.9077076	0.186465297	8819.496528
Sacramento	2028	Airport Ground Support - Lift	Aggregate	50	Diesel	1.44E-05	1.74E-05	2.07E-05	0.000218856	0.000181351	0.034840248	4.16E-06	3.82E-06	3.30E-07	0	1132.139927	1121.952333	2.857774213	17840.56732
Sacramento	2028	Airport Ground Support - Lift	Aggregate	75	Diesel	1.61E-05	1.95E-05	2.33E-05	0.000254658	0.000217788	0.044708015	4.17E-06	3.84E-06	4.24E-07	0	1452.794751	1111.081991	2.29908799	24196.08273
Sacramento	2028	Airport Ground Support - Misc - A/C Tug Narrow Body	Aggregate	175	Gasoline	0.000342926	0.000315423	0.000377369	0.02360749	0.002218542	0.601760187	4.31E-05	3.26E-05	5.98E-06	8.48E-06	24199.5	2551.35	3.47	331675.5
Sacramento	2028	Airport Ground Support - Misc - A/C Tug Wide Body	Aggregate	600	Gasoline	0.000172213	0.000158402	0.00018951	0.01835078	0.001652965	0.524998626	3.87E-05	2.93E-05	5.37E-06	7.35E-06	20980.2	594.95	1.16	297475
Sacramento	2028	Airport Ground Support - Misc - Air Conditioner	Aggregate	175	Gasoline	1.32E-07	1.21E-07	1.45E-07	1.70E-05	1.64E-06	0.000539057	3.86E-08	2.92E-08	5.35E-09	1.28E-09	3.65	0	0.12	0
Sacramento	2028	Airport Ground Support - Misc - Air Conditioner	Aggregate	175	Nat Gas	0	0	6.23E-08	7.15E-05	7.19E-06	0.002896889	0	0	0	0	146	0	0.65	0
Sacramento	2028	Airport Ground Support - Misc - Air Start Unit	Aggregate	175	Gasoline	1.38E-05	1.26E-05	1.51E-05	0.001633788	0.000157394	0.050990891	3.66E-06	2.76E-06	5.07E-07	7.07E-07	2018.45	189.8	2.54	24674
Sacramento	2028	Airport Ground Support - Misc - Baggage Tug	Aggregate	100	Gasoline	0.002907106	0.002673956	0.003199093	0.214906083	0.017346715	5.312688512	0.000370413	0.000279868	5.13E-05	7.50E-05	214174.7	41303.4	47.06	4130340
Sacramento	2028	Airport Ground Support - Misc - Baggage Tug	Aggregate	100	Nat Gas	0	0	8.61E-05	0.038402918	0.0040117	0.872662734	0	0	0	0	48490.25	7781.8	9.37	778180
Sacramento	2028	Airport Ground Support - Misc - Belt Loader	Aggregate	100	Gasoline	0.000706141	0.000649509	0.000777066	0.052983052	0.004179982	1.266851123	8.83E-05	6.67E-05	1.22E-05	1.79E-05	51173	18052.9	22.26	1083174
Sacramento	2028	Airport Ground Support - Misc - Belt Loader	Aggregate	100	Nat Gas	0	0	6.17E-06	0.003285005	0.000326485	0.084128096	0	0	0	0	4628.2	1376.05	2.48	82563
Sacramento	2028	Airport Ground Support - Misc - Bobtail	Aggregate	100	Gasoline	0.000467226	0.000429754	0.000514154	0.034539405	0.002787939	0.853847351	5.95E-05	4.50E-05	8.25E-06	1.21E-05	34430.45	6639.35	7.57	663935
Sacramento	2028	Airport Ground Support - Misc - Bobtail	Aggregate	100	Nat Gas	0	0	1.10E-06	0.00075494	6.85E-05	0.021050342	0	0	0	0	1153.4	189.8	0.21	18980
Sacramento	2028	Airport Ground Support - Misc - Cargo Loader	Aggregate	100	Gasoline	0.000196829	0.000181043	0.000216598	0.014891202	0.001159992	0.349515324	2.44E-05	1.84E-05	3.38E-06	4.95E-06	14129.15	4263.2	5.94	298424
Sacramento	2028	Airport Ground Support - Misc - Cargo Loader	Aggregate	100	Nat Gas	0	0	8.68E-06	0.003532218	0.000379683	0.074185827	0	0	0	0	4142.75	1032.95	1	72306.5
Sacramento	2028	Airport Ground Support - Misc - Cargo Tractor	Aggregate	100	Gasoline	0.005272789	0.004849912	0.005802383	0.509971555	0.02620515	5.93840313	0.00041404	0.00031283	4.90E-05	8.96E-05	255744.55	49497.65	36.62	4702276.75
Sacramento	2028	Airport Ground Support - Misc - Cargo Tractor	Aggregate	175	Nat Gas	0	0	2.95E-06	0.002775434	0.000274851	0.105949347	0	0	0	0	5715.9	616.85	3.98	95981.86
Sacramento	2028	Airport Ground Support - Misc - Cart	Aggregate	15	Gasoline	2.51E-05	2.54E-05	0.000027666	0.001419626	1.54E-05	5.46E-07	5.50E-08	4.15E-08	2.20E-08	3.04E-08	86.4975418	0	2.01118975	0
Sacramento	2028	Airport Ground Support - Misc - Catering Truck	Aggregate	300	Gasoline	0.000694365	0.000638677	0.000764107	0.041848622	0.003898522	0.956223553	7.05E-05	5.33E-05	8.35E-06	1.36E-05	38770.3	4084.35	4.04	832798.965
Sacramento	2028	Airport Ground Support - Misc - Catering Truck	Aggregate	300	Nat Gas	0	0	3.08E-06	0.002166783	0.000208334	0.073229951	0	0	0	0	3982.15	339.45	0.73	69587.25
Sacramento	2028	Airport Ground Support - Misc - Deicer	Aggregate	100	Gasoline	4.99E-06	4.59E-06	5.50E-06	0.000197306	3.58E-05	0.013077362	9.12E-07	6.89E-07	1.26E-07	1.78E-07	507.35	62.05	2.86	5770.65
Sacramento	2028	Airport Ground Support - Misc - Forklift	Aggregate	50	Gasoline	0.000203958	0.0001876	0.000224443	0.018968645	0.000456479	0.14460297	9.97E-06	7.53E-06	1.76E-06	2.32E-06	6628.4	4084.35	5.61	204217.5
Sacramento	2028	Airport Ground Support - Misc - Forklift	Aggregate	50	Nat Gas	0	0	1.33E-05	0.00360051	0.000973901	0.291440525	2.59E-05	0	0	0	15413.95	9537.45	13.11	476872.5
Sacramento	2028	Airport Ground Support - Misc - Fuel Truck	Aggregate	175	Gasoline	1.38E-06	1.27E-06	1.52E-06	0.000177498	1.71E-05	0.005643201	4.05E-07	3.06E-07	5.61E-08	7.42E-08	211.7	62.05	3.46	8066.5
Sacramento	2028	Airport Ground Support - Misc - Fuel Truck	Aggregate	175	Nat Gas	0	0	8.40E-07	0.000547493	5.21E-05	0.017729349	0	0	0	0	963.6	244.55	0.42	34237
Sacramento	2028	Airport Ground Support - Misc - Generator	Aggregate	100	Gasoline	4.87E-05	4.48E-05	5.36E-05	0.003967395	0.000222892	0.049861124	3.48E-06	2.63E-06	4.12E-07	7.44E-07	2124.3	259.15	0.27	27729.05
Sacramento	2028	Airport Ground Support - Misc - Ground Power Unit	Aggregate	175	Gasoline	0.000303978	0.000279599	0.000334509	0.031051278	0.002784881	0.899830027	6.45E-05	4.87E-05	8.94E-06	1.26E-05	35923.3	3514.95	4.41	527242.5
Sacramento	2028	Airport Ground Support - Misc - Hydrant Truck	Aggregate	175	Gasoline	0.000944277	0.000868546	0.00103912	0.048305159	0.004432198	0.994997275	7.13E-05	5.39E-05	8.45E-06	1.42E-05	40646.4	5135.55	3.33	623969.325
Sacramento	2028	Airport Ground Support - Misc - Lav Cart	Aggregate	15	Gasoline	2.16E-06	2.18E-06	2.37E-06	0.000121884	1.33E-06	4.69E-08	4.72E-09	3.57E-09	1.89E-09	2.61E-09	7.426333434	0	0.172673648	0
Sacramento	2028	Airport Ground Support - Misc - Lav Truck	Aggregate	175	Gasoline	0.000256752	0.000236161	0.00028254	0.019220503	0.001666835	0.484030497	3.47E-05	2.62E-05	4.81E-06	6.83E-06	19491	6548.1	5.38	851253
Sacramento	2028	Airport Ground Support - Misc - Lav Truck	Aggregate	175	Nat Gas	0	0	3.93E-07	0.000291593	2.82E-05	0.010110625	0	0	0	0	551.15	146	0.36	18980
Sacramento	2028	Airport Ground Support - Misc - Lift	Aggregate	100	Gasoline	0.000268778	0.000247222	0.000295773	0.017745857	0.001487227	0.433161987	3.02E-05	2.28E-05	4.18E-06	6.13E-06	17490.8	3708.4	9.84	370840
Sacramento	2028	Airport Ground Support - Misc - Lift	Aggregate	100	Nat Gas	0	0	6.95E-07	0.000452594	4.28E-05	0.012821223	0	0	0	0	700.8	113.15	0.33	11315
Sacramento	2028	Airport Ground Support - Misc - Maint. Truck	Aggregate	175	Gasoline	0.00017395	0.000159999	0.000191422	0.016243265	0.001460393	0.459307758	3.29E-05	2.49E-05	4.56E-06	6.43E-06	18366.8	3095.2	6.9	402376
Sacramento	2028	Airport Ground Support - Misc - Other	Aggregate	50	Gasoline	0.000140122	0.000128884	0.000154196	0.01113591	0.000304014	0.110571058	7.62E-06	5.76E-06	1.34E-06	1.71E-06	4869.1	1879.75	10.19	93987.5
Sacramento	2028	Airport Ground Support - Misc - Other	Aggregate	50	Nat Gas	0	0	1.16E-05	0.001682638	0.000469938	0.099980962	0	0	0	0	5347.25	1956.4	1.93	97820

Sacramento	2028 Airport Ground Support - Misc - Passenger Stand	Aggregate	175	Gasoline	4.76E-05	4.37E-05	5.23E-05	0.004934306	0.000472746	0.148312429	1.06E-05	8.03E-06	1.31E-06	2.07E-06	5913	886.95	4.69	110957.445
Sacramento	2028 Airport Ground Support - Misc - Passenger Stand	Aggregate	175	Nat Gas	0	0	8.53E-09	9.95E-06	1.00E-06	0.000405297	0	0	0	0	3.65	0	0.17	0
Sacramento	2028 Airport Ground Support - Misc - Service Truck	Aggregate	300	Gasoline	0.000854536	0.000786003	0.000940365	0.055587662	0.005203186	1.332524018	9.83E-05	7.43E-05	1.36E-05	1.89E-05	53848.45	16746.2	19.9	3014316
Sacramento	2028 Airport Ground Support - Misc - Service Truck	Aggregate	300	Nat Gas	0	0	1.11E-05	0.006549786	0.000555207	0.186047914	0	0	0	0	10183.5	2533.1	1.96	455958
Sacramento	2028 Airport Ground Support - Misc - Sweeper	Aggregate	100	Gasoline	6.38E-06	5.87E-06	7.02E-06	0.000416923	3.56E-05	0.010442562	7.28E-07	5.50E-07	8.62E-08	1.47E-07	419.75	153.3	0.42	8170.89
Sacramento	2028 Airport Ground Support - Misc - Sweeper	Aggregate	50	Nat Gas	0	0	9.20E-08	2.65E-05	7.32E-06	0.00221352	0	0	0	0	113.15	51.1	0.15	2299.5
Sacramento	2028 Airport Ground Support - Misc - Water Truck	Aggregate	175	Gasoline	1.40E-05	1.29E-05	1.54E-05	0.001282214	0.000122285	0.037043287	2.66E-06	2.01E-06	3.68E-07	5.20E-07	1485.55	547.5	1.74	82125
Sacramento	2028 Airport Ground Support - Other	Aggregate	100	Diesel	6.28E-06	7.59E-06	9.04E-06	0.000108313	5.79E-05	0.018331407	4.42E-06	4.06E-06	1.74E-07	0	595.6822539	349.4488899	0.714075905	10419.51654
Sacramento	2028 Airport Ground Support - Other	Aggregate	175	Diesel	2.08E-05	2.52E-05	2.99E-05	0.000430564	0.000128833	0.072519507	5.52E-06	5.08E-06	6.87E-07	0	2356.534032	1071.97805	1.522406192	47042.35194
Sacramento	2028 Airport Ground Support - Other	Aggregate	300	Diesel	3.86E-05	4.67E-05	5.56E-05	0.000301486	0.000243892	0.131126146	1.16E-05	1.07E-05	1.24E-06	0	4260.967001	1103.623983	1.833141374	86301.24907
Sacramento	2028 Airport Ground Support - Other	Aggregate	50	Diesel	2.29E-05	2.77E-05	3.30E-05	0.000245148	0.000208132	0.034364438	7.32E-06	6.74E-06	3.26E-07	0	1116.678411	1604.608485	3.6010039	18239.9272
Sacramento	2028 Airport Ground Support - Other	Aggregate	600	Diesel	2.77E-05	3.35E-05	3.99E-05	0.000222011	0.000118646	0.112333524	6.15E-06	5.66E-06	1.06E-06	0	3650.297463	622.9720865	0.931346839	73162.36863
Sacramento	2028 Airport Ground Support - Other	Aggregate	75	Diesel	2.11E-05	2.56E-05	3.04E-05	0.000307253	0.000270049	0.05428488	7.16E-06	6.59E-06	5.14E-07	0	1763.996642	1296.901073	2.796009566	27543.2312
Sacramento	2028 Airport Ground Support - Other	Aggregate	750	Diesel	2.30E-06	2.79E-06	3.32E-06	2.13E-05	1.16E-05	0.010925232	6.11E-07	5.62E-07	1.03E-07	0	355.0173124	35.37062703	0.062191648	7576.38831
Sacramento	2028 Airport Ground Support - Other	Aggregate	9999	Diesel	1.68E-05	2.03E-05	2.41E-05	0.000153538	0.000324718	0.077802478	6.91E-06	6.36E-06	7.37E-07	0	2528.205087	53.92911286	0.093123	50118.12222
Sacramento	2028 Airport Ground Support - Passenger Stand	Aggregate	175	Diesel	7.97E-07	9.65E-07	1.15E-06	1.46E-05	5.13E-06	0.002296256	2.58E-07	2.37E-07	2.18E-08	0	74.61723419	32.29655199	0.062082	1479.182081
Sacramento	2028 Airport Ground Support - Passenger Stand	Aggregate	300	Diesel	5.45E-07	6.60E-07	7.85E-07	6.50E-06	1.15E-06	0.003036996	6.99E-08	6.43E-08	2.88E-08	0	98.68772368	19.51980593	0.031142573	2147.178652
Sacramento	2028 Airport Ground Support - Passenger Stand	Aggregate	50	Diesel	3.25E-06	3.93E-06	4.68E-06	3.84E-05	3.08E-05	0.006012746	8.38E-07	7.71E-07	5.70E-08	0	195.385233	188.4211278	0.466123232	2924.509524
Sacramento	2028 Airport Ground Support - Passenger Stand	Aggregate	75	Diesel	5.39E-06	6.52E-06	7.76E-06	7.62E-05	6.76E-05	0.013683505	1.26E-06	1.16E-06	1.30E-07	0	444.6478975	327.6309963	0.621793736	7076.890937
Sacramento	2028 Cargo Handling Equipment - Port Forklift	Aggregate	175	Diesel	0.00013719	0.00016625	0.00019781	0.001631751	0.001125152	0.257107407	0.00008681	7.98E-05	0.000002436	5.76E-09	8362.873656	3640.618624	0	0
Sacramento	2028 Cargo Handling Equipment - Port Tractors/Loaders/Backhoes	Aggregate	300	Diesel	0.0001726	0.00020891	0.000248622	0.001220746	0.0001338	0.530653485	0.0000122	0.00001124	0.00000504	1.19E-08	17260.44421	2131.680198	0	0
Sacramento	2028 Commercial Harbor Craft - AE - Commercial Fishing	Aggregate	75	Diesel	0.000129408	0.000156583	0.000186347	0.000436141	0.001184201	0.084879822	5.16E-05	4.93E-05	0	0	2891.207677	1880.540873	1.583454022	49420.61304
Sacramento	2028 Commercial Harbor Craft - AE - Excursion	Aggregate	75	Diesel	9.77E-06	1.18E-05	1.41E-05	5.12E-05	0.000234919	0.034862017	7.39E-06	7.07E-06	0	0	1187.482813	963.4008189	5.102426052	20965.52788
Sacramento	2028 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	100	Diesel	6.72E-06	8.13E-06	9.67E-06	2.37E-05	0.000133878	0.0125824	8.78E-06	8.39E-06	0	0	428.5863136	235.4687796	1.541667	7579.740223
Sacramento	2028 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	175	Diesel	6.33E-06	7.66E-06	9.12E-06	2.64E-05	0.00013466	0.014605046	5.13E-06	4.90E-06	0	0	492.627338	235.4687835	1.541666989	8712.344936
Sacramento	2028 Commercial Harbor Craft - AE - Tugboat-Push/Tow	Aggregate	50	Diesel	0.000138047	0.000167037	0.000198788	0.0004904	0.002298387	0.221439718	5.50E-05	5.26E-05	0	0	7295.312279	8882.677046	7.708333023	113826.9892
Sacramento	2028 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	300	Diesel	0.000206222	0.000249529	0.00029696	0.000822849	0.00242132	0.169720585	7.76E-05	7.42E-05	0	0	5781.084883	1578.696639	1.583454026	106562.0236
Sacramento	2028 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	50	Diesel	7.58E-06	9.17E-06	1.09E-05	7.22E-05	0.000142812	0.020404793	6.20E-06	5.93E-06	0	0	695.0355465	1578.696655	1.583454013	11508.69921
Sacramento	2028 Commercial Harbor Craft - ME - Commercial Fishing	Aggregate	600	Diesel	0.000109409	0.000132385	0.000157549	0.000547577	0.003045218	0.288910433	5.36E-05	5.12E-05	0	0	9840.973267	1578.696655	1.583454013	181155.4374
Sacramento	2028 Commercial Harbor Craft - ME - Excursion	Aggregate	600	Diesel	3.63E-05	4.39E-05	5.22E-05	0.000142694	0.000937292	0.12920725	1.41E-05	1.35E-05	0	0	4400.966219	1100.157689	5.10242596	82707.39844
Sacramento	2028 Commercial Harbor Craft - ME - Excursion	Aggregate	800	Diesel	0.000423179	0.000512046	0.000609377	0.001673056	0.01053998	1.454991659	0.000172146	0.000164572	0	0	49560.46029	5461.563943	5.102426	914812
Sacramento	2028 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	600	Diesel	0.000877394	0.001061646	0.001263447	0.002221782	0.017859165	1.51900336	0.000171112	0.000163584	0	0	50077.70084	7876.983931	9.249999945	924362.3101
Sacramento	2028 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	800	Diesel	3.30E-05	4.00E-05	4.76E-05	0.000236238	0.000698346	0.183549593	2.85E-05	2.72E-05	0	0	6184.698559	471.4464467	3.083333011	114160.7531
Sacramento	2028 Commercial Harbor Craft - ME - Tugboat-Push/Tow	Aggregate	9999	Diesel	0.000249262	0.000301607	0.000358937	0.002137852	0.005437717	1.611361963	0.000308495	0.000294921	0	0	54886.80289	2489.793787	3.083333042	1081068.468
Sacramento	2028 Commercial Harbor Craft - ME - Work Boat	Aggregate	300	Diesel	0.000160884	0.00019467	0.000231673	0.000524047	0.00292112	0.227478275	6.07E-05	5.80E-05	0	0	8156.261634	1960.344748	3.068023	150142.7858
Sacramento	2028 Commercial Harbor Craft - ME - Work Boat	Aggregate	600	Diesel	0.000461667	0.000558617	0.000664801	0.001492859	0.008144647	0.72079783	7.47E-05	7.14E-05	0	0	25129.17755	3920.688978	6.136045	463484.2436
Sacramento	2028 Commercial Harbor Craft - ME - Work Boat	Aggregate	9999	Diesel	0.004891541	0.005918765	0.007043819	0.022340763	0.045659449	8.31526363	0.001796751	0.001717694	0	0	298144.8055	11762.07104	18.40814087	5816402.549
Sacramento	2028 Construction and Mining - Bore/Drill Rigs	Aggregate	100	Diesel	4.74E-05	5.73E-05	6.82E-05	0.000784733	0.000448082	0.133522398	3.46E-05	3.18E-05	1.26E-06	0	4338.833605	1705.161037	3.31413503	74868.66789
Sacramento	2028 Construction and Mining - Bore/Drill Rigs	Aggregate	175	Diesel	0.000280563	0.000339482	0.000404011	0.005374946	0.00186149	0.919111942	8.63E-05	7.94E-05	8.71E-06	0	29866.70292	8494.68728	13.13240138	594451.313
Sacramento	2028 Construction and Mining - Bore/Drill Rigs	Aggregate	300	Diesel	0.000312671	0.000378332	0.000450246	0.002357565	0.002202099	1.080468124	9.55E-05	8.79E-05	1.02E-05	0	35110.00021	6341.224667	10.27550412	716739.325
Sacramento	2028 Construction and Mining - Bore/Drill Rigs	Aggregate	50	Diesel	3.53E-05	4.27E-05	5.08E-05	0.000365297	0.000287177	0.047713767	1.19E-05	1.10E-05	4.52E-07	0	1550.467183	1269.066488	2.690162896	25203.90443
Sacramento	2028 Construction and Mining - Bore/Drill Rigs	Aggregate	600	Diesel	0.000429148	0.00051927	0.000617974	0.003483819	0.002765709	1.5514565	0.00012697	0.000116812	1.47E-05	0	50414.84964	5114.552263	8.829207472	1038412.789
Sacramento	2028 Construction and Mining - Bore/Drill Rigs	Aggregate	75	Diesel	7.35E-05	8.89E-05	0.000105849	0.001023206	0.000905012	0.173075872	2.16E-05	1.99E-05	1.64E-06	0	5624.130672	3030.664795	6.266882113	96432.70068
Sacramento	2028 Construction and Mining - Bore/Drill Rigs	Aggregate	750	Diesel	0.000168283	0.000203622	0.000242327	0.00124409	0.001188298	0.643288805	5.49E-05	5.06E-05	6.09E-06	0	20903.78195	1302.861764	2.297452069	425669.7529
Sacramento	2028 Construction and Mining - Bore/Drill Rigs	Aggregate	9999	Diesel	5.46E-05	6.60E-05	7.86E-05	0.000396072	0.000894063	0.207046899	1.73E-05	1.59E-05	1.96E-06	0	6728.02511	324.9989687	0.5581132	138592.8527
Sacramento	2028 Construction and Mining - Bucket	Aggregate	100	Diesel	3.87E-06	4.69E-06	5.58E-06	6.21E-05	3.45E-05	0.01058279	2.63E-06	2.42E-06	1.00E-07	0	343.8896074	185.405717	0.360842383	5786.708769
Sacramento	2028 Construction and Mining - Bucket	Aggregate	175	Diesel	5.27E-06	6.38E-06	7.59E-06	9.73E-05	3.63E-05	0.01584804	1.50E-06	1.38E-06	1.50E-07	0	514.9848365	209.2061321	0.360842383	10208.85256
Sacramento	2028 Construction and Mining - Bucket	Aggregate	300	Diesel	1.30E-05	1.57E-05	1.87E-05	9.18E-05	6.02E-05	0.041350279	3.13E-06	2.88E-06	3.92E-07	0	1343.684524	285.010548	0.426450089	26636.66233
Sacramento	2028 Construction and Mining - Bucket	Aggregate	50	Diesel	2.38E-06	2.88E-06	3.43E-06	2.89E-05	2.19E-05	0.004577507	6.66E-07	6.13E-07	4.34E-08	0	148.7468755	127.4699525	0.295515583	1972.968708
Sacramento	2028 Construction and Mining - Bucket	Aggregate	75	Diesel	4.14E-06	5.01E-06	5.96E-06	5.82E-05	5.24E-05	0.009585831	9.94E-07	9.14E-07	9.08E-08	0	311.4932527	214.6629447	0.426450089	5554.398499
Sacramento	2028 Construction and Mining - Bucket	Aggregate	750	Diesel	7.42E-06	8.97E-06	1.07E-05	6.50E-05	3.72E-05	0.033094575	2.27E-06	2.09E-06	3.13E-07	0	1075.413992	75.20310092	0.131215412	21318.57505
Sacramento	2028 Construction and Mining - Compactor	Aggregate	100	Diesel	1.08E-06	1.31E-06	1.56E-06	2.76E-05	1.33E-05	0.0046435	1.15E-06	1.05E-06	4.40E-08	0	150.8913381	88.15104293	0.196823118	2690.622076
Sacramento	2028 Construction and Mining - Compactor	Aggregate	175	Diesel	2.12E-05	2.56E-05	3.05E-05	0.000485015	0.000114479	0.081248868	4.57E-06	4.21E-06	7.70E-07	0	2640.196145	1054.340619	1.574584944	51770.65678
Sacramento	2028 Construction and Mining - Compactor	Aggregate	300	Diesel	5.33E-06	6.45E-06	7.68E-06	4.18E-05	2.64E-05	0.020569398	1.28E-06	1.18E-06	1.95E-07	0	668.4061816	156.0447442	0.262430824	13250.21569
Sacramento	2028 Construction and Mining - Compactor	Aggregate	50	Diesel	3.13E-06	3.78E-06	4.50E-06	3.57E-05	2.84E-05	0.004925286	6.50E-07	5.98E-07	4.67E-08	0	160.0480255	236.1685435	0.557665501	2853.89974
Sacramento	2028 Construction and Mining - Compactor	Aggregate	600	Diesel	1.17E-05	1.41E-05	1.68E-05	0.000102584	4.86E-05	0.052446097	2.24E-06	2.06E-06	4.97E-07	0	1704.245061	216.6608526	0.361086017	34380.51133
Sacramento	2028 Construction and Mining - Compactor	Aggregate	75	Diesel	2.00E-06	2.42E-06	2.88E-06	3.14E-05	2.74E-05	0.005307499	3.72E-07	3.43E-07	5.03E-08	0	172.4681215	126.7917774	0.295234677	3075.368943
Sacramento	2028 Construction and Mining - Compactor	Aggregate	9999	Diesel	3.14E-06	3.80E-06	4.53E-06	2.95E-05	5.05E-05	0.015026487	9.48E-07	8.72E-07	1.42E-07	0	488.2883186	17.07816648	0.032803853	9679.631512
Sacramento	2028 Construction and Mining - Concrete Mixer	Aggregate	175	Diesel	1.32E-06	1.59E-06	1.90E-06	2.84E-05	7.73E-06	0.004550879	3.84E-07	3.53E-07	4.31E-08	0	147.8815956	61.88301985	0.098411559	2931.545356
Sacramento	2028 Construction and Mining - Concrete Mixer	Aggregate	300	Diesel	1.25E-06	1.52E-06	1.81E-06	1.13E-05	5.04E-06	0.005444534	2.39E-07	2.20E-07	5.16E-08	0	176.9210753	42.17427053	0.065607706	3507.212337
Sacramento	2028 Construction and Mining - Concrete Mixer	Aggregate	50	Diesel	8.88E-07	1.07E-06	1.28E-06	1.41E-05	1.15E-05	0.00225246	1.12E-07	1.03E-07	2.13E-08	0	73.19408303	132.8003494	0.32803853	1305.161834
Sacramento	2028 Construction and Mining - Concrete Mixer	Aggregate	600	Diesel	6.88E-07	8.32E-07	9.90E-07	8.05E-06	1.40E-06	0.003887904	8.65E-08	7.96E-08	3.68E-08	0	126.33813	22.81973045	0.032919728	2752.059492
Sacramento	2028 Construction and Mining - Concrete Mixer	Aggregate	75	Diesel	3.77E-07	4.57E-07	5.43E-07	4.20E-06	3.25E-06	0.000623421	6.14E-08	5.65E-08	5.91E-09	0	20.25817547	17.00725437	0.032803853	361.2340828
Sacramento	2028 Construction and Mining - Concrete Pump	Aggregate	100	Diesel	1.31E-06	1.59E-06	1.89E-06	2.52E-05	1.38E-05	0.004298761	1.02E-06	9.41E-07	4.07E-08	0	139.6889957	70.44259144	0.131322753	2338.751977
Sacramento	2028 Construction and Mining - Concrete Pump	Aggregate	175	Diesel	1.89E-05	2.28E-05	2.71E-05	0.000425338	9.89E-05	0.069787574	3.69E-06	3.39E-06	6.61E-07	0	2267.759407	832.7712489	1.049839171	44981.14698
Sacramento	2028 Construction and Mining - Concrete Pump	Aggregate	300	Diesel	7.27E-06	8.80E-06	1.05E-05	6.14E-05	2.40E-05	0.027869845	1.51E-06	1.39E-06	2.64E-07	0	905.6354796	240.9660588	0.393646236	17952.95401
Sacramento	2028 Construction and Mining - Concrete Pump	Aggregate	50	Diesel	1.66E-07	2.01E-07	2.39E-07	3.23E-06	2.05E-06	0.000733955	2.31E-08	2.13E-08	6.95E-09	0	23.85000322	12.90676089	0.032919728	227.675262
Sacramento	2028 Construction and Mining - Concrete Pump	Aggregate	600	Diesel	1.77E-05	2.14E-05	2.55E-05	0.000128144	0.0001792	0.067746398	5.74E-06	5.28E-06	6.42E-07	0	2201.431034	313.6429829	0.590469354	43640.28464
Sacramento	2028 Construction and Mining - Concrete Pump	Aggregate	75	Diesel	2.32E-06	2.80E-06	3.34E-06	2.92E-05	2.50E-05	0.004899178	5.95E-07	5.47E-07	4.64E-08	0	159.1996312	110.9452899	0.229626971	2632.836958
Sacramento	2028 Construction and Mining - Crane less than 35ton	Aggregate	100	Diesel	1.70E-06	2.06E-06	2.45E-06	3.88E-05	1.89E-05	0.007326646	1.40E-06	1.29E-06	6.94E-08	0	238.0806497	144.6343979	0.689004388	3801.313573
Sacramento	2028 Construction and Mining - Crane less than 35ton	Aggregate	175	Diesel	1.43E-05	1.73E-05	2.06E-05	0.000259759	0.000141152	0.048764708	6.71E-06	6.18E-06	4.62E-07	0	1584.617702	680.9633655	2.462368814	26525.56767
Sacramento	2028 Construction and Mining - Crane less than 35ton	Aggregate	300	Diesel	2.85E-06	3.44E-06	4.10E-06	2.30E-05	3.04E-05	0.01227439	1.09E-06	1.01E-06	1.16E-07	0	398.8584421	117.3467178	0.426450089	7906.809559
Sacramento	2028 Construction and Mining - Crane less than 35ton	Aggregate	50	Diesel	1.05E-06	1.27E-06	1.51E-06	1.98E-05	1.87E-05	0.003534244	3.67E-07	3.37E-07	3.35E-08	0	114.8458612	187.1877559	1.115331002	2047.876394
Sacramento	2028 Construction and Mining - Crane less than 35ton	Aggregate	600	Diesel	2.09E-06	2.52E-06	3.00E-06	2.25E-05	1.51E-05	0.010384003	7.27E-07	6.69E-07	9.84E-08	0	337.429992	56.6536913	0.229626971	6084.973256
Sacramento	2028 Construction and Mining - Crane less than 35ton	Aggregate	75	Diesel	2.03E-06	2.45E-06	2.92E-06	3.73E-05	3.24E-05	0.007118645	6.53E-07	6.01E-07	6.74E-08	0	231.3216246	167.0743294	0.787674398	3408.525021
Sacramento	2028 Construction and Mining - Crane less than 35ton	Aggregate	750	Diesel	3.18E-07	3.84E-07	4.57E-07	3.78E-06	2.57E-06	0.00211567	1.52E-07	1.39E-07	2.00E-08	0	68.74906334	7.793525586	0.032803853	1362.853819
Sacramento	2028 Construction and Mining - Crane less than 35ton	Aggregate	9999	Diesel	3.97E-06	4.80E-06	5.72E-06	5.40E-05	5.68E-05	0.002504214	2.85E-06	2.62E-06	2.37E-08	0	81.37486363	5.562560735	0.032803853	1613.142613
Sacramento	2028 Construction and Mining - Cranes	Aggregate	100	Diesel	2.63E-05	3.18E-05	3.79E-05	0.000362454	0.00024514	0.074964461	1.69E-05	1.55E-05	7.10E-07	0	2435.98323	970.8482652	4.960751616	24089.70382
Sacramento	2028 Construction and Mining - Cranes	Aggregate	175	Diesel	0.000167638	0.000202842	0.000241398	0.002657616	0.001639398	0.519603109	8.60E-05	7.91E-05	4.92E-06	0	16884.59369	5900.661094	22.30331493	248738.5138
Sacramento	2028 Construction and Mining - Cranes	Aggregate	25	Diesel	1.10E-06	1.33E-06	1.59E-06	1.33E-05	8.53E-06	0.003195424	5.41E-07	4.97E-07	3.03E-08	0	103.8358661	10.26911472	0.065607706	64.77244107
Sacramento	2028 Construction and Mining - Cranes	Aggregate	300	Diesel	0.000379765	0.000459515	0.000546861	0.003720677	0.003237347	1.525376972	0.000162993	0.000149953	1.44E-05	0	49567.39082	12844.31202	50.16090407	889238.145
Sacramento	2028 Construction and Mining - Cranes	Aggregate	50	Diesel	4.01E-06	4.86E-06	5.78E-06	4.87E-05	3.40E-05	0.010834629	1.47E-06	1.35E-06	1.03E-07	0	352.0731605	167.2945548	0.853761703	1941.133804
Sacramento	2028 Construction and Mining - Cranes	Aggregate	600	Diesel	0.000425881	0.000515316	0.000613268	0.004907602	0.003427359	2.057723773	0.000155216	0.000142799	1.95E-05	0	66866.09301	10663.26684	40.08334136	1290707.787
Sacramento	2028 Construction and Mining - Cranes	Aggregate	75	Diesel	1.49E-05	1.80E-05	2.14E-05	0.000154992	0.000158489	0.032403789	8.64E-06	7.94E-06	3.07E-07	0	1052.966762	465.4189476	2.527857424	8278.310674
Sacramento	2028 Construction and Mining - Cranes	Aggregate	750	Diesel	5.80E-05	7.02E-05	8.36E-05	0.000621681	0.000514435	0.315650618	2.35E-05	2.16E-05	2.99E-06	0	10257.12189	1089.161866	4.626606944	202819.0468
Sacramento	2028 Construction and Mining - Cranes	Aggregate	9999	Diesel	1.70E-05	2.05E-05	2.44E-05	0.000200296	0.000381808	0.10392902	6.81E-06	6.27E-06	9.84E-07	0	3377.191644	263.5628079	1.084280831	69185.58968
Sacramento	2028 Construction and Mining - Crawler Tractors	Aggregate	100	Diesel	0.000268351	0.000324704	0.000386425	0.004155893	0.002451112	0.755018594	0.000182459	0.000167862	7.15E-06	0	24534.46094	9978.639653	28.16262918	377098.0597
Sacramento	2028 Construction and Mining - Crawler Tractors	Aggregate	175	Diesel	0.00076178	0.000921754	0.001096963	0.014373371	0.006019369	2.49542974	0.000292406	0.000269013	2.36E-05	0	81089.42478	26614.67265	57.82224322	1549058.744
Sacramento	2028 Construction and Mining - Crawler Tractors	Aggregate	300	Diesel	0.000784478	0.000949218	0.001129648	0.006828752	0.00531044	3.014242697	0.000260363	0.000239534	2.86E-05	0	97948.34233	20408.82817	46.83944945	1926925.111
Sacramento	2028 Construction and Mining - Crawler Tractors	Aggregate	50	Diesel	3.22E-05	3.90E-05	4.64E-05	0.000217408	0.000171354	0.030480565	1.06E-05	9.75E-06	2.89E-07	0	990.4712799	769.414752	2.822026419	12958.16895
Sacramento	2028 Construction and Mining - Crawler Tractors	Aggregate	600	Diesel	0.001265902	0.001531742	0.001822899	0.012475414	0.008271372	5.171932159	0.000393019	0.000361578	4.90E-05	0	168062.8378	20587.35573	46.81241253	3449747.52
Sacramento	2028 Construction and Mining - Crawler Tractors	Aggregate	75	Diesel	0.000119192	0.000144222	0.000171636	0.00121057	0.001345511	0.219025448	6.25E-05	5.75E-05	2.07E-06	0	7117.270157	3359.794557	11.19075788	96188.74167
Sacramento	2028 Construction and Mining - Crawler Tractors	Aggregate	750	Diesel	6.99E-05	8.45E-05	0.000100615	0.000679484	0.000438644	0.334364567	2.23E-05	2.05E-05	3.17E-06	0	10865.23496	844.5588912	2.138791363	234340.9781
Sacramento	2028 Construction and Mining - Crawler Tractors	Aggregate	9999	Diesel	0.000105455	0.000127601	0.000151856	0.00104322	0.001954448	0.524181858	3.99E-05	3.67E-05	4.97E-06	0	17033.38092	1004.708866	2.530803317	368109.68
Sacramento	2028 Construction and Mining - Crushing/Processing Equipment	Aggregate	100	Diesel	2.14E-06	2.59E-06	3.09E-06	5.25E-05	2.31E-05	0.008859768	1.70E-06	1.56E-06	8.39E-08	0	287.8997132	165.96964	0.32803853	5133.689802
Sacramento	2028 Construction and Mining - Crushing/Processing Equipment	Aggregate	175	Diesel	3.16E-05	3.83E-05	4.55E-05	0.000767811	0.000163912	0.126821065	6.00E-06	5.52E-06	1.20E-06	0	4121.072647	1739.368093	2.591627862	81638.98373
Sacramento	2028 Construction and Mining - Crushing/Processing Equipment	Aggregate	300	Diesel	1.55E-05	1.88E-05	2.24E-05	0.000127413	6.64E-05	0.062257675	3.23E-06	2.97E-06	5.90E-07	0	2023.074007	504.5715501	0.885704031	40104.60656
Sacramento	2028 Construction and Mining - Crushing/Processing Equipment	Aggregate	50	Diesel	1.16E-06	1.41E-06	1.67E-06	1.78E-05	1.53E-05	0.002787563	2.87E-07	2.64E-07	2.64E-08	0	90.58233425	108.3033387	0.295234677	1615.220802
Sacramento	2028 Construction and Mining - Crushing/Processing Equipment	Aggregate	600	Diesel	8.02E-05	9.70E-05	0.000115492	0.000674407	0.000243169	0.341567263	1.47E-05	1.35E-05	3.24E-06	0	11099.28779	1601.080858	2.788327505	220027.8232
Sacramento	2028 Construction and Mining - Crushing/Processing Equipment	Aggregate	75	Diesel	4.99E-06	6.04E-06	7.19E-06	8.17E-05	7.00E-05	0.013753889	6.84E-07	6.29E-07	1.30E-07	0	446.9350128	325.6168931	0.754488619	7969.531099
Sacramento	2028 Construction and Mining - Crushing/Processing Equipment	Aggregate	750	Diesel	8.01E-06	9.69E-06	1.15E-05	6.38E-05	4.61E-05	0.032526119	2.34E-06	2.15E-06	3.08E-07	0	1056.941913	83.98324102	0.164019265	20952.39196
Sacramento	2028 Construction and Mining - Crushing/Processing Equipment	Aggregate	9999	Diesel	1.43E-05	1.73E-05	2.06E-05	0.000136602	0.000241401	0.06981495	5.37E-06	4.94E-06	6.61E-07	0	2268.64899	134.327025	0.262430824	44972.7864
Sacramento	2028 Construction and Mining - Excavators	Aggregate	100	Diesel	0.000472894	0.000572202	0.000680968	0.010023564	0.004673346	1.701199272	0.000358997	0.000330277	1.61E-05	0	55280.76716	27949.64052	53.38481259	951646.6036
Sacramento	2028 Construction and Mining - Excavators	Aggregate	175	Diesel	0.002759127	0.003338544	0.003973143	0.056342701	0.016735335	9.367307912	0.0007143	0.000657156	8.87E-05	0	304392.3049	107695.3983	151.6851517	5997430.135
Sacramento	2028 Construction and Mining - Excavators	Aggregate	25	Diesel	5.51E-07	6.67E-07	7.94E-07	6.67E-06	4.26E-06	0.001597712	2.70E-07	2.49E-07	1.51E-08	0	51.91793305	12.94445363	0.032803853	39.35113905
Sacramento	2028 Construction and Mining - Excavators	Aggregate	300	Diesel	0.002696317	0.003262544	0.003882696	0.021089227	0.015284933	9.9493932	0.000663792	0.000610689	9.42E-05	0	323307.2679	72295.0266	113.0227202	6456664.255
Sacramento	2028 Construction and Mining - Excavators	Aggregate	50	Diesel	0.001672138	0.002023287	0.002407879	0.020469417	0.016011465	2.767734963	0.000491413	0.0004521	2.62E-05	0	89938.0305	114266.8784	245.1610011	1541323.346
Sacramento	2028 Construction and Mining - Excavators	Aggregate	600	Diesel	0.002867329	0.003469468	0.004128953	0.023114353	0.012221526	11.39109508	0.000596877	0.000549126	0.000107906	0	370155.622	52054.62114	78.7939162	7448489.584
Sacramento	2028 Construction and Mining - Excavators	Aggregate	75	Diesel	0.000900333	0.001089402	0.001296479	0.012904348	0.011133472	2.14508791	0.000184021	0.000169299	2.03E-05	0	69705.00587	51915.72122	101.4045651	1217250.197
Sacramento	2028 Construction and Mining - Excavators	Aggregate	750	Diesel	7.25E-05	8.77E-05	0.000104342	0.000651349	0.00038728	0.32352815	2.01E-05	1.85E-05	3.06E-06	0	10513.10369	874.1364043	1.643104159	222466.1325
Sacramento	2028 Construction and Mining - Excavators	Aggregate	9999	Diesel	0.000389296	0.000471049	0.000560587	0.003089587	0.006549523	1.56518907	0.000140747	0.000129487	1.48E-05	0	50861.09191	1742.517313	3.054749781	1065423.841
Sacramento	2028 Construction and Mining - Graders	Aggregate	100	Diesel	4.71E-05	5.69E-05	6.78E-05	0.000507186	0.000421089	0.094363056	3.18E-05	2.93E-05	8.94E-07	0	3066.343962	1091.140666	4.037051783	38037.45734
Sacramento	2028 Construction and Mining - Graders	Aggregate	175	Diesel	0.000455605	0.000551282	0.000656071	0.006610357	0.004281445	1.243402345	0.000233826	0.00021512	1.18E-05	0	40404.57614	11425.88932	34.39618728	677039.7335
Sacramento	2028 Construction and Mining - Graders	Aggregate	300	Diesel	0.000824237	0.000997327	0.001186902	0.007773332	0.00556378	3.670974349	0.000246146	0.000226454	3.48E-05	0	119288.9519	25016.98696	64.35007915	2326096.09
Sacramento	2028 Construction and Mining - Graders	Aggregate	50	Diesel	8.70E-06	1.05E-05	1.25E-05	0.000101692	7.50E-05	0.020918186	3.25E-06	2.99E-06	1.98E-07	0	679.7400977	323.2746062	1.213915394	4802.253156
Sacramento	2028 Construction and Mining - Graders	Aggregate	600	Diesel	0.000185648	0.000224634	0.000267333	0.001717279	0.001009892	0.873974223	4.91E-05	4.52E-05	8.28E-06	0	28399.94487	4002.636297	9.517158135	564214.2514
Sacramento	2028 Construction and Mining - Graders	Aggregate	75	Diesel	2.23E-05	2.70E-05	3.21E-05	0.000236951	0.000234986	0.047876149	1.16E-05	1.07E-05	4.54E-07	0	1555.743822	579.5120615	2.331392306	14501.12363
Sacramento	2028 Construction and Mining - Graders	Aggregate	750	Diesel	6.22E-06	7.53E-06	8.96E-06	6.23E-05	3.26E-05	0.033034795	2.03E-06	1.86E-06	3.13E-07	0	1073.471424	73.52962773	0.196823118	21280.06636
Sacramento	2028 Construction and Mining - Graders	Aggregate	9999	Diesel	5.70E-06	6.90E-06	8.21E-06	4.32E-05	0.000101932	0.023486532	2.03E-06	1.87E-06	2.22E-07	0	763.1989444	49.13562191	0.131215412	15129.34934
Sacramento	2028 Construction and Mining - Hopper Tractor Trailer	Aggregate	300	Diesel	1.41E-06	1.71E-06	2.03E-06	1.23E-05	1.50E-06	0.00590603	1.32E-07	1.21E-07	5.59E-08	0	191.9174725	44.78505227	0.065607706	3804.494894
Sacramento	2028 Construction and Mining - Hopper Tractor Trailer	Aggregate	600	Diesel	1.40E-06	1.69E-06	2.02E-06	1.03E-05	6.96E-06	0.005210944	3.43E-07	3.16E-07	4.94E-08	0	169.3305325	28.67048726	0.065607706	3356.740467
Sacramento	2028 Construction and Mining - Misc - Asphalt Pavers	Aggregate	100	Gasoline	3.84E-05	3.53E-05	4.23E-05	0.002310115	9.95E-05	0.056918355	3.97E-06	3.00E-06	5.50E-07	8.04E-07	2295.85	616.85	1.55	37627.85
Sacramento	2028 Construction and Mining - Misc - Asphalt Pavers	Aggregate	15	Gasoline	0.000147444	0.000148918	0.000162253	0.004880258	0.000109998	1.93E-07	6.25E-05	4.72E-05	7.79E-08	1.08E-07	305.2307628	0	2.716230422	0
Sacramento	2028 Construction and Mining - Misc - Asphalt Pavers	Aggregate	25	Gasoline	0.000650506	0.000657012	0.000715842	0.021645234	0.000424898	8.06E-07	0.000261002	0.000197202	3.44E-07	4.75E-07	1353.328998	0	4.643187378	0
Sacramento	2028 Construction and Mining - Misc - Asphalt Pavers	Aggregate	50	Gasoline	8.94E-05	8.22E-05	9.83E-05	0.008061482	0.000126504	0.054975976	3.79E-06	2.86E-06	6.68E-07	9.01E-07	2573.25	1095	2.8	35040
Sacramento	2028 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	100	Gasoline	3.74E-05	3.44E-05	4.11E-05	0.001573507	0.00010882	0.069477284	4.84E-06	3.66E-06	6.71E-07	9.56E-07	2730.2	419.75	3.96	36938
Sacramento	2028 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	15	Gasoline	1.89E-05	1.91E-05	2.09E-05	0.00068522	1.41E-05	2.71E-08	8.77E-06	6.63E-06	1.09E-08	1.50E-08	42.62797662	0	0.915770152	0
Sacramento	2028 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	15	Diesel	1.15E-05	1.38E-05	1.65E-05	7.25E-05	8.66E-05	0.000166013	3.05E-06	2.30E-06	1.58E-09	1.36E-09	5.399863663	0	1.035460045	0
Sacramento	2028 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	175	Gasoline	9.30E-06	8.56E-06	1.02E-05	0.000778872	4.17E-05	0.023947877	1.72E-06	1.30E-06	2.38E-07	3.30E-07	941.7	98.55	0.98	12417.3
Sacramento	2028 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	25	Gasoline	0.000181022	0.000182832	0.000199204	0.006559666	0.000118258	2.44E-07	7.91E-05	5.98E-05	1.04E-07	1.43E-07	408.0339568	0	4.588558038	0
Sacramento	2028 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	25	Diesel	7.05E-05	8.48E-05	0.000101404	0.000289589	0.000536155	0.00077509	1.80E-05	1.36E-05	7.36E-09	6.34E-09	25.21118275	0	3.966556333	0
Sacramento	2028 Construction and Mining - Misc - Bore/Drill Rigs	Aggregate	50	Gasoline	7.00E-06	6.44E-06	7.70E-06	0.000472777	1.18E-05	0.005565679	3.84E-07	2.90E-07	6.77E-08	8.44E-08	240.9	83.95	0.85	2686.4
Sacramento	2028 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	15	Gasoline	0.006511758	0.006576876	0.007165792	0.209989284	0.004857648	8.30E-06	0.002687626	0.00203065	3.39E-06	4.68E-06	13155.36619	0	633.1007214	0
Sacramento	2028 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	15	Diesel	7.87E-05	9.46E-05	0.000113107	0.000496415	0.000592659	0.001136129	2.08E-05	1.57E-05	1.08E-08	9.29E-09	36.95459787	0	31.35754356	0
Sacramento	2028 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	25	Gasoline	8.95E-05	9.04E-05	9.85E-05	0.002910812	5.85E-05	1.08E-07	3.51E-05	2.65E-05	4.64E-08	6.41E-08	182.2626025	0	2.645757886	0
Sacramento	2028 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	25	Diesel	2.02E-05	2.43E-05	2.90E-05	0.000082794	0.000153462	0.000221648	5.21E-06	3.94E-06	2.10E-09	1.81E-09	7.20948087	0	2.791979678	0
Sacramento	2028 Construction and Mining - Misc - Cement And Mortar Mixers	Aggregate	5	Gasoline	0.003003966	0.003034006	0.003305682	0.081289708	0.001359916	3.06E-06	0.000038554	2.91E-05	1.34E-06	1.86E-06	5155.495598	0	373.6529654	0
Sacramento	2028 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	100	Gasoline	5.86E-05	5.39E-05	6.45E-05	0.002888921	0.000148313	0.136487881	9.52E-06	7.19E-06	1.32E-06	1.87E-06	5347.25	1135.15	1.86	74919.9
Sacramento	2028 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	15	Gasoline	0.004761048	0.00480866	0.005239244	0.154634362	0.003551722	6.11E-06	0.001979146	0.001495354	2.47E-06	3.41E-06	9683.057328	0	93.0277909	0
Sacramento	2028 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	25	Gasoline	0.002970786	0.003000494	0.003269168	0.09699345	0.001940394	3.61E-06	0.001169566	0.000883672	1.54E-06	2.13E-06	6071.605682	0	29.10401566	0
Sacramento	2028 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	25	Diesel	1.38E-05	0.000016589	1.98E-05	5.66E-05	0.000104829	0.000151546	3.53E-06	2.66E-06	1.44E-09	1.24E-09	4.929303326	0	1.030908029	0
Sacramento	2028 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	5	Gasoline	0.00025334	0.000255872	0.000278784	0.006738864	0.00011469	2.54E-07	3.20E-06	2.41E-06	1.11E-07	1.53E-07	427.9484402	0	20.72676126	0
Sacramento	2028 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	50	Gasoline	0.00014268	0.000131237	0.000157011	0.01059928	0.000231702	0.127714717	8.80E-06	6.65E-06	1.55E-06	1.92E-06	5482.3	1981.95	3.24	69368.25
Sacramento	2028 Construction and Mining - Misc - Concrete/Industrial Saws	Aggregate	50	Diesel	2.80E-05	3.33E-05	4.03E-05	0.000383485	0.000300136	0.052965602	5.18E-06	4.77E-06	6.66E-07	4.33E-07	1722.8	1237.35	2.14	40832.55
Sacramento	2028 Construction and Mining - Misc - Cranes	Aggregate	100	Gasoline	5.87E-05	5.40E-05	6.46E-05	0.003153003	0.000151409	0.066738363	4.65E-06	3.52E-06	6.45E-07	9.50E-07	2711.95	824.9	1.97	61042.6
Sacramento	2028 Construction and Mining - Misc - Cranes	Aggregate	175	Gasoline	3.26E-06	3.00E-06	3.59E-06	0.000159267	1.08E-05	0.004385626	3.14E-07	2.38E-07	4.36E-08	5.88E-08	167.9	29.2	0	3650
Sacramento	2028 Construction and Mining - Misc - Cranes	Aggregate	50	Gasoline	3.28E-05	3.02E-05	3.61E-05	0.00278994	4.56E-05	0.016874164	1.16E-06	8.79E-07	2.05E-07	2.84E-07	810.3	412.45	0.98	15260.65
Sacramento	2028 Construction and Mining - Misc - Crushing/Proc. Equipment	Aggregate	15	Gasoline	2.74E-05	2.77E-05	3.01E-05	0.000949258	2.04E-05	3.75E-08	1.21E-05	9.18E-06	1.51E-08	2.08E-08	59.20158828	0	0.56212177	0
Sacramento	2028 Construction and Mining - Misc - Crushing/Proc. Equipment	Aggregate	25	Gasoline	3.36E-05	3.40E-05	3.70E-05	0.001172662	0.000021972	4.36E-08	1.41E-05	1.07E-05	1.86E-08	2.57E-08	73.109568	0	0.3680036	0
Sacramento	2028 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	100	Gasoline	3.20E-06	2.95E-06	3.53E-06	0.000138684	9.22E-06	0.005720473	3.99E-07	3.01E-07	5.53E-08	8.31E-08	237.25	76.65	0.71	5058.9
Sacramento	2028 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	15	Gasoline	0.000618564	0.00062475	0.000680692	0.01712619	0.00046126	6.77E-07	0.000219196	0.000165615	2.79E-07	3.85E-07	1084.302872	0	40.7806015	0
Sacramento	2028 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	25	Gasoline	0.000254948	0.000257498	0.000280556	0.007099722	0.000166481	2.64E-07	8.56E-05	0.000064683	1.15E-07	1.58E-07	449.3084778	0	7.54454993	0
Sacramento	2028 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	25	Diesel	9.98E-06	1.20E-05	1.43E-05	4.10E-05	7.59E-05	0.000109658	2.55E-06	1.93E-06	1.04E-09	8.96E-10	3.566822839	0	1.441688443	0
Sacramento	2028 Construction and Mining - Misc - Dumpers/Tenders	Aggregate	5	Gasoline	0.000166397	0.000168061	0.00018311	0.003746052	7.53E-05	1.41E-07	1.78E-06	1.34E-06	6.39E-08	8.82E-08	241.218875	0	19.12434127	0
Sacramento	2028 Construction and Mining - Misc - Excavators	Aggregate	25	Diesel	0.000071161	8.56E-05	0.000102295	0.000292135	0.000540869	0.000781904	1.82E-05	1.37E-05	7.42E-09	6.39E-09	25.43282504	0	2.260778127	0
Sacramento	2028 Construction and Mining - Misc - Other	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.479843716	0
Sacramento	2028 Construction and Mining - Misc - Other	Aggregate	15	Diesel	0.000173852	0.000209106	0.000249916	0.00109685	0.001309506	0.002510327	4.61E-05	3.48E-05	2.38E-08	2.05E-08	81.652826	0	18.83703051	0
Sacramento	2028 Construction and Mining - Misc - Other	Aggregate	175	Gasoline	5.48E-05	5.04E-05	6.03E-05	0.004663596	0.000181926	0.141263306	1.01E-05	7.65E-06	1.40E-06	1.97E-06	5628.3	1029.3	2.77	129691.8
Sacramento	2028 Construction and Mining - Misc - Other	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.479843716	0
Sacramento	2028 Construction and Mining - Misc - Other	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.479843716	0
Sacramento	2028 Construction and Mining - Misc - Other	Aggregate	25	Diesel	3.74E-05	4.50E-05	5.38E-05	0.000153572	0.000284328	0.000411037	9.56E-06	7.22E-06	3.90E-09	3.36E-09	13.36971458	0	2.990775952	0
Sacramento	2028 Construction and Mining - Misc - Other	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.479843716	0
Sacramento	2028 Construction and Mining - Misc - Pavers	Aggregate	25	Diesel	1.88E-05	2.26E-05	2.70E-05	7.71E-05	0.000142692	0.000206282	4.80E-06	3.63E-06	1.96E-09	1.69E-09	6.709700371	0	0.893528651	0
Sacramento	2028 Construction and Mining - Misc - Paving Equipment	Aggregate	100	Gasoline	1.41E-05	1.29E-05	1.55E-05	0.000715182	3.56E-05	0.031508802	2.20E-06	1.66E-06	3.04E-07	4.36E-07	1244.65	343.1	1.96	22644.6
Sacramento	2028 Construction and Mining - Misc - Paving Equipment	Aggregate	15	Gasoline	0.012980958	0.013110766	0.014284752	0.402040878	0.009682504	1.59E-05	0.00514567	0.00388784	6.46E-06	8.91E-06	25253.8265	0	446.0604382	0
Sacramento	2028 Construction and Mining - Misc - Paving Equipment	Aggregate	25	Gasoline	0.000669952	0.000676652	0.000737242	0.02086052	0.00043755	7.76E-07	0.00025154	0.000190052	3.33E-07	4.60E-07	1309.866008	0	9.911426706	0
Sacramento	2028 Construction and Mining - Misc - Paving Equipment	Aggregate	25	Diesel	3.18E-05	3.82E-05	4.57E-05	0.000130462	0.000241542	0.000349184	8.12E-06	6.14E-06	3.31E-09	2.85E-09	11.35783737	0	2.213416225	0
Sacramento	2028 Construction and Mining - Misc - Paving Equipment	Aggregate	5	Gasoline	0.00352501	0.00356026	0.003879058	0.08485145	0.001595978	3.19E-06	4.02E-05	0.000030406	1.42E-06	1.96E-06	5432.064868	0	263.8402584	0
Sacramento	2028 Construction and Mining - Misc - Paving Equipment	Aggregate	50	Gasoline	8.00E-05	7.35E-05	8.80E-05	0.006104706	0.000127794	0.069315136	4.78E-06	3.61E-06	8.43E-07	1.05E-06	3003.95	1339.55	7.66	49563.35
Sacramento	2028 Construction and Mining - Misc - Plate Compactors	Aggregate	15	Gasoline	0.004582213	0.004628036	0.005042446	0.140897456	0.003420265	5.58E-06	0.001808072	0.001366099	2.27E-06	3.14E-06	8854.634158	0	208.8037714	0
Sacramento	2028 Construction and Mining - Misc - Plate Compactors	Aggregate	15	Diesel	6.77E-05	0.000081419	9.73E-05	0.000427077	0.000509878	0.000977438	1.79E-05	1.35E-05	9.28E-09	7.99E-09	31.7929064	0	19.7626822	0
Sacramento	2028 Construction and Mining - Misc - Plate Compactors	Aggregate	5	Gasoline	0.002536716	0.002562084	0.002791502	0.059644502	0.001148544	2.25E-06	2.83E-05	2.14E-05	1.00E-06	1.38E-06	3826.016586	0	187.8961792	0
Sacramento	2028 Construction and Mining - Misc - Rollers	Aggregate	100	Gasoline	0.000278139	0.000255832	0.000306075	0.015995663	0.000687487	0.251015364	1.75E-05	1.32E-05	2.43E-06	3.67E-06	10490.1	2306.8	3.7	173010
Sacramento	2028 Construction and Mining - Misc - Rollers	Aggregate	15	Gasoline	0.001299788	0.001312786	0.001430338	0.042503872	0.000969654	1.68E-06	0.000544002	0.000411024	6.80E-07	9.38E-07	2660.398358	0	32.16903962	0
Sacramento	2028 Construction and Mining - Misc - Rollers	Aggregate	15	Diesel	0.000245368	0.000295123	0.00035272	0.001548046	0.00184818	0.003542964	6.50E-05	4.91E-05	3.36E-08	2.90E-08	115.2411917	0	42.21023353	0
Sacramento	2028 Construction and Mining - Misc - Rollers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.038105076	0
Sacramento	2028 Construction and Mining - Misc - Rollers	Aggregate	25	Gasoline	0.001957548	0.001977122	0.002154162	0.064323498	0.001278602	2.39E-06	0.000775624	0.000586028	1.02E-06	1.41E-06	4024.889096	0	21.72593054	0
Sacramento	2028 Construction and Mining - Misc - Rollers	Aggregate	25	Diesel	0.000223769	0.000269145	0.000321671	0.00091863	0.001700785	0.002458731	5.72E-05	4.32E-05	2.33E-08	2.01E-08	79.97459316	0	17.59450516	0
Sacramento	2028 Construction and Mining - Misc - Rollers	Aggregate	5	Gasoline	0.000146059	0.000147519	0.000160729	0.004103222	6.61E-05	1.54E-07	1.95E-06	1.47E-06	6.76E-08	9.34E-08	259.50647	0	19.89426372	0
Sacramento	2028 Construction and Mining - Misc - Rollers	Aggregate	50	Gasoline	0.000160352	0.000147492	0.000176458	0.014602842	0.000205978	0.066617699	4.59E-06	3.47E-06	8.10E-07	1.20E-06	3420.05	1226.4	1.97	45376.8
Sacramento	2028 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	100	Gasoline	0.000509494	0.000468632	0.000560667	0.027348354	0.001315093	0.580839033	4.05E-05	3.06E-05	5.61E-06	8.29E-06	23666.6	4650.1	11.22	395258.5
Sacramento	2028 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	175	Gasoline	2.46E-05	2.27E-05	2.71E-05	0.001205927	8.17E-05	0.033229557	2.38E-06	1.80E-06	3.30E-07	4.63E-07	1321.3	116.8	0.32	16585.6
Sacramento	2028 Construction and Mining - Misc - Rough Terrain Forklifts	Aggregate	50	Gasoline	4.44E-05	4.08E-05	4.89E-05	0.003770071	6.17E-05	0.022874575	1.58E-06	1.19E-06	2.78E-07	3.76E-07	1073.1	292	0.64	13724
Sacramento	2028 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	100	Gasoline	0.000267114	0.000245691	0.000293942	0.016012144	0.000681942	0.305585107	2.13E-05	1.61E-05	2.95E-06	4.40E-06	12552.35	3368.95	6.54	242564.4
Sacramento	2028 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.065513452	0
Sacramento	2028 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.065513452	0
Sacramento	2028 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.065513452	0
Sacramento	2028 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	25	Diesel	1.30E-05	1.56E-05	0.000018642	5.32E-05	9.86E-05	0.000142492	3.31E-06	2.50E-06	1.35E-09	1.16E-09	4.634813013	0	0.583630469	0
Sacramento	2028 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.065513452	0
Sacramento	2028 Construction and Mining - Misc - Rubber Tired Loaders	Aggregate	50	Gasoline	5.16E-05	4.75E-05	5.68E-05	0.004762004	6.93E-05	0.025858203	1.78E-06	1.35E-06	3.14E-07	4.44E-07	1266.55	503.7	0.99	20148
Sacramento	2028 Construction and Mining - Misc - Signal Boards	Aggregate	15	Gasoline	0.00016258	0.000164206	0.00017891	0.005512562	0.000121299	2.18E-07	7.06E-05	0.000053308	8.79E-08	1.21E-07	344.2613936	0	4.179623058	0
Sacramento	2028 Construction and Mining - Misc - Signal Boards	Aggregate	15	Diesel	0.001058046	0.001272596	0.001520957	0.006675306	0.007969507	0.015277563	0.00028027	0.00021176	1.45E-07	1.25E-07	496.9298021	0	172.7802178	0
Sacramento	2028 Construction and Mining - Misc - Signal Boards	Aggregate	5	Gasoline	8.79E-06	8.88E-06	9.67E-06	0.000234318	3.98E-06	8.82E-09	1.11E-07	8.40E-08	3.85E-09	5.31E-09	14.87780453	0	0.591728066	0
Sacramento	2028 Construction and Mining - Misc - Signal Boards	Aggregate	50	Diesel	1.20E-05	1.43E-05	1.73E-05	0.00016593	0.000131569	0.023116343	2.25E-06	2.07E-06	2.95E-07	1.89E-07	751.9	456.25	0.86	16881.25
Sacramento	2028 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	100	Gasoline	0.000251565	0.00023139	0.000276832	0.013203407	0.000638434	0.542709888	3.78E-05	2.86E-05	5.24E-06	7.48E-06	21352.5	5000.5	16.12	400040
Sacramento	2028 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	15	Gasoline	6.20E-05	6.26E-05	6.82E-05	0.00179465	4.62E-05	7.09E-08	2.30E-05	1.74E-05	2.89E-08	3.98E-08	113.2549639	0	0.90706511	0
Sacramento	2028 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.06879823	0
Sacramento	2028 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	25	Gasoline	0.00534515	0.005398602	0.005882012	0.160258662	0.003490748	5.96E-06	0.001932428	0.001460058	2.57E-06	3.54E-06	10088.71057	0	56.2295951	0
Sacramento	2028 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	25	Diesel	0.003637531	0.004375149	0.005229009	0.014931492	0.027650856	0.039966126	0.000933667	0.000705437	3.79E-07	3.27E-07	1299.969029	0	230.5193225	0
Sacramento	2028 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.06879823	0
Sacramento	2028 Construction and Mining - Misc - Skid Steer Loaders	Aggregate	50	Gasoline	0.000437652	0.000402552	0.000481609	0.03431184	0.000688189	0.366993701	2.53E-05	1.91E-05	4.46E-06	5.60E-06	15990.65	8358.5	26.95	267472
Sacramento	2028 Construction and Mining - Misc - Surfacing Equipment	Aggregate	15	Gasoline	0.008152442	0.008233966	0.008971264	0.215718406	0.006078588	8.52E-06	0.002760952	0.002086054	3.51E-06	4.84E-06	13704.67936	0	143.2315361	0
Sacramento	2028 Construction and Mining - Misc - Surfacing Equipment	Aggregate	25	Gasoline	0.000279178	0.00028197	0.000307218	0.007428508	0.000182291	2.76E-07	8.96E-05	6.77E-05	1.20E-07	1.66E-07	471.7325842	0	1.956589458	0
Sacramento	2028 Construction and Mining - Misc - Surfacing Equipment	Aggregate	5	Gasoline	0.00084187	0.000850288	0.000926426	0.018945558	0.000381186	7.13E-07	8.99E-06	6.79E-06	3.18E-07	4.39E-07	1219.99939	0	48.234084	0
Sacramento	2028 Construction and Mining - Misc - Tampers/Rammers	Aggregate	15	Gasoline	0.000866518	0.000875184	0.00095355	0.033620338	0.000672136	1.48E-06	0.000479155	0.000362028	5.43E-07	7.50E-07	2083.335181	0	116.0189365	0
Sacramento	2028 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	100	Gasoline	0.000176588	0.000162425	0.000194324	0.01239531	0.000454615	0.214097503	1.49E-05	1.13E-05	2.07E-06	3.10E-06	8858.55	3029.5	3.46	190858.5

Sacramento	2028 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	15	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.16222956	0
Sacramento	2028 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.16222956	0
Sacramento	2028 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.16222956	0
Sacramento	2028 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	25	Diesel	0.000341138	0.000410314	0.000490391	0.001400462	0.002592865	0.003748363	8.72E-05	6.59E-05	3.56E-08	3.06E-08	121.9221459	0	16.64533793	0
Sacramento	2028 Construction and Mining - Misc - Tractors/Loaders/Backhoes	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.16222956	0
Sacramento	2028 Construction and Mining - Misc - Trenchers	Aggregate	100	Gasoline	0.000211501	0.000194538	0.000232744	0.011297948	0.00054749	0.244522501	1.70E-05	1.29E-05	2.36E-06	3.49E-06	9953.55	2401.7	5.97	158512.2
Sacramento	2028 Construction and Mining - Misc - Trenchers	Aggregate	15	Gasoline	0.002359008	0.002382598	0.002595944	0.07639319	0.001759796	3.02E-06	0.000977746	0.000738742	1.22E-06	1.68E-06	4784.571404	0	34.91615922	0
Sacramento	2028 Construction and Mining - Misc - Trenchers	Aggregate	15	Diesel	9.65E-05	0.000116061	0.000138712	0.000608791	0.000726823	0.001393322	2.56E-05	1.93E-05	1.32E-08	1.14E-08	45.32025851	0	13.93880332	0
Sacramento	2028 Construction and Mining - Misc - Trenchers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.036340114	0
Sacramento	2028 Construction and Mining - Misc - Trenchers	Aggregate	25	Gasoline	0.004055526	0.004096082	0.004462858	0.131986828	0.002648888	4.91E-06	0.001591522	0.001202484	2.10E-06	2.90E-06	8263.808298	0	27.06408582	0
Sacramento	2028 Construction and Mining - Misc - Trenchers	Aggregate	25	Diesel	0.000331534	0.000398762	0.000476585	0.001361034	0.002519867	0.003642834	8.47E-05	6.40E-05	3.46E-08	2.98E-08	118.4896258	0	11.88266876	0
Sacramento	2028 Construction and Mining - Misc - Trenchers	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.036340114	0
Sacramento	2028 Construction and Mining - Misc - Trenchers	Aggregate	50	Gasoline	0.000649205	0.000597139	0.000714411	0.054851199	0.000906294	0.33871723	2.34E-05	1.76E-05	4.12E-06	5.66E-06	16169.5	7223.35	17.98	216700.5
Sacramento	2028 Construction and Mining - Nurse Rig Other	Aggregate	175	Diesel	3.37E-07	4.08E-07	4.86E-07	6.06E-06	2.99E-06	0.00104991	2.26E-07	2.08E-07	9.95E-09	0	34.11702305	18.78672672	0.032803853	676.3221621
Sacramento	2028 Construction and Mining - Off-Highway Tractors	Aggregate	100	Diesel	0.000150218	0.000181764	0.000216314	0.002341922	0.00135284	0.387060157	9.97E-05	9.17E-05	3.67E-06	0	12577.58733	5960.373918	9.416666647	220111.4505
Sacramento	2028 Construction and Mining - Off-Highway Tractors	Aggregate	175	Diesel	0.000638027	0.000772012	0.000918758	0.012689115	0.003352701	2.043714307	0.00015629	0.000143787	1.94E-05	0	66410.85295	20980.09095	20.83534858	1324379.07
Sacramento	2028 Construction and Mining - Off-Highway Tractors	Aggregate	300	Diesel	0.000274698	0.000332385	0.000395565	0.0020368	0.001491505	0.911002049	6.97E-05	6.42E-05	8.63E-06	0	29603.17052	6455.057034	8.140736792	604248.567
Sacramento	2028 Construction and Mining - Off-Highway Tractors	Aggregate	50	Diesel	0.000377662	0.000456971	0.000543833	0.003805007	0.002940988	0.526103892	0.000107437	9.88E-05	4.98E-06	0	17095.83774	16160.29407	26.38530901	259245.8067
Sacramento	2028 Construction and Mining - Off-Highway Tractors	Aggregate	600	Diesel	0.000681755	0.000824924	0.000981727	0.004958049	0.002655595	2.40792505	0.000135128	0.000124318	2.28E-05	0	78245.9446	9676.751261	10.57072012	1601146.341
Sacramento	2028 Construction and Mining - Off-Highway Tractors	Aggregate	75	Diesel	0.000216388	0.00026183	0.000311599	0.00247421	0.002271241	0.420419343	7.27E-05	6.69E-05	3.98E-06	0	13661.59991	8696.197007	14.24656666	222493.2591
Sacramento	2028 Construction and Mining - Off-Highway Tractors	Aggregate	750	Diesel	6.01E-05	7.28E-05	8.66E-05	0.000445847	0.000303131	0.196096129	1.75E-05	1.61E-05	1.86E-06	0	6372.177923	500.951017	0.689010585	127432.6331
Sacramento	2028 Construction and Mining - Off-Highway Tractors	Aggregate	9999	Diesel	4.85E-05	5.87E-05	6.99E-05	0.000361048	0.000719431	0.176961989	1.61E-05	1.48E-05	1.68E-06	0	5750.410712	178.8426833	0.230242913	124236.7805
Sacramento	2028 Construction and Mining - Off-Highway Trucks	Aggregate	100	Diesel	4.26E-06	5.16E-06	6.14E-06	6.36E-05	3.47E-05	0.010470654	2.51E-06	2.31E-06	9.92E-08	0	340.2457219	187.0705561	0.295234677	6067.09876
Sacramento	2028 Construction and Mining - Off-Highway Trucks	Aggregate	175	Diesel	0.000163967	0.0001984	0.000236112	0.003154286	0.000972546	0.533444681	5.30E-05	4.88E-05	5.05E-06	0	17334.37798	5787.459137	6.36745928	346951.0487
Sacramento	2028 Construction and Mining - Off-Highway Trucks	Aggregate	300	Diesel	0.000361957	0.000437968	0.000521219	0.002798616	0.002001298	1.224264613	9.82E-05	9.03E-05	1.16E-05	0	39782.69218	9337.460999	12.63713543	815020.1131
Sacramento	2028 Construction and Mining - Off-Highway Trucks	Aggregate	50	Diesel	1.54E-05	1.86E-05	2.21E-05	0.000160154	0.000131188	0.020441128	4.91E-06	4.52E-06	1.94E-07	0	664.238036	1066.06798	1.705940809	11390.30082
Sacramento	2028 Construction and Mining - Off-Highway Trucks	Aggregate	600	Diesel	0.002425059	0.002934321	0.003492085	0.018838238	0.009449759	8.973979873	0.00048425	0.00044551	8.50E-05	0	291611.0416	35942.90489	43.35916992	5926120.899
Sacramento	2028 Construction and Mining - Off-Highway Trucks	Aggregate	75	Diesel	1.17E-05	1.42E-05	1.69E-05	0.000141492	0.000121697	0.024421176	3.25E-06	2.99E-06	2.31E-07	0	793.5703766	460.5813038	0.853112982	11895.56945
Sacramento	2028 Construction and Mining - Off-Highway Trucks	Aggregate	750	Diesel	0.000296859	0.000359199	0.000427476	0.002582412	0.001854999	1.128060636	9.52E-05	8.76E-05	1.07E-05	0	36656.52717	3261.109277	5.631146215	853029.8401
Sacramento	2028 Construction and Mining - Off-Highway Trucks	Aggregate	9999	Diesel	0.001001438	0.00121174	0.001442071	0.008328925	0.015947289	4.078769801	0.000316335	0.000291028	3.86E-05	0	132540.3363	6556.044365	9.832665923	2964051.238
Sacramento	2028 Construction and Mining - Other Construction Equipment	Aggregate	100	Diesel	0.000124756	0.000150955	0.000179649	0.002181566	0.001191579	0.402423466	8.73E-05	8.04E-05	3.81E-06	0	13076.82075	5565.699474	17.03976822	200160.333
Sacramento	2028 Construction and Mining - Other Construction Equipment	Aggregate	175	Diesel	0.000326479	0.00039504	0.00047013	0.006709924	0.00245104	1.199973198	0.000112591	0.000103584	1.14E-05	0	38993.33842	13362.54662	30.00348255	735852.0293
Sacramento	2028 Construction and Mining - Other Construction Equipment	Aggregate	300	Diesel	0.000300163	0.000363197	0.000432234	0.002601705	0.002338524	1.109083714	0.000111071	0.000102185	1.05E-05	0	36039.8688	7185.803545	18.65750165	700739.2084
Sacramento	2028 Construction and Mining - Other Construction Equipment	Aggregate	50	Diesel	0.00018834	0.000227892	0.00027121	0.002100248	0.00173468	0.340917926	6.23E-05	5.73E-05	3.23E-06	0	11078.18748	9260.473536	30.05786389	151524.8044
Sacramento	2028 Construction and Mining - Other Construction Equipment	Aggregate	600	Diesel	0.000797208	0.000964622	0.00114798	0.007667884	0.004964313	3.471843809	0.000238685	0.000219591	3.29E-05	0	112818.1703	13402.15113	32.11701621	2282576.787
Sacramento	2028 Construction and Mining - Other Construction Equipment	Aggregate	75	Diesel	0.000196324	0.000237552	0.000282707	0.002803625	0.002615553	0.507360899	7.06E-05	6.49E-05	4.81E-06	0	16486.78094	9407.785107	29.01146442	256468.4743
Sacramento	2028 Construction and Mining - Other Construction Equipment	Aggregate	750	Diesel	0.000107247	0.000129769	0.000154435	0.001072527	0.000710653	0.546427131	3.46E-05	3.18E-05	5.18E-06	0	17756.24496	1323.20918	3.512940555	359358.2261
Sacramento	2028 Construction and Mining - Other Construction Equipment	Aggregate	9999	Diesel	0.000142984	0.00017301	0.000205896	0.001393373	0.002799518	0.710955074	5.70E-05	5.25E-05	6.73E-06	0	23102.60917	971.5027972	2.560957939	475849.9124
Sacramento	2028 Construction and Mining - Other Material Handling Equipment	Aggregate	100	Diesel	4.21E-05	5.10E-05	6.07E-05	0.000723038	0.00038556	0.131784967	2.80E-05	2.58E-05	1.25E-06	0	4282.375498	1883.954665	4.792647485	66477.67239
Sacramento	2028 Construction and Mining - Other Material Handling Equipment	Aggregate	175	Diesel	0.000143443	0.000173565	0.000206557	0.002837781	0.001072495	0.496175036	5.01E-05	4.61E-05	4.70E-06	0	16123.29437	5970.994882	11.64950766	308905.1975
Sacramento	2028 Construction and Mining - Other Material Handling Equipment	Aggregate	300	Diesel	0.000133656	0.000161724	0.000192465	0.001100052	0.000856001	0.493683723	4.23E-05	3.89E-05	4.68E-06	0	16042.33871	3406.635932	7.286293422	318321.3339
Sacramento	2028 Construction and Mining - Other Material Handling Equipment	Aggregate	50	Diesel	3.22E-05	3.89E-05	4.64E-05	0.000393728	0.000322303	0.063553138	1.05E-05	9.68E-06	6.02E-07	0	2065.17031	2106.348682	6.103574706	28560.25655
Sacramento	2028 Construction and Mining - Other Material Handling Equipment	Aggregate	600	Diesel	0.000210279	0.000254438	0.000302802	0.001835855	0.001205035	0.871458671	5.60E-05	5.15E-05	8.26E-06	0	28318.20155	3564.884186	7.022249299	565417.3136
Sacramento	2028 Construction and Mining - Other Material Handling Equipment	Aggregate	75	Diesel	2.87E-05	3.48E-05	4.14E-05	0.000404116	0.000371569	0.070883712	9.68E-06	8.90E-06	6.71E-07	0	2303.37859	1440.410542	3.838785514	37207.11
Sacramento	2028 Construction and Mining - Other Material Handling Equipment	Aggregate	750	Diesel	3.06E-05	3.70E-05	4.41E-05	0.000307982	0.000257241	0.094739694	1.44E-05	1.33E-05	8.97E-07	0	3078.582875	222.7726298	0.623273207	61028.59042
Sacramento	2028 Construction and Mining - Other Material Handling Equipment	Aggregate	9999	Diesel	6.63E-05	8.03E-05	9.55E-05	0.000604029	0.001209464	0.310930327	2.56E-05	2.35E-05	2.95E-06	0	10103.73523	532.252084	1.148705581	206219.4092
Sacramento	2028 Construction and Mining - Pavers	Aggregate	100	Diesel	8.46E-05	0.000102345	0.000121799	0.001402592	0.000808939	0.244446969	5.83E-05	5.36E-05	2.32E-06	0	7943.346895	3799.484927	8.696173175	133662.4999
Sacramento	2028 Construction and Mining - Pavers	Aggregate	175	Diesel	0.000226952	0.000274612	0.000326812	0.004614046	0.001516629	0.786794637	6.67E-05	6.14E-05	7.45E-06	0	25567.02901	8492.093957	15.39070305	499050.0834
Sacramento	2028 Construction and Mining - Pavers	Aggregate	300	Diesel	0.000237394	0.000287247	0.000341847	0.001914723	0.001350524	0.93954085	5.67E-05	5.21E-05	8.90E-06	0	30530.54385	6342.35886	11.38580736	606814.4225
Sacramento	2028 Construction and Mining - Pavers	Aggregate	50	Diesel	4.26E-05	5.16E-05	6.14E-05	0.000362968	0.00028675	0.05389403	1.25E-05	1.15E-05	5.11E-07	0	1751.295915	1563.704252	4.363523211	24288.53339
Sacramento	2028 Construction and Mining - Pavers	Aggregate	600	Diesel	3.88E-05	4.69E-05	5.58E-05	0.000326113	0.00018755	0.165529251	8.96E-06	8.24E-06	1.57E-06	0	5378.901876	685.3021798	1.181805765	108827.4227
Sacramento	2028 Construction and Mining - Pavers	Aggregate	75	Diesel	0.000109016	0.000131909	0.000156983	0.001337187	0.001285158	0.232888227	4.03E-05	3.71E-05	2.21E-06	0	7567.743581	4403.69719	11.31936371	122384.8135
Sacramento	2028 Construction and Mining - Pavers	Aggregate	750	Diesel	1.31E-06	1.58E-06	1.88E-06	1.31E-05	4.20E-06	0.006767646	3.19E-07	2.94E-07	6.41E-08	0	219.9158507	16.47590135	0.032803853	4359.523497
Sacramento	2028 Construction and Mining - Pavers	Aggregate	9999	Diesel	4.18E-05	5.06E-05	6.02E-05	0.000304755	0.000717625	0.155403132	1.63E-05	1.50E-05	1.47E-06	0	5049.851884	122.6762441	0.229626971	100106.2355
Sacramento	2028 Construction and Mining - Paving Equipment	Aggregate	100	Diesel	4.16E-05	5.03E-05	5.99E-05	0.000781609	0.000382526	0.143043306	2.79E-05	2.57E-05	1.36E-06	0	4648.217195	2338.7728	5.418441729	72679.2015
Sacramento	2028 Construction and Mining - Paving Equipment	Aggregate	175	Diesel	0.000232843	0.00028174	0.000335293	0.005115961	0.001396884	0.86624359	6.38E-05	5.87E-05	8.21E-06	0	28148.73659	11369.12829	17.49064723	552714.2119
Sacramento	2028 Construction and Mining - Paving Equipment	Aggregate	300	Diesel	9.75E-05	0.000118015	0.000140448	0.000820875	0.000572497	0.388507025	2.58E-05	2.38E-05	3.68E-06	0	12624.60355	2977.523527	5.5472135	250402.3847
Sacramento	2028 Construction and Mining - Paving Equipment	Aggregate	50	Diesel	6.63E-05	8.02E-05	9.55E-05	0.000794545	0.000634106	0.11698232	1.89E-05	1.74E-05	1.11E-06	0	3801.360886	4630.138391	12.07373446	61426.77524
Sacramento	2028 Construction and Mining - Paving Equipment	Aggregate	600	Diesel	0.000215857	0.000261187	0.000310834	0.001821763	0.000895958	0.913058945	4.87E-05	4.48E-05	8.65E-06	0	29670.00973	4617.541907	8.008369691	591947.8573
Sacramento	2028 Construction and Mining - Paving Equipment	Aggregate	75	Diesel	3.72E-05	4.50E-05	5.36E-05	0.000496913	0.000463453	0.086771505	1.23E-05	1.14E-05	8.22E-07	0	2819.655188	1944.293161	4.757297617	45819.2803
Sacramento	2028 Construction and Mining - Paving Equipment	Aggregate	750	Diesel	4.36E-05	5.27E-05	6.28E-05	0.000386846	0.000233699	0.197132839	1.37E-05	1.26E-05	1.87E-06	0	6405.865989	554.5667609	1.082527149	126987.3145
Sacramento	2028 Construction and Mining - Paving Equipment	Aggregate	9999	Diesel	3.28E-05	3.97E-05	4.73E-05	0.00023932	0.000534962	0.123622877	1.26E-05	1.16E-05	1.17E-06	0	4017.146954	221.4021383	0.426450089	79634.30777
Sacramento	2028 Construction and Mining - Rollers	Aggregate	100	Diesel	0.000239915	0.000290297	0.000345478	0.004032463	0.002216158	0.734759338	0.000165108	0.000151899	6.96E-06	0	23876.13289	11305.47139	29.61058339	368474.9409
Sacramento	2028 Construction and Mining - Rollers	Aggregate	175	Diesel	0.001000378	0.001210457	0.001440544	0.021896717	0.006263891	3.784427606	0.000283242	0.000260582	3.58E-05	0	122975.6353	47459.6942	80.21987578	2393842.284
Sacramento	2028 Construction and Mining - Rollers	Aggregate	300	Diesel	8.44E-05	0.00010211	0.000121519	0.000779147	0.000570787	0.328881037	2.79E-05	2.57E-05	3.12E-06	0	10687.04667	2442.007141	5.323517976	207355.9696
Sacramento	2028 Construction and Mining - Rollers	Aggregate	50	Diesel	0.000753311	0.000911506	0.001084768	0.008321062	0.00650757	1.324683048	0.000223408	0.000205536	1.25E-05	0	43045.80675	44298.6068	122.7315068	588339.7093
Sacramento	2028 Construction and Mining - Rollers	Aggregate	600	Diesel	6.01E-05	7.28E-05	8.66E-05	0.000589502	0.000324747	0.257434034	1.63E-05	1.50E-05	2.44E-06	0	8365.363852	1146.678989	2.301113085	173374.5161
Sacramento	2028 Construction and Mining - Rollers	Aggregate	75	Diesel	0.000192673	0.000233134	0.000277449	0.00264608	0.002454397	0.470570176	6.36E-05	5.85E-05	4.46E-06	0	15291.25998	9308.634115	24.93644236	238751.2188
Sacramento	2028 Construction and Mining - Rollers	Aggregate	750	Diesel	1.51E-06	1.83E-06	2.17E-06	1.19E-05	1.08E-05	0.006349967	4.83E-07	4.44E-07	6.02E-08	0	206.3432871	15.01308981	0.032803853	4090.466448
Sacramento	2028 Construction and Mining - Rollers	Aggregate	9999	Diesel	6.60E-05	7.99E-05	9.50E-05	0.000537786	0.00107154	0.277889666	2.51E-05	2.31E-05	2.63E-06	0	9030.073168	201.6260569	0.426450089	179008.5436
Sacramento	2028 Construction and Mining - Rough Terrain Forklifts	Aggregate	100	Diesel	0.00024962	0.00030204	0.000359452	0.005570372	0.00240134	1.045463821	0.000174004	0.000160084	9.90E-06	0	33972.52925	15246.22022	47.60313408	525294.818
Sacramento	2028 Construction and Mining - Rough Terrain Forklifts	Aggregate	175	Diesel	0.001467277	0.001775405	0.002112879	0.034460167	0.010085414	6.045217588	0.000421014	0.000387333	5.73E-05	0	196440.4002	79170.76952	166.9472152	3831578.794
Sacramento	2028 Construction and Mining - Rough Terrain Forklifts	Aggregate	300	Diesel	1.17E-05	1.41E-05	1.68E-05	0.000109424	8.21E-05	0.051440383	3.65E-06	3.35E-06	4.87E-07	0	1671.564207	389.3614175	1.017158499	32543.90115
Sacramento	2028 Construction and Mining - Rough Terrain Forklifts	Aggregate	50	Diesel	1.81E-05	2.19E-05	2.60E-05	0.000226409	0.000191977	0.037900483	5.20E-06	4.78E-06	3.59E-07	0	1231.582823	1089.064613	4.06818105	19229.81773
Sacramento	2028 Construction and Mining - Rough Terrain Forklifts	Aggregate	600	Diesel	2.62E-06	3.17E-06	3.77E-06	2.75E-05	1.31E-05	0.014305049	5.03E-07	4.63E-07	1.36E-07	0	464.845049	69.03554315	0.16413857	9314.148533
Sacramento	2028 Construction and Mining - Rough Terrain Forklifts	Aggregate	75	Diesel	0.00042007	0.000508284	0.0006049	0.007652923	0.006691885	1.352861478	7.39E-05	6.80E-05	1.28E-05	0	43961.46977	26836.83482	83.10371301	755351.8486
Sacramento	2028 Construction and Mining - Rough Terrain Forklifts	Aggregate	750	Diesel	7.19E-07	8.70E-07	1.04E-06	8.94E-06	1.49E-06	0.004760748	1.24E-07	1.14E-07	4.51E-08	0	154.7013284	12.26326434	0.032807283	3065.816084
Sacramento	2028 Construction and Mining - Rubber Tired Dozers	Aggregate	100	Diesel	1.74E-05	2.10E-05	2.50E-05	0.000280182	0.000145899	0.050742768	1.20E-05	1.11E-05	4.81E-07	0	1648.895108	736.7278451	1.641604553	25542.97856
Sacramento	2028 Construction and Mining - Rubber Tired Dozers	Aggregate	175	Diesel	4.78E-05	5.78E-05	6.88E-05	0.000856945	0.000332503	0.146711176	1.58E-05	1.45E-05	1.39E-06	0	4767.405276	1601.897758	2.723912729	91426.3398
Sacramento	2028 Construction and Mining - Rubber Tired Dozers	Aggregate	300	Diesel	4.93E-05	5.97E-05	7.11E-05	0.000418188	0.000261432	0.176259384	1.41E-05	1.30E-05	1.67E-06	0	5727.57945	1257.8474	2.199274872	114559.7995
Sacramento	2028 Construction and Mining - Rubber Tired Dozers	Aggregate	50	Diesel	3.81E-06	4.61E-06	5.48E-06	5.99E-05	3.83E-05	0.013284929	9.29E-07	8.54E-07	1.26E-07	0	431.6960934	228.9928938	0.592676425	3561.018602
Sacramento	2028 Construction and Mining - Rubber Tired Dozers	Aggregate	600	Diesel	0.000239009	0.000289201	0.000344173	0.002410428	0.001263605	0.973433286	6.70E-05	6.16E-05	9.22E-06	0	31631.88445	4476.917293	8.030148468	697973.3942
Sacramento	2028 Construction and Mining - Rubber Tired Dozers	Aggregate	75	Diesel	9.43E-06	1.14E-05	1.36E-05	0.000141829	0.000113522	0.028558294	2.89E-06	2.66E-06	2.71E-07	0	928.0067609	457.911238	0.986110109	11321.0439
Sacramento	2028 Construction and Mining - Rubber Tired Dozers	Aggregate	750	Diesel	6.70E-06	8.10E-06	9.64E-06	6.39E-05	3.42E-05	0.031157462	1.88E-06	1.73E-06	2.95E-07	0	1012.467171	87.41121533	0.16441622	23475.21018
Sacramento	2028 Construction and Mining - Rubber Tired Dozers	Aggregate	9999	Diesel	2.07E-05	2.51E-05	2.98E-05	0.000158168	0.000404567	0.076861607	1.03E-05	9.45E-06	7.28E-07	0	2497.631332	94.975598	0.164019265	49512.04037
Sacramento	2028 Construction and Mining - Rubber Tired Loaders	Aggregate	100	Diesel	0.000271435	0.000328436	0.000390866	0.00491556	0.002421787	0.856699063	0.000186393	0.000171482	8.12E-06	0	27838.58553	14767.5612	27.37773158	458945.9725
Sacramento	2028 Construction and Mining - Rubber Tired Loaders	Aggregate	175	Diesel	0.001929809	0.002335068	0.002778924	0.03653652	0.012547912	6.195775375	0.000607106	0.000558538	5.87E-05	0	201332.8018	74261.70864	102.2571436	3940181.518
Sacramento	2028 Construction and Mining - Rubber Tired Loaders	Aggregate	300	Diesel	0.003076843	0.00372298	0.004430654	0.024604493	0.014901164	11.36553237	0.000687503	0.000632503	0.000107663	0	369324.9573	91082.15828	129.4331569	7391161.601
Sacramento	2028 Construction and Mining - Rubber Tired Loaders	Aggregate	50	Diesel	5.35E-05	6.48E-05	7.71E-05	0.000553124	0.000409921	0.082584614	1.65E-05	1.52E-05	7.82E-07	0	2683.601444	2467.265829	5.053182622	35008.89135
Sacramento	2028 Construction and Mining - Rubber Tired Loaders	Aggregate	600	Diesel	0.002277985	0.002756361	0.003280298	0.018473126	0.009558899	8.7051651	0.000490223	0.000451005	8.25E-05	0	282875.8587	41650.3096	57.51401886	5751598.499
Sacramento	2028 Construction and Mining - Rubber Tired Loaders	Aggregate	75	Diesel	0.000245593	0.000297168	0.000353654	0.003100452	0.002795406	0.534192184	7.60E-05	6.99E-05	5.06E-06	0	17358.66822	11560.44276	22.54478128	276450.671
Sacramento	2028 Construction and Mining - Rubber Tired Loaders	Aggregate	750	Diesel	5.66E-05	6.85E-05	8.16E-05	0.000586558	0.000371428	0.227862037	1.88E-05	1.73E-05	2.16E-06	0	7404.416642	777.3683171	1.584743901	190646.0686
Sacramento	2028 Construction and Mining - Rubber Tired Loaders	Aggregate	9999	Diesel	0.00016385	0.000198259	0.000235944	0.001441577	0.002763854	0.732742506	5.28E-05	4.86E-05	6.94E-06	0	23810.59558	1470.494076	2.332508824	502624.8695
Sacramento	2028 Construction and Mining - Scrapers	Aggregate	100	Diesel	7.43E-06	8.99E-06	1.07E-05	0.000135826	7.61E-05	0.025345137	5.16E-06	4.75E-06	2.40E-07	0	823.5946444	316.6879347	1.018030547	12531.92747
Sacramento	2028 Construction and Mining - Scrapers	Aggregate	175	Diesel	8.95E-05	0.000108273	0.000128854	0.001310396	0.000843969	0.233242736	4.89E-05	4.50E-05	2.21E-06	0	7579.263405	1816.662913	6.169878405	130334.2067
Sacramento	2028 Construction and Mining - Scrapers	Aggregate	300	Diesel	0.000749701	0.000907138	0.001079569	0.00735147	0.00598548	2.965710086	0.000303239	0.00027898	2.81E-05	0	96371.26665	16009.64155	48.72067479	1836424.257
Sacramento	2028 Construction and Mining - Scrapers	Aggregate	50	Diesel	1.74E-06	2.10E-06	2.50E-06	1.36E-05	1.03E-05	0.002379703	4.60E-07	4.23E-07	2.25E-08	0	77.3288509	41.87293533	0.164188821	831.4579904
Sacramento	2028 Construction and Mining - Scrapers	Aggregate	600	Diesel	0.002367652	0.002864859	0.003409419	0.029067032	0.016567093	10.49018896	0.000838102	0.000771054	9.94E-05	0	340880.5205	34212.01095	101.7290592	7157851.601
Sacramento	2028 Construction and Mining - Scrapers	Aggregate	75	Diesel	1.14E-05	1.38E-05	1.64E-05	0.000130355	0.000132586	0.024771173	5.63E-06	5.18E-06	2.35E-07	0	804.9435988	338.8150193	1.279897731	10544.55605
Sacramento	2028 Construction and Mining - Scrapers	Aggregate	750	Diesel	0.00028453	0.000344281	0.000409723	0.003825793	0.001652611	1.620884127	8.96E-05	8.24E-05	1.54E-05	0	52670.9125	4139.683553	15.36580493	1225333.335
Sacramento	2028 Construction and Mining - Skid Steer Loaders	Aggregate	100	Diesel	0.001045043	0.001264502	0.001504861	0.022057393	0.010954111	3.762617273	0.000805015	0.000740614	3.56E-05	0	122266.9047	68644.75111	146.7639253	2127893.634
Sacramento	2028 Construction and Mining - Skid Steer Loaders	Aggregate	175	Diesel	0.000275439	0.000333281	0.000396632	0.006462337	0.001495339	1.066464327	5.12E-05	4.71E-05	1.01E-05	0	34654.94438	16482.50884	25.42495307	683039.935
Sacramento	2028 Construction and Mining - Skid Steer Loaders	Aggregate	300	Diesel	2.63E-05	3.18E-05	3.79E-05	0.000194914	0.000164905	0.088214544	7.74E-06	7.12E-06	8.36E-07	0	2866.547002	738.9977477	1.377877701	56902.5938
Sacramento	2028 Construction and Mining - Skid Steer Loaders	Aggregate	50	Diesel	0.000702443	0.000849956	0.001011517	0.007679425	0.00615737	1.15747325	0.000199573	0.000183607	1.10E-05	0	37612.29521	37178.50887	96.52596378	577536.0926
Sacramento	2028 Construction and Mining - Skid Steer Loaders	Aggregate	600	Diesel	1.56E-05	1.88E-05	2.24E-05	0.000117964	7.95E-05	0.060711815	3.71E-06	3.41E-06	5.75E-07	0	1972.841006	223.6034265	0.393646236	39108.80773
Sacramento	2028 Construction and Mining - Skid Steer Loaders	Aggregate	75	Diesel	0.002959499	0.003580994	0.004261679	0.043434039	0.038072013	7.344729421	0.000660182	0.000607368	6.96E-05	0	238668.2639	166892.9528	376.0409667	4139103.723
Sacramento	2028 Construction and Mining - Skid Steer Loaders	Aggregate	750	Diesel	1.67E-06	2.03E-06	2.41E-06	1.16E-05	1.76E-05	0.006140809	5.77E-07	5.31E-07	5.82E-08	0	199.5466447	16.65291125	0.032803853	3955.732539
Sacramento	2028 Construction and Mining - Skid Steer Loaders	Aggregate	9999	Diesel	9.99E-05	0.000120833	0.000143801	0.000865834	0.001662155	0.436834711	3.60E-05	3.31E-05	4.14E-06	0	14195.02014	339.843282	0.721684766	286143.7659
Sacramento	2028 Construction and Mining - Spray Truck	Aggregate	100	Diesel	2.93E-06	3.54E-06	4.21E-06	4.61E-05	2.37E-05	0.008270337	1.81E-06	1.67E-06	7.83E-08	0	268.7460491	140.8784687	0.262430824	4229.17163
Sacramento	2028 Construction and Mining - Spray Truck	Aggregate	175	Diesel	8.03E-06	9.71E-06	1.16E-05	0.000146395	5.57E-05	0.022895143	2.92E-06	2.68E-06	2.17E-07	0	743.9816636	253.4731713	0.426450089	14748.39369
Sacramento	2028 Construction and Mining - Spray Truck	Aggregate	300	Diesel	6.10E-06	7.38E-06	8.78E-06	4.54E-05	4.12E-05	0.020815311	1.85E-06	1.70E-06	1.97E-07	0	676.3971688	147.9527974	0.229675435	13894.30628
Sacramento	2028 Construction and Mining - Spray Truck	Aggregate	50	Diesel	1.13E-05	1.36E-05	1.62E-05	0.000136886	0.000114112	0.016786939	4.70E-06	4.33E-06	1.59E-07	0	545.4945176	733.9511654	1.509109022	9492.071507
Sacramento	2028 Construction and Mining - Spray Truck	Aggregate	600	Diesel	2.46E-05	2.98E-05	3.55E-05	0.000182628	9.20E-05	0.087460251	4.86E-06	4.47E-06	8.28E-07	0	2842.036113	359.9140664	0.524861648	56437.04974
Sacramento	2028 Construction and Mining - Spray Truck	Aggregate	75	Diesel	4.53E-06	5.48E-06	6.52E-06	6.27E-05	5.42E-05	0.01056476	1.25E-06	1.15E-06	1.00E-07	0	343.3037272	237.5627879	0.459253942	5750.798739
Sacramento	2028 Construction and Mining - Spreader Tractor Trailer	Aggregate	50	Diesel	6.28E-07	7.60E-07	9.05E-07	7.06E-06	5.93E-06	0.000948392	1.52E-07	1.40E-07	8.98E-09	0	30.81815417	57.3181187	0.131215412	549.5345655
Sacramento	2028 Construction and Mining - Spreader Tractor Trailer	Aggregate	600	Diesel	5.15E-06	6.23E-06	7.42E-06	3.90E-05	3.61E-05	0.020148901	1.35E-06	1.24E-06	1.91E-07	0	654.7420478	105.1810647	0.196823118	12979.34339
Sacramento	2028 Construction and Mining - Spreader Truck	Aggregate	100	Diesel	4.59E-06	5.55E-06	6.60E-06	7.00E-05	4.63E-05	0.011605577	3.76E-06	3.46E-06	1.10E-07	0	377.1252422	192.9080548	0.426450089	6724.716703
Sacramento	2028 Construction and Mining - Spreader Truck	Aggregate	175	Diesel	3.63E-06	4.39E-06	5.23E-06	8.67E-05	1.45E-05	0.013846744	8.19E-07	7.54E-07	1.31E-07	0	449.9523765	168.0632181	0.196823118	8919.675193
Sacramento	2028 Construction and Mining - Spreader Truck	Aggregate	300	Diesel	2.96E-06	3.58E-06	4.26E-06	1.98E-05	1.98E-05	0.009726989	7.87E-07	7.24E-07	9.21E-08	0	316.0802168	63.86226488	0.098411559	6265.847267
Sacramento	2028 Construction and Mining - Spreader Truck	Aggregate	50	Diesel	2.17E-07	2.63E-07	3.13E-07	2.46E-06	1.75E-06	0.000271162	6.79E-08	6.25E-08	2.57E-09	0	8.811462015	16.53913375	0.032803853	157.1217706
Sacramento	2028 Construction and Mining - Spreader Truck	Aggregate	600	Diesel	2.64E-05	3.19E-05	3.80E-05	0.00023785	0.000160087	0.092644779	8.15E-06	7.50E-06	8.78E-07	0	3010.508264	388.591615	0.65607706	59679.10668
Sacramento	2028 Construction and Mining - Spreader Truck	Aggregate	75	Diesel	5.39E-07	6.52E-07	7.76E-07	9.40E-06	8.25E-06	0.001627833	2.12E-07	1.95E-07	1.54E-08	0	52.89670544	33.54298427	0.065607706	943.2287178
Sacramento	2028 Construction and Mining - Surfacing Equipment	Aggregate	100	Diesel	8.62E-06	1.04E-05	1.24E-05	0.000147409	7.76E-05	0.028116686	6.07E-06	5.58E-06	2.66E-07	0	913.6566309	483.3747741	1.019115613	12525.47981
Sacramento	2028 Construction and Mining - Surfacing Equipment	Aggregate	175	Diesel	3.18E-05	3.85E-05	4.58E-05	0.000593263	0.000226573	0.103425343	1.16E-05	1.07E-05	9.80E-07	0	3360.82456	1588.175456	2.461741454	63320.91735
Sacramento	2028 Construction and Mining - Surfacing Equipment	Aggregate	300	Diesel	3.12E-05	3.78E-05	4.49E-05	0.00026336	0.000200712	0.115816149	9.01E-06	8.29E-06	1.10E-06	0	3763.465974	1029.893486	1.873174209	73631.12792
Sacramento	2028 Construction and Mining - Surfacing Equipment	Aggregate	50	Diesel	8.68E-06	1.05E-05	1.25E-05	9.60E-05	7.29E-05	0.016208544	2.75E-06	2.53E-06	1.54E-07	0	526.6994706	527.21322	1.115829108	5827.040733
Sacramento	2028 Construction and Mining - Surfacing Equipment	Aggregate	600	Diesel	0.000171719	0.000207781	0.000247276	0.001400235	0.000861075	0.655143776	4.30E-05	3.95E-05	6.21E-06	0	21289.01129	3629.10662	5.611727464	425864.125
Sacramento	2028 Construction and Mining - Surfacing Equipment	Aggregate	75	Diesel	9.38E-06	1.14E-05	1.35E-05	0.000123836	0.000102503	0.022310598	2.64E-06	2.43E-06	2.11E-07	0	724.9867702	524.1176634	1.083557731	10049.91176
Sacramento	2028 Construction and Mining - Surfacing Equipment	Aggregate	750	Diesel	6.47E-05	7.83E-05	9.31E-05	0.000534765	0.000386323	0.277223703	2.00E-05	1.84E-05	2.63E-06	0	9008.432585	941.931638	1.67328999	179483.1088
Sacramento	2028 Construction and Mining - Surfacing Equipment	Aggregate	9999	Diesel	2.84E-05	3.44E-05	4.10E-05	0.000252612	0.000479242	0.122339048	1.00E-05	9.23E-06	1.16E-06	0	3975.428698	327.2901654	0.658676691	89298.00803
Sacramento	2028 Construction and Mining - Tank Truck	Aggregate	100	Diesel	7.10E-07	8.59E-07	1.02E-06	1.81E-05	6.55E-06	0.002791203	5.86E-07	5.39E-07	2.64E-08	0	90.70063784	50.66824358	0.065607706	1617.330335
Sacramento	2028 Construction and Mining - Tank Truck	Aggregate	175	Diesel	1.87E-06	2.26E-06	2.69E-06	2.45E-05	2.00E-05	0.004017218	1.01E-06	9.33E-07	3.81E-08	0	130.5401868	50.67257714	0.164019265	2587.776234
Sacramento	2028 Construction and Mining - Tank Truck	Aggregate	300	Diesel	6.10E-05	7.38E-05	8.79E-05	0.000419612	0.000327775	0.196066895	1.42E-05	1.31E-05	1.86E-06	0	6371.227952	1449.102528	2.066642739	126300.664
Sacramento	2028 Construction and Mining - Tank Truck	Aggregate	600	Diesel	2.35E-05	2.85E-05	3.39E-05	0.000159115	0.000136934	0.078998501	6.64E-06	6.11E-06	7.48E-07	0	2567.070076	374.1630392	0.557665501	50888.56614
Sacramento	2028 Construction and Mining - Tanker Truck Trailer	Aggregate	100	Diesel	1.11E-06	1.34E-06	1.59E-06	2.73E-05	1.09E-05	0.004147409	9.62E-07	8.85E-07	3.93E-08	0	134.7707773	75.28721663	0.098411559	2403.167955
Sacramento	2028 Construction and Mining - Tanker Truck Trailer	Aggregate	175	Diesel	1.50E-06	1.81E-06	2.16E-06	3.50E-05	6.65E-06	0.005808726	3.51E-07	3.23E-07	5.50E-08	0	188.7555724	69.8797268	0.098411559	3768.325462
Sacramento	2028 Construction and Mining - Tanker Truck Trailer	Aggregate	300	Diesel	4.95E-07	5.99E-07	7.13E-07	4.67E-06	5.76E-07	0.002294425	4.96E-08	4.57E-08	2.17E-08	0	74.55774319	21.37077437	0.032803853	1478.002756
Sacramento	2028 Construction and Mining - Tanker Truck Trailer	Aggregate	50	Diesel	9.21E-07	1.11E-06	1.33E-06	9.34E-06	7.78E-06	0.001201285	2.25E-07	2.07E-07	1.14E-08	0	39.03596923	51.35789778	0.098411559	696.0707078
Sacramento	2028 Construction and Mining - Tanker Truck Trailer	Aggregate	600	Diesel	1.45E-06	1.75E-06	2.08E-06	1.30E-05	1.82E-06	0.006567943	1.42E-07	1.31E-07	6.22E-08	0	213.4264561	23.53889142	0.032803853	4230.880344
Sacramento	2028 Construction and Mining - Tanker Truck Trailer	Aggregate	75	Diesel	6.50E-07	7.87E-07	9.36E-07	8.79E-06	7.22E-06	0.001401404	8.29E-08	7.62E-08	1.33E-08	0	45.53886266	34.16325008	0.065607706	812.0271892
Sacramento	2028 Construction and Mining - Telescopic Handler	Aggregate	100	Diesel	1.12E-05	1.36E-05	1.62E-05	0.00033461	0.000127552	0.058636465	9.42E-06	8.67E-06	5.55E-07	0	1905.40217	1220.305693	3.674031536	33976.21895
Sacramento	2028 Construction and Mining - Telescopic Handler	Aggregate	175	Diesel	7.34E-05	8.88E-05	0.000105659	0.001884102	0.000479529	0.325394408	1.80E-05	1.66E-05	3.08E-06	0	10573.74807	4909.260404	10.16941344	209367.7254
Sacramento	2028 Construction and Mining - Telescopic Handler	Aggregate	300	Diesel	1.92E-06	2.32E-06	2.76E-06	1.86E-05	3.54E-06	0.009230376	2.35E-07	2.17E-07	8.74E-08	0	299.9426819	84.37167681	0.196823118	5945.943257
Sacramento	2028 Construction and Mining - Telescopic Handler	Aggregate	50	Diesel	1.81E-06	2.19E-06	2.61E-06	2.57E-05	2.27E-05	0.004260394	3.82E-07	3.51E-07	4.04E-08	0	138.4422388	181.3739736	0.65607706	2468.635699
Sacramento	2028 Construction and Mining - Telescopic Handler	Aggregate	600	Diesel	7.65E-07	9.25E-07	1.10E-06	8.36E-06	1.18E-06	0.004378535	8.91E-08	8.20E-08	4.15E-08	0	142.2812697	14.81369089	0.032803853	2820.526745
Sacramento	2028 Construction and Mining - Telescopic Handler	Aggregate	75	Diesel	3.59E-05	4.34E-05	5.16E-05	0.000683138	0.000597039	0.119105379	4.93E-06	4.54E-06	1.13E-06	0	3870.350057	2838.034062	8.594609486	69014.2286
Sacramento	2028 Construction and Mining - Telescopic Handler	Aggregate	750	Diesel	7.74E-07	9.37E-07	1.11E-06	9.09E-06	1.50E-06	0.004813088	1.45E-07	1.34E-07	4.56E-08	0	156.4021465	12.15864052	0.032803853	3100.453334
Sacramento	2028 Construction and Mining - Telescopic Handler	Aggregate	9999	Diesel	5.39E-06	6.52E-06	7.76E-06	6.45E-05	0.000131045	0.033855897	2.22E-06	2.04E-06	3.21E-07	0	1100.153294	23.67165399	0.06573949	24145.08707
Sacramento	2028 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	100	Diesel	0.003602364	0.00435886	0.005187404	0.067929277	0.033400616	11.8355598	0.002497713	0.002297896	0.000112116	0	384598.5807	199836.449	415.671975	6469787.129
Sacramento	2028 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	175	Diesel	0.003436338	0.004157969	0.004948327	0.070928362	0.021583454	11.92233261	0.000928648	0.000854356	0.000112938	0	387418.2782	161396.2715	246.5675517	7552989.929
Sacramento	2028 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	25	Diesel	2.03E-07	2.46E-07	2.92E-07	2.14E-06	1.59E-06	0.000234344	1.02E-07	9.36E-08	2.22E-09	0	7.615050279	15.95627844	0.065607706	135.7879295
Sacramento	2028 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	300	Diesel	0.001332581	0.001612422	0.001918916	0.010739878	0.007395507	4.995122659	0.000333685	0.00030699	4.73E-05	0	162317.3823	39732.16395	67.87072776	3221513.541
Sacramento	2028 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	50	Diesel	0.000921525	0.001115045	0.001326996	0.009005311	0.006951475	1.398899873	0.000280728	0.00025827	1.33E-05	0	45457.49543	42138.71002	105.9866794	582811.78
Sacramento	2028 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	600	Diesel	0.000960478	0.001162179	0.001383089	0.008236	0.004830942	3.772375831	0.000236424	0.00021751	3.57E-05	0	122584.0108	17168.48819	28.91820088	2477346.702
Sacramento	2028 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	75	Diesel	0.002300021	0.002783026	0.003312031	0.030065737	0.027524702	5.249846436	0.000712802	0.000655778	4.97E-05	0	170594.6758	110666.6363	250.3265082	2708242.892
Sacramento	2028 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	750	Diesel	4.15E-05	5.02E-05	5.97E-05	0.000347903	0.000240236	0.172334616	1.35E-05	1.24E-05	1.63E-06	0	5600.043409	440.9427217	0.853398284	113898.383
Sacramento	2028 Construction and Mining - Tractors/Loaders/Backhoes	Aggregate	9999	Diesel	0.000182666	0.000221025	0.000263038	0.001307748	0.002832765	0.662024756	6.71E-05	6.18E-05	6.27E-06	0	21512.60994	621.1022798	1.148539807	448890.0431
Sacramento	2028 Construction and Mining - Trenchers	Aggregate	100	Diesel	5.59E-05	6.76E-05	8.04E-05	0.000785678	0.000451455	0.14289504	3.51E-05	3.23E-05	1.35E-06	0	4643.399246	1669.307402	5.121043741	73016.80349
Sacramento	2028 Construction and Mining - Trenchers	Aggregate	175	Diesel	6.65E-05	8.04E-05	9.57E-05	0.00121913	0.0005343	0.212849731	2.60E-05	2.39E-05	2.02E-06	0	6916.589152	2133.778692	5.119194618	132961.1532
Sacramento	2028 Construction and Mining - Trenchers	Aggregate	300	Diesel	4.15E-05	5.02E-05	5.97E-05	0.000308285	0.000388773	0.122131751	1.86E-05	1.71E-05	1.16E-06	0	3968.692545	708.6369936	1.969611457	79256.60273
Sacramento	2028 Construction and Mining - Trenchers	Aggregate	50	Diesel	0.000215514	0.000260772	0.000310341	0.002374891	0.001958675	0.386628361	6.22E-05	5.72E-05	3.66E-06	0	12563.55605	8889.683195	28.48434605	185123.6203
Sacramento	2028 Construction and Mining - Trenchers	Aggregate	600	Diesel	5.96E-05	7.21E-05	8.58E-05	0.000464588	0.000554351	0.19799521	2.24E-05	2.06E-05	1.88E-06	0	6433.888893	590.5053294	1.740405749	130136.1877
Sacramento	2028 Construction and Mining - Trenchers	Aggregate	75	Diesel	6.16E-05	7.45E-05	8.87E-05	0.000691914	0.000727471	0.126729602	2.95E-05	2.72E-05	1.20E-06	0	4118.100514	1882.110127	6.235784552	58208.87557
Sacramento	2028 Construction and Mining - Trenchers	Aggregate	750	Diesel	2.90E-06	3.52E-06	4.18E-06	1.97E-05	4.09E-05	0.009556183	1.26E-06	1.16E-06	9.05E-08	0	310.5298414	21.25287266	0.098697922	6807.345377
Sacramento	2028 Construction and Mining - Trenchers	Aggregate	9999	Diesel	5.82E-05	7.04E-05	8.38E-05	0.000524449	0.000924019	0.248736466	2.18E-05	2.01E-05	2.36E-06	0	8082.734869	374.0727342	0.885704031	160228.8897
Sacramento	2028 Construction and Mining - Vacuum Truck	Aggregate	100	Diesel	4.12E-06	4.98E-06	5.93E-06	7.72E-05	4.74E-05	0.012218535	3.71E-06	3.41E-06	1.16E-07	0	397.0434313	205.660085	0.426450089	7079.888312
Sacramento	2028 Construction and Mining - Vacuum Truck	Aggregate	175	Diesel	3.64E-05	4.40E-05	5.24E-05	0.000659189	0.000282037	0.113438602	1.35E-05	1.24E-05	1.07E-06	0	3686.207161	1333.181985	2.165286049	72835.65604
Sacramento	2028 Construction and Mining - Vacuum Truck	Aggregate	300	Diesel	3.42E-05	4.14E-05	4.93E-05	0.000252027	0.000224804	0.123572564	9.25E-06	8.51E-06	1.17E-06	0	4015.512036	886.9848214	1.378109452	80395.9863
Sacramento	2028 Construction and Mining - Vacuum Truck	Aggregate	50	Diesel	4.78E-06	5.78E-06	6.88E-06	4.67E-05	3.58E-05	0.006646015	1.25E-06	1.15E-06	6.30E-08	0	215.9634025	245.968708	0.557797285	3175.954219
Sacramento	2028 Construction and Mining - Vacuum Truck	Aggregate	600	Diesel	4.71E-05	5.70E-05	6.79E-05	0.000327204	0.000334604	0.168039895	1.33E-05	1.22E-05	1.59E-06	0	5460.485715	856.2465125	1.672996503	108246.4757
Sacramento	2028 Construction and Mining - Vacuum Truck	Aggregate	75	Diesel	3.61E-06	4.37E-06	5.20E-06	4.92E-05	4.23E-05	0.008007753	1.13E-06	1.04E-06	7.59E-08	0	260.2133282	186.5162521	0.360842383	4639.999445
Sacramento	2028 Construction and Mining - Water Truck	Aggregate	175	Diesel	1.12E-05	1.35E-05	1.61E-05	0.000197543	8.80E-05	0.033699401	4.49E-06	4.13E-06	3.19E-07	0	1095.067918	398.4083437	0.688880913	21377.05666
Sacramento	2028 Construction and Mining - Water Truck	Aggregate	300	Diesel	6.15E-05	7.44E-05	8.86E-05	0.000511345	0.000451673	0.212066142	2.12E-05	1.95E-05	2.01E-06	0	6891.126291	1591.543649	2.922494879	139229.4352
Sacramento	2028 Construction and Mining - Water Truck	Aggregate	50	Diesel	1.22E-06	1.47E-06	1.75E-06	1.46E-05	1.25E-05	0.001827917	3.86E-07	3.55E-07	1.73E-08	0	59.3984821	76.35161327	0.131215412	1059.165285
Sacramento	2028 Construction and Mining - Water Truck	Aggregate	600	Diesel	0.000249545	0.00030195	0.000359345	0.001961702	0.001341866	0.94636385	6.16E-05	5.67E-05	8.96E-06	0	30752.25842	4024.514913	6.562809269	621233.256
Sacramento	2028 Construction and Mining - Water Truck	Aggregate	75	Diesel	6.39E-06	7.73E-06	9.20E-06	8.32E-05	6.74E-05	0.017149133	2.62E-06	2.41E-06	1.62E-07	0	557.2640708	243.6142249	0.524861648	5686.827425
Sacramento	2028 Construction and Mining - Water Truck	Aggregate	750	Diesel	7.31E-06	8.85E-06	1.05E-05	7.46E-05	9.40E-05	0.015978957	3.95E-06	3.63E-06	1.51E-07	0	519.238994	43.11722502	0.098411559	10293.18527
Sacramento	2028 Construction and Mining - Water Truck	Aggregate	9999	Diesel	1.12E-05	1.36E-05	1.62E-05	0.000100014	0.000198087	0.051409859	3.64E-06	3.35E-06	4.87E-07	0	1670.57235	113.1906358	0.197104024	35241.52715
Sacramento	2028 Forestry - Extraction	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Extraction	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Extraction	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Extraction	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Extraction	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Extraction	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Extraction	Aggregate	750	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Extraction	Aggregate	9999	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Maintenance & Construction	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Maintenance & Construction	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Maintenance & Construction	Aggregate	25	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Maintenance & Construction	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Maintenance & Construction	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Maintenance & Construction	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Maintenance & Construction	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Manufacturing	Aggregate	100	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Manufacturing	Aggregate	175	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Manufacturing	Aggregate	300	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Manufacturing	Aggregate	50	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Manufacturing	Aggregate	600	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Forestry - Manufacturing	Aggregate	75	Diesel	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sacramento	2028 Industrial - Aerial Lifts	Aggregate	100	Diesel	2.31E-05	2.80E-05	3.33E-05	0.000668068	0.000247738	0.121342506	1.84E-05	1.69E-05	1.15E-06	0	3943.045888	2690.719691	9.422324812	67048.06042
Sacramento	2028 Industrial - Aerial Lifts	Aggregate	175	Diesel	3.73E-05	4.51E-05	5.37E-05	0.000974729	0.000244313	0.171219448	1.07E-05	9.84E-06	1.62E-06	0	5563.805845	2986.766963	6.670171515	110021.2089
Sacramento	2028 Industrial - Aerial Lifts	Aggregate	300	Diesel	7.34E-07	8.88E-07	1.06E-06	7.00E-06	3.28E-06	0.003596081	1.33E-07	1.23E-07	3.41E-08	0	116.8552819	31.89620679	0.07898693	2316.492175
Sacramento	2028 Industrial - Aerial Lifts	Aggregate	50	Diesel	0.000108972	0.000131857	0.00015692	0.001787307	0.001596179	0.308169056	3.09E-05	2.84E-05	2.92E-06	0	10014.00724	11678.4384	50.0289303	168392.8039
Sacramento	2028 Industrial - Aerial Lifts	Aggregate	600	Diesel	4.44E-07	5.37E-07	6.40E-07	4.10E-06	2.75E-06	0.002145859	9.38E-08	8.63E-08	2.03E-08	0	69.73006517	11.83610861	0.031594772	1382.300806
Sacramento	2028 Industrial - Aerial Lifts	Aggregate	75	Diesel	0.00017335	0.000209754	0.000249624	0.003357772	0.002924342	0.596823256	3.74E-05	3.44E-05	5.65E-06	0	19393.87584	15926.86218	54.55206419	335748.634
Sacramento	2028 Industrial - Boom	Aggregate	100	Diesel	1.28E-05	1.54E-05	1.84E-05	0.00034276	0.000124367	0.058557646	1.06E-05	9.77E-06	5.55E-07	0	1902.840926	1268.837183	2.559879354	33877.22883

Sacramento	2028 Industrial - Boom	Aggregate	175	Diesel	1.49E-05	1.80E-05	2.15E-05	0.000317474	8.53E-05	0.052656335	3.59E-06	3.30E-06	4.99E-07	0	1711.076809	880.1461648	1.137538719	34058.11418
Sacramento	2028 Industrial - Boom	Aggregate	300	Diesel	1.91E-06	2.31E-06	2.75E-06	1.66E-05	8.21E-06	0.007819634	3.60E-07	3.32E-07	7.41E-08	0	254.1003628	71.1094218	0.110772864	5302.937878
Sacramento	2028 Industrial - Boom	Aggregate	50	Diesel	0.000163422	0.000197741	0.000235328	0.002483243	0.002033234	0.382281151	3.72E-05	3.43E-05	3.62E-06	0	12422.29269	13550.53113	33.68354755	219942.2649
Sacramento	2028 Industrial - Boom	Aggregate	600	Diesel	1.81E-06	2.19E-06	2.61E-06	1.53E-05	7.86E-06	0.00771979	4.35E-07	4.00E-07	7.31E-08	0	250.8559097	40.77884559	0.063189544	5181.358007
Sacramento	2028 Industrial - Boom	Aggregate	75	Diesel	0.000239034	0.000289231	0.000344209	0.003812806	0.003254056	0.638778599	3.54E-05	3.26E-05	6.05E-06	0	20757.22203	16087.03262	31.21814592	369718.2501
Sacramento	2028 Industrial - Boom	Aggregate	9999	Diesel	1.16E-06	1.40E-06	1.66E-06	1.01E-05	1.72E-05	0.005069197	3.32E-07	3.05E-07	4.80E-08	0	164.7244271	9.604208479	0.015797386	3265.430883
Sacramento	2028 Industrial - Forklifts	Aggregate	100	Diesel	0.000239989	0.000290386	0.000345584	0.005157842	0.002329468	0.903030926	0.000172386	0.000158595	8.55E-06	0	29344.14749	28861.92474	70.48293578	486402.1986
Sacramento	2028 Industrial - Forklifts	Aggregate	175	Diesel	0.000701224	0.00084848	0.001009762	0.014963147	0.004487842	2.526735213	0.000194447	0.000178892	2.39E-05	0	82106.70158	64074.49123	106.1167994	1618427.883
Sacramento	2028 Industrial - Forklifts	Aggregate	25	Diesel	1.29E-07	1.56E-07	1.86E-07	1.57E-06	1.13E-06	0.000296354	6.40E-08	5.89E-08	2.81E-09	0	9.630071564	5.165249596	0.015797386	1.239659903
Sacramento	2028 Industrial - Forklifts	Aggregate	300	Diesel	6.54E-05	7.91E-05	9.42E-05	0.000515819	0.000424389	0.226119589	1.99E-05	1.83E-05	2.14E-06	0	7347.795511	3418.017872	6.686096666	146669.6208
Sacramento	2028 Industrial - Forklifts	Aggregate	50	Diesel	8.07E-05	9.77E-05	0.000116244	0.000980715	0.000776594	0.151355646	2.31E-05	2.12E-05	1.43E-06	0	4918.328108	8448.149907	23.30087193	71527.51712
Sacramento	2028 Industrial - Forklifts	Aggregate	600	Diesel	1.96E-05	2.37E-05	2.82E-05	0.000191553	0.000138572	0.068522336	6.67E-06	6.14E-06	6.49E-07	0	2226.645263	635.6883084	1.26454465	45172.96265
Sacramento	2028 Industrial - Forklifts	Aggregate	75	Diesel	0.000491332	0.000594512	0.000707519	0.007775838	0.006793392	1.330621773	0.00010882	0.000100115	1.26E-05	0	43238.78666	55513.66771	132.7219175	737561.4179
Sacramento	2028 Industrial - Forklifts	Aggregate	750	Diesel	1.01E-06	1.22E-06	1.45E-06	1.01E-05	3.90E-06	0.005223286	2.72E-07	2.51E-07	4.95E-08	0	169.7315852	22.94107346	0.047392158	3364.690774
Sacramento	2028 Industrial - Forklifts	Aggregate	9999	Diesel	2.28E-05	2.76E-05	3.28E-05	0.000183303	0.000403736	0.095236268	8.53E-06	7.85E-06	9.02E-07	0	3094.719156	154.8615691	0.316102797	62778.44021
Sacramento	2028 Industrial - Garbage Refuse	Aggregate	175	Diesel	2.31E-07	2.79E-07	3.33E-07	3.37E-06	2.67E-06	0.000570654	1.28E-07	1.18E-07	5.41E-09	0	18.54349775	8.794230898	0.015797386	367.5988515
Sacramento	2028 Industrial - Garbage Refuse	Aggregate	300	Diesel	6.59E-07	7.98E-07	9.50E-07	5.51E-06	3.29E-06	0.002793173	1.41E-07	1.30E-07	2.65E-08	0	90.76465414	20.06335915	0.031594772	1799.282049
Sacramento	2028 Industrial - Garbage Refuse	Aggregate	50	Diesel	3.81E-08	4.61E-08	5.48E-08	6.41E-07	5.95E-07	0.000101469	1.14E-08	1.05E-08	9.61E-10	0	3.297237162	6.188921466	0.015797386	58.79475393
Sacramento	2028 Industrial - Garbage Refuse	Aggregate	600	Diesel	9.73E-06	1.18E-05	1.40E-05	8.02E-05	3.77E-05	0.040883572	1.77E-06	1.62E-06	3.87E-07	0	1328.51879	144.1665012	0.20542182	26666.81042
Sacramento	2028 Industrial - Garbage Refuse	Aggregate	75	Diesel	2.29E-07	2.77E-07	3.30E-07	2.69E-06	2.20E-06	0.000408254	7.21E-08	6.63E-08	3.87E-09	0	13.26628501	8.412448104	0.015797386	236.5580407
Sacramento	2028 Industrial - Garbage Refuse	Aggregate	9999	Diesel	2.12E-06	2.57E-06	3.06E-06	2.02E-05	3.49E-05	0.010290072	7.32E-07	6.73E-07	9.75E-08	0	334.377686	18.46861037	0.031594772	6628.568948
Sacramento	2028 Industrial - Garbage Transfer	Aggregate	300	Diesel	9.29E-07	1.12E-06	1.34E-06	6.20E-06	6.09E-06	0.002918813	2.27E-07	2.09E-07	2.76E-08	0	94.84734422	21.55493766	0.031594772	1880.215657
Sacramento	2028 Industrial - Garbage Transfer	Aggregate	600	Diesel	1.66E-06	2.01E-06	2.39E-06	1.42E-05	4.03E-06	0.007109627	2.55E-07	2.34E-07	6.73E-08	0	231.0285718	22.42260767	0.031594772	4579.817616
Sacramento	2028 Industrial - Misc - Aerial Lifts	Aggregate	100	Gasoline	0.000156641	0.000144079	0.000172374	0.009008404	0.000399264	0.295906582	2.06E-05	1.56E-05	2.86E-06	4.12E-06	11749.35	4098.95	11.35	274629.65
Sacramento	2028 Industrial - Misc - Aerial Lifts	Aggregate	15	Gasoline	2.48E-05	2.50E-05	2.73E-05	0.000703988	0.000018479	2.78E-08	9.01E-06	6.81E-06	1.13E-08	1.57E-08	44.4870969	0	0.410997114	0
Sacramento	2028 Industrial - Misc - Aerial Lifts	Aggregate	15	Diesel	0.000027349	3.29E-05	3.93E-05	0.000172547	0.000206	0.000394903	7.24E-06	5.47E-06	3.75E-09	3.23E-09	12.84492425	0	5.985975133	0
Sacramento	2028 Industrial - Misc - Aerial Lifts	Aggregate	15	Electric	2.96E-06	2.68E-07	2.93E-06	0.00010425	2.85E-06	9.58E-09	2.66E-07	2.01E-07	2.18E-10	1.96E-09	5.610936131	0	0.141513612	0
Sacramento	2028 Industrial - Misc - Aerial Lifts	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.130154548	0
Sacramento	2028 Industrial - Misc - Aerial Lifts	Aggregate	25	Gasoline	0.001387952	0.00140183	0.001527356	0.036743192	0.000906262	1.37E-06	0.000443056	0.000334754	5.94E-07	8.20E-07	2334.222552	0	13.82769861	0
Sacramento	2028 Industrial - Misc - Aerial Lifts	Aggregate	25	Diesel	5.06E-05	6.08E-05	7.27E-05	0.000207554	0.000384444	0.00055557	1.31E-05	9.91E-06	5.27E-09	4.54E-09	18.07089124	0	8.429661302	0
Sacramento	2028 Industrial - Misc - Aerial Lifts	Aggregate	25	Electric	0.000253423	2.29E-05	0.000250862	0.006415056	0.000176355	5.64E-07	1.73E-05	1.31E-05	1.37E-08	1.23E-07	352.5409949	0	5.701921371	0
Sacramento	2028 Industrial - Misc - Aerial Lifts	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.130154548	0
Sacramento	2028 Industrial - Misc - Aerial Lifts	Aggregate	50	Gasoline	0.000197371	0.000181542	0.000217195	0.016778567	0.000293843	0.147401013	1.02E-05	7.68E-06	1.79E-06	2.31E-06	6602.85	4098.95	11.35	135265.35
Sacramento	2028 Industrial - Misc - Forklifts	Aggregate	100	Gasoline	0.009991595	0.009190269	0.010995141	0.948739737	0.050377433	11.76661778	0.000820397	0.000619855	0.000113682	0.000176215	503006.5	239549.5	132.98	16768465
Sacramento	2028 Industrial - Misc - Forklifts	Aggregate	100	Nat Gas	0	0	0.001800304	0.849201456	0.085181485	18.79853911	0.001671823	0	0	0	1045925.75	439350.5	243.86	30754535
Sacramento	2028 Industrial - Misc - Forklifts	Aggregate	175	Gasoline	0.00052151	0.000479685	0.00057389	0.036527921	0.00311971	0.872337767	6.25E-05	4.73E-05	8.67E-06	1.23E-05	35248.05	8752.7	4.85	1277894.2
Sacramento	2028 Industrial - Misc - Forklifts	Aggregate	175	Nat Gas	0	0	8.26E-05	0.049744097	0.004236084	1.434830109	0.000127605	0	0	0	78500.55	16081.9	8.92	2347957.4
Sacramento	2028 Industrial - Misc - Forklifts	Aggregate	25	Gasoline	8.83E-06	8.92E-06	9.72E-06	0.000738178	4.94E-06	2.00E-07	1.79E-08	1.35E-08	1.13E-08	1.56E-08	44.42175374	0	0.106560112	0
Sacramento	2028 Industrial - Misc - Forklifts	Aggregate	25	Electric	4.60E-05	4.17E-06	4.56E-05	0.000660604	1.84E-05	5.11E-08	2.04E-06	1.54E-06	1.49E-09	1.34E-08	38.33249157	0	0.19624527	0
Sacramento	2028 Industrial - Misc - Forklifts	Aggregate	50	Gasoline	0.004732893	0.004353315	0.00520826	0.558033471	0.011136867	1.986199332	0.000136927	0.000103456	2.41E-05	3.82E-05	109036.45	68258.65	37.89	2798604.65
Sacramento	2028 Industrial - Misc - Forklifts	Aggregate	50	Nat Gas	0	0	0.000303513	0.050374324	0.013173713	3.137194189	0.000279002	0	0	0	167126.2	125180.4	69.5	5132396.4
Sacramento	2028 Industrial - Misc - Other General Industrial Equipment	Aggregate	100	Gasoline	4.56E-05	4.19E-05	5.02E-05	0.003320321	0.000274325	0.084913054	5.92E-06	4.47E-06	8.20E-07	1.20E-06	3416.4	850.45	1.18	67185.55
Sacramento	2028 Industrial - Misc - Other General Industrial Equipment	Aggregate	15	Gasoline	0.000286012	0.000288872	0.000314739	0.016930698	0.000147923	6.65E-06	1.43E-06	1.08E-06	2.63E-07	3.63E-07	1029.789723	0	14.29929973	0
Sacramento	2028 Industrial - Misc - Other General Industrial Equipment	Aggregate	15	Diesel	1.57E-05	1.89E-05	2.26E-05	0.000111381	0.000132976	0.000246168	4.68E-06	3.53E-06	2.34E-09	2.01E-09	8.007050377	0	1.463784577	0
Sacramento	2028 Industrial - Misc - Other General Industrial Equipment	Aggregate	175	Gasoline	6.40E-06	5.88E-06	7.04E-06	0.000619222	5.53E-05	0.017602481	1.26E-06	9.53E-07	1.75E-07	2.46E-07	700.8	76.65	0.11	13337.1
Sacramento	2028 Industrial - Misc - Other General Industrial Equipment	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.012714942	0
Sacramento	2028 Industrial - Misc - Other General Industrial Equipment	Aggregate	25	Gasoline	0.000253582	0.000256118	0.000279052	0.02237465	0.000141934	6.05E-06	5.42E-07	4.09E-07	3.42E-07	4.72E-07	1344.621166	0	4.79895365	0
Sacramento	2028 Industrial - Misc - Other General Industrial Equipment	Aggregate	25	Diesel	0.000045306	5.45E-05	6.51E-05	0.000185993	0.000344354	0.000497814	1.16E-05	8.75E-06	4.72E-09	4.07E-09	16.19229741	0	1.510301454	0
Sacramento	2028 Industrial - Misc - Other General Industrial Equipment	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.012714942	0
Sacramento	2028 Industrial - Misc - Other General Industrial Equipment	Aggregate	50	Gasoline	0.000147377	0.000135558	0.00016218	0.014155818	0.000332107	0.099238174	6.84E-06	5.17E-06	1.21E-06	1.62E-06	4613.6	2591.5	3.62	77745
Sacramento	2028 Industrial - Misc - Other Material Handling Equipment	Aggregate	100	Gasoline	8.27E-05	7.61E-05	9.10E-05	0.005313584	0.000428544	0.11739274	8.18E-06	6.18E-06	1.13E-06	1.67E-06	4774.2	1752	4.56	94608
Sacramento	2028 Industrial - Misc - Other Material Handling Equipment	Aggregate	50	Gasoline	3.57E-06	3.29E-06	3.93E-06	0.000328716	7.84E-06	0.002037158	1.40E-07	1.06E-07	2.48E-08	3.58E-08	102.2	14.6	0.04	598.6
Sacramento	2028 Industrial - Misc - Sweepers/Scrubbers	Aggregate	100	Gasoline	0.00023895	0.000219786	0.00026295	0.015152157	0.001536241	0.514501257	3.59E-05	2.71E-05	4.97E-06	7.15E-06	20403.5	4558.85	8.82	310001.8
Sacramento	2028 Industrial - Misc - Sweepers/Scrubbers	Aggregate	15	Gasoline	0.000115889	0.000117047	0.000127528	0.007154864	5.84E-05	2.94E-06	2.96E-07	2.24E-07	1.11E-07	1.53E-07	434.543095	0	6.356796704	0
Sacramento	2028 Industrial - Misc - Sweepers/Scrubbers	Aggregate	15	Diesel	6.25E-06	7.52E-06	8.99E-06	4.43E-05	5.28E-05	9.78E-05	1.86E-06	1.40E-06	9.28E-10	8.00E-10	3.182113107	0	0.683211202	0
Sacramento	2028 Industrial - Misc - Sweepers/Scrubbers	Aggregate	175	Gasoline	1.85E-06	1.70E-06	2.04E-06	0.000201901	1.82E-05	0.005989559	4.29E-07	3.24E-07	5.95E-08	8.31E-08	237.25	29.2	0.06	4088
Sacramento	2028 Industrial - Misc - Sweepers/Scrubbers	Aggregate	2	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.009012822	0
Sacramento	2028 Industrial - Misc - Sweepers/Scrubbers	Aggregate	25	Gasoline	0.000254578	0.000257124	0.000280148	0.024328918	0.000142489	6.58E-06	5.89E-07	4.45E-07	3.71E-07	5.12E-07	1459.311532	0	6.32052589	0
Sacramento	2028 Industrial - Misc - Sweepers/Scrubbers	Aggregate	25	Diesel	9.06E-06	1.09E-05	1.30E-05	0.00003718	6.88E-05	9.95E-05	2.31E-06	1.75E-06	9.44E-10	8.14E-10	3.236838835	0	0.517991245	0
Sacramento	2028 Industrial - Misc - Sweepers/Scrubbers	Aggregate	5	Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0.009012822	0
Sacramento	2028 Industrial - Misc - Sweepers/Scrubbers	Aggregate	50	Gasoline	0.000409401	0.000376567	0.00045052	0.035455752	0.000902773	0.320768012	2.21E-05	1.67E-05	3.90E-06	5.01E-06	14304.35	5456.75	10.58	190986.25
Sacramento	2028 Industrial - Mower	Aggregate	100	Diesel	2.52E-05	3.05E-05	3.63E-05	0.000517717	0.000283543	0.084712614	2.11E-05	1.94E-05	8.02E-07	0	2752.751185	1436.912369	2.622518272	49150.7732
Sacramento	2028 Industrial - Mower	Aggregate	175	Diesel	7.62E-06	9.22E-06	1.10E-05	0.00016038	4.85E-05	0.025837876	1.75E-06	1.61E-06	2.45E-07	0	839.6062914	360.367462	0.584731282	16773.69416
Sacramento	2028 Industrial - Mower	Aggregate	300	Diesel	3.39E-07	4.10E-07	4.88E-07	2.18E-06	3.83E-06	0.001106182	1.29E-07	1.18E-07	1.05E-08	0	35.94557142	10.71534693	0.015797386	712.5705706
Sacramento	2028 Industrial - Mower	Aggregate	50	Diesel	0.000192462	0.000232879	0.000277145	0.002221265	0.001735504	0.27743696	6.18E-05	5.69E-05	2.63E-06	0	9015.362408	11896.80895	25.08788217	158799.3514
Sacramento	2028 Industrial - Mower	Aggregate	75	Diesel	8.61E-05	0.000104179	0.000123981	0.001138197	0.000973049	0.182513181	1.95E-05	1.80E-05	1.73E-06	0	5930.797648	4817.020816	9.525959034	105728.2608
Sacramento	2028 Industrial - Mower	Aggregate	9999	Diesel	1.54E-05	1.87E-05	2.22E-05	9.85E-05	0.000243909	0.048949627	6.71E-06	6.17E-06	4.64E-07	0	1590.626673	57.50191567	0.126379088	31531.94431
Sacramento	2028 Industrial - Other General Industrial Equipment	Aggregate	100	Diesel	2.56E-05	3.10E-05	3.69E-05	0.000442228	0.00024072	0.075499119	1.83E-05	1.68E-05	7.15E-07	0	2453.357056	1476.787275	3.619638554	43128.18364
Sacramento	2028 Industrial - Other General Industrial Equipment	Aggregate	175	Diesel	7.08E-05	8.57E-05	0.000101964	0.001367805	0.000503186	0.229839151	2.42E-05	2.23E-05	2.18E-06	0	7468.663307	3373.403998	5.92625229	149975.8108
Sacramento	2028 Industrial - Other General Industrial Equipment	Aggregate	300	Diesel	4.94E-05	5.97E-05	7.11E-05	0.000356518	0.000377932	0.151926339	1.80E-05	1.66E-05	1.44E-06	0	4936.872891	1257.048964	2.655226	100126.7279
Sacramento	2028 Industrial - Other General Industrial Equipment	Aggregate	50	Diesel	0.00013931	0.000168565	0.000200606	0.00147374	0.001236479	0.207845387	4.37E-05	4.02E-05	1.97E-06	0	6753.972121	9269.659861	23.2633584	109421.4058
Sacramento	2028 Industrial - Other General Industrial Equipment	Aggregate	600	Diesel	0.000127593	0.000154387	0.000183734	0.001091461	0.000790668	0.484212406	3.75E-05	3.45E-05	4.59E-06	0	15734.56663	2441.599471	4.761941168	333677.3766
Sacramento	2028 Industrial - Other General Industrial Equipment	Aggregate	75	Diesel	4.53E-05	5.48E-05	6.52E-05	0.000618941	0.000586523	0.104524084	1.73E-05	1.59E-05	9.90E-07	0	3396.528361	2911.293258	6.81022107	59500.0788
Sacramento	2028 Industrial - Other General Industrial Equipment	Aggregate	750	Diesel	2.91E-05	3.52E-05	4.19E-05	0.000236425	0.000213078	0.113219483	1.00E-05	9.23E-06	1.07E-06	0	3679.086841	324.7669495	0.711041873	73760.42398
Sacramento	2028 Industrial - Other General Industrial Equipment	Aggregate	9999	Diesel	4.44E-05	5.38E-05	6.40E-05	0.000350957	0.000780854	0.180300505	1.74E-05	1.60E-05	1.71E-06	0	5858.896379	323.437848	0.63197568	118902.021
Sacramento	2028 Industrial - Other Truck	Aggregate	100	Diesel	2.48E-06	3.00E-06	3.58E-06	6.43E-05	2.30E-05	0.010484696	2.03E-06	1.87E-06	9.93E-08	0	340.7020327	208.8346776	0.31594772	6075.235476
Sacramento	2028 Industrial - Other Truck	Aggregate	175	Diesel	2.54E-05	3.08E-05	3.66E-05	0.000522592	0.000121125	0.082887078	4.69E-06	4.32E-06	7.85E-07	0	2693.430058	937.3511656	1.011293505	54216.87489
Sacramento	2028 Industrial - Other Truck	Aggregate	300	Diesel	4.78E-05	5.78E-05	6.88E-05	0.000328587	0.000297972	0.149077024	1.26E-05	1.16E-05	1.41E-06	0	4844.283893	1112.779801	1.437922333	98435.69861
Sacramento	2028 Industrial - Other Truck	Aggregate	50	Diesel	6.22E-06	7.52E-06	8.95E-06	6.99E-05	5.25E-05	0.008538518	1.65E-06	1.52E-06	8.09E-08	0	277.4606277	461.9467523	0.805666686	4947.545031
Sacramento	2028 Industrial - Other Truck	Aggregate	600	Diesel	0.0001678	0.000203038	0.000241632	0.001134228	0.000741482	0.546255107	3.67E-05	3.37E-05	5.17E-06	0	17750.65502	2266.247638	3.681389609	359241.3812
Sacramento	2028 Industrial - Other Truck	Aggregate	75	Diesel	8.91E-06	1.08E-05	1.28E-05	0.000117811	0.000106088	0.019366303	2.41E-06	2.22E-06	1.83E-07	0	629.3114044	449.4766499	0.71088237	11251.65041
Sacramento	2028 Industrial - Other Truck	Aggregate	750	Diesel	1.58E-05	1.91E-05	2.28E-05	8.47E-05	0.000129862	0.042649956	5.63E-06	5.18E-06	4.04E-07	0	1385.917769	104.8232564	0.379137264	27473.87721
Sacramento	2028 Industrial - Other Truck	Aggregate	9999	Diesel	1.38E-05	1.67E-05	1.99E-05	9.65E-05	0.000218413	0.048159261	4.90E-06	4.51E-06	4.56E-07	0	1564.94359	37.86779172	0.063189544	31022.81318
Sacramento	2028 Industrial - Railcars or Track Cars	Aggregate	100	Diesel	3.19E-07	3.87E-07	4.60E-07	5.76E-06	2.03E-06	0.000995428	1.42E-07	1.31E-07	9.43E-09	0	32.34660636	16.721041	0.031654234	578.7109279
Sacramento	2028 Industrial - Railcars or Track Cars	Aggregate	175	Diesel	8.05E-06	9.74E-06	1.16E-05	0.000152466	5.58E-05	0.024729432	2.46E-06	2.27E-06	2.34E-07	0	803.5872095	288.7020908	0.505667933	16223.13955
Sacramento	2028 Industrial - Railcars or Track Cars	Aggregate	300	Diesel	7.16E-06	8.66E-06	1.03E-05	5.63E-05	2.98E-05	0.027141785	1.39E-06	1.28E-06	2.57E-07	0	881.97703	209.6047978	0.316007182	17599.52558
Sacramento	2028 Industrial - Railcars or Track Cars	Aggregate	50	Diesel	1.85E-07	2.24E-07	2.66E-07	1.30E-06	1.03E-06	0.00017186	2.88E-08	2.65E-08	1.63E-09	0	5.584634045	8.31934166	0.015797386	99.58251967
Sacramento	2028 Industrial - Railcars or Track Cars	Aggregate	600	Diesel	2.57E-06	3.11E-06	3.70E-06	2.19E-05	5.71E-06	0.011125362	3.75E-07	3.45E-07	1.05E-07	0	361.5205756	59.73706829	0.094784316	7166.638689
Sacramento	2028 Industrial - Railcars or Track Cars	Aggregate	75	Diesel	4.88E-07	5.90E-07	7.03E-07	8.33E-06	6.92E-06	0.001443721	5.89E-08	5.41E-08	1.37E-08	0	46.91396792	40.32527112	0.079111392	793.7626367
Sacramento	2028 Industrial - Railcars or Track Cars	Aggregate	9999	Diesel	1.47E-06	1.78E-06	2.12E-06	1.01E-05	2.79E-05	0.004758322	7.69E-07	7.07E-07	4.51E-08	0	154.6224973	10.50292723	0.015797386	3065.174284
Sacramento	2028 Industrial - Sweepers/Scrubbers	Aggregate	100	Diesel	2.67E-05	3.23E-05	3.84E-05	0.000530441	0.000271728	0.093860313	2.10E-05	1.93E-05	8.89E-07	0	3050.007251	1404.489365	4.601993495	53431.59491
Sacramento	2028 Industrial - Sweepers/Scrubbers	Aggregate	175	Diesel	6.39E-06	7.73E-06	9.20E-06	0.000122531	5.61E-05	0.021138265	2.70E-06	2.48E-06	2.00E-07	0	686.8916243	251.098408	0.632210968	13747.07587
Sacramento	2028 Industrial - Sweepers/Scrubbers	Aggregate	300	Diesel	6.38E-06	7.72E-06	9.19E-06	5.72E-05	3.86E-05	0.028635224	1.64E-06	1.51E-06	2.71E-07	0	930.5065884	185.2360581	0.458124194	18627.39092
Sacramento	2028 Industrial - Sweepers/Scrubbers	Aggregate	50	Diesel	4.52E-05	5.47E-05	6.51E-05	0.000541982	0.000464272	0.087339011	1.31E-05	1.21E-05	8.27E-07	0	2838.096401	2927.830782	11.0813089	44765.07804
Sacramento	2028 Industrial - Sweepers/Scrubbers	Aggregate	600	Diesel	1.02E-06	1.23E-06	1.47E-06	9.16E-06	5.26E-06	0.004475808	2.82E-07	2.59E-07	4.24E-08	0	145.4421646	19.90706953	0.047392158	2948.376272
Sacramento	2028 Industrial - Sweepers/Scrubbers	Aggregate	75	Diesel	2.50E-05	3.02E-05	3.60E-05	0.000412692	0.000376812	0.072300205	7.04E-06	6.47E-06	6.85E-07	0	2349.407761	1297.202049	4.283466954	40884.39226
Sacramento	2028 Industrial - Sweepers/Scrubbers	Aggregate	9999	Diesel	1.52E-06	1.84E-06	2.19E-06	1.73E-05	3.05E-05	0.009096334	6.22E-07	5.72E-07	8.62E-08	0	295.5869684	5.79011595	0.015797386	5859.597341
Sacramento	2028 Industrial - Tow Tractor	Aggregate	600	Diesel	5.06E-07	6.12E-07	7.28E-07	3.97E-06	4.95E-06	0.002088256	1.47E-07	1.35E-07	1.98E-08	0	67.85824214	8.455025377	0.015797386	1345.194537
Sacramento	2028 Industrial - Yard Goat	Aggregate	100	Diesel	3.96E-06	4.79E-06	5.70E-06	6.56E-05	3.04E-05	0.010750618	2.03E-06	1.86E-06	1.02E-07	0	349.3432113	182.5749205	0.189568632	6300.675175
Sacramento	2028 Industrial - Yard Goat	Aggregate	175	Diesel	0.000486404	0.000588549	0.000700422	0.009168457	0.002720811	1.438721311	0.00011578	0.000106518	1.36E-05	0	46751.5	14728.31391	11.83302995	933775.4291
Sacramento	2028 Industrial - Yard Goat	Aggregate	300	Diesel	0.00027892	0.000337493	0.000401644	0.001932457	0.001179735	0.893086838	5.50E-05	5.06E-05	8.46E-06	0	29021.01263	7555.756195	6.935797052	583591.5275
Sacramento	2028 Industrial - Yard Goat	Aggregate	50	Diesel	2.03E-06	2.45E-06	2.92E-06	2.32E-05	1.77E-05	0.002511693	7.19E-07	6.61E-07	2.38E-08	0	81.61790123	120.9338115	0.221163404	1455.371326
Sacramento	2028 Industrial - Yard Goat	Aggregate	600	Diesel	2.36E-05	2.85E-05	3.39E-05	0.000152065	0.000110756	0.074496527	4.95E-06	4.55E-06	7.06E-07	0	2420.777651	338.5214437	0.316234501	49827.55469
Sacramento	2028 Industrial - Yard Goat	Aggregate	75	Diesel	2.53E-06	3.06E-06	3.65E-06	2.86E-05	2.71E-05	0.004460078	7.04E-07	6.48E-07	4.22E-08	0	144.9310199	115.7506299	0.142176474	2615.051462
Sacramento	2028 Industrial - Yard Goat	Aggregate	9999	Diesel	4.80E-06	5.80E-06	6.91E-06	3.03E-05	6.98E-05	0.015575183	1.52E-06	1.40E-06	1.48E-07	0	506.1182767	15.24414343	0.015797386	10033.08544
Sacramento	2028 Lawn and Garden - Misc - Chainsaws	Aggregate	2	Gasoline	0.20636917	0.208396862	0.227091203	0.584852511	0.0066	3.13089515	0.002489	0.001878	0.00004554	0.00006291	177907.6715	0	42423.81686	0
Sacramento	2028 Lawn and Garden - Misc - Chainsaws	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	26550.76286	0
Sacramento	2028 Lawn and Garden - Misc - Chainsaws	Aggregate	5	Gasoline	0.1689	0.1705	0.185769988	0.542217742	0.006048	2.902628165	0.002308	0.001741	0.00004145	0.00005709	162010.6975	0	30184.09123	0
Sacramento	2028 Lawn and Garden - Misc - Chainsaws	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	18890.58335	0
Sacramento	2028 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	2	Gasoline	0.18	0.1819	0.198144129	0.3149365	0.006447	1.685866619	0.001338	0.001011	2.68E-05	0.00003709	104766.3335	0	22843.59369	0
Sacramento	2028 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	14296.56462	0
Sacramento	2028 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	5	Gasoline	0.166842106	0.1685	0.1837	0.292017248	0.005978	1.562953627	0.001241	0.000937	0.00002477	0.00003417	97128.15489	0	16252.97221	0
Sacramento	2028 Lawn and Garden - Misc - Chainsaws Preempt	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	10171.85257	0
Sacramento	2028 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	15	Gasoline	0.000231	0.000233	0.000254	0.0128	0.0000931	0.0281	4.59E-07	0.000000347	0.000000469	0.000000647	1826.864493	0	188.8662022	0
Sacramento	2028 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	70.27290478	0
Sacramento	2028 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	2	Gasoline	0.0000718	0.0000725	0.000079	0.000934	0.00000777	0.00219	3.42E-08	2.58E-08	3.99E-08	5.51E-08	145.6297878	0	65.33507233	0
Sacramento	2028 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	24.30972436	0
Sacramento	2028 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	25	Diesel	0.00000655	0.00000788	0.00000942	2.69E-05	0.0000498	0.006582597	0.00000168	0.00000127	6.25E-08	5.38E-08	214.1106356	0	0.510225698	0
Sacramento	2028 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	5	Gasoline	0.00027	0.000273	0.000297	0.0127	0.000098	0.0297	0.000000466	0.000000352	0.000000493	0.00000068	1888.948464	0	300.3245464	0
Sacramento	2028 Lawn and Garden - Misc - Chippers/Stump Grinders	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	111.7440707	0
Sacramento	2028 Lawn and Garden - Misc - Lawn Mowers	Aggregate	15	Gasoline	0.0004556	0.00046	0.0005017	0.03156	0.0002096	0.06636	0.000002826	0.000002133	0.000001155	0.000001594	4384.038295	0	623.9950042	0
Sacramento	2028 Lawn and Garden - Misc - Lawn Mowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	284.7810244	0
Sacramento	2028 Lawn and Garden - Misc - Lawn Mowers	Aggregate	2	Gasoline	2.92E-05	0.00002951	0.0000322	0.0006691	0.0000142	0.0018	1.37E-06	0.000001038	3.08E-08	4.26E-08	110.2922597	0	41.53745896	0
Sacramento	2028 Lawn and Garden - Misc - Lawn Mowers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	18.95700736	0
Sacramento	2028 Lawn and Garden - Misc - Lawn Mowers	Aggregate	25	Gasoline	0.000378	0.0003814	0.0004154	0.02662	0.0001304	0.055882444	0.000002378	0.000001799	9.48E-07	0.000001308	3692.200831	0	169.883515	0
Sacramento	2028 Lawn and Garden - Misc - Lawn Mowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	77.53203326	0
Sacramento	2028 Lawn and Garden - Misc - Lawn Mowers	Aggregate	5	Gasoline	0.09889	0.09978	0.10879	4.948520314	0.06174	13.55728765	0.00048	0.0003624	0.000217	0.0002998	808556.5721	0	170599.4127	0
Sacramento	2028 Lawn and Garden - Misc - Lawn Mowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	77858.75719	0
Sacramento	2028 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	15	Gasoline	0.002303	0.002327	0.002536	0.1654	0.001733	0.427048727	0.00000652	0.00000494	0.00000671	0.00000925	25922.80639	0	1389.521942	0
Sacramento	2028 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	2	Gasoline	0.25959464	0.262238787	0.285635454	1.6118287	0.01122	6.798276418	0.0036706	0.0027743	0.0000974	0.00013451	381815.0553	0	46096.01933	0
Sacramento	2028 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	112499.6252	0
Sacramento	2028 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	25	Gasoline	4.92E-05	0.00004975	5.42E-05	0.003597	0.00005467	0.013773	1.62E-07	1.22E-07	1.87E-07	2.58E-07	731.180002	0	14.01131291	0
Sacramento	2028 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	5	Gasoline	0.355859343	0.359436348	0.391654738	1.32287146	0.0087544	8.639777726	0.0054706	0.00412801	0.000113334	0.000156504	446093.2629	0	22379.66999	0
Sacramento	2028 Lawn and Garden - Misc - Leaf Blowers/Vacuums	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	60540.29343	0
Sacramento	2028 Lawn and Garden - Misc - Other	Aggregate	15	Gasoline	0.00126	0.001272	0.001387	0.0704	0.00046	0.182913347	0.00000313	0.000002369	2.86E-06	0.00000395	11111.92568	0	1395.93961	0
Sacramento	2028 Lawn and Garden - Misc - Other	Aggregate	15	Diesel	0.00000245	0.00000294	0.00000352	0.0000173	0.0000207	0.002865171	0.000000727	0.00000055	2.72E-08	2.34E-08	93.19476968	0	0.391882948	0
Sacramento	2028 Lawn and Garden - Misc - Other	Aggregate	25	Gasoline	0.0002223	0.000224	0.000244	0.0207	0.0001531	0.0434	0.000000744	0.000000562	0.000000729	0.000001006	2859.922556	0	120.3795349	0
Sacramento	2028 Lawn and Garden - Misc - Other	Aggregate	25	Diesel	0.000000448	5.39E-07	0.000000644	0.00000184	0.0000034	0.000449978	0.000000115	8.65E-08	4.27E-09	3.68E-09	14.63634704	0	0.0463	0
Sacramento	2028 Lawn and Garden - Misc - Other	Aggregate	5	Gasoline	0.000634	0.000641	0.000697	0.032	0.000248	0.0722	0.00000114	0.000000862	0.000001221	0.000001686	4650.203757	0	1136.660612	0
Sacramento	2028 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Gasoline	0.004687	0.004732	0.005163	0.264662759	0.003851	0.77792319	0.00001598	0.00001207	1.16E-05	1.60E-05	45138.96921	0	1212.363482	0
Sacramento	2028 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Diesel	0.0006276	0.0007562	0.0009032	0.004452	0.005309	0.73602201	0.0001866	0.00014116	0.000006993	0.00000602	23940.41909	0	847.6232489	0
Sacramento	2028 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	73.44493546	0
Sacramento	2028 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Gasoline	0.158314677	0.159842154	0.174132145	9.738780039	0.081876	20.17952204	0.000426852	0.00032186	0.000342628	0.000472628	1344046.301	0	14130.50086	0
Sacramento	2028 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Diesel	0.001891	0.00228	0.002731	0.007778	0.014381607	1.905177778	0.0004843	0.0003664	0.00001811	0.00001555	61969.28059	0	1727.516754	0
Sacramento	2028 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	838.9203272	0
Sacramento	2028 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	5	Gasoline	0.0005568	0.0005623	0.0006129	0.01962	0.0002274	0.046	9.72E-07	7.34E-07	7.65E-07	1.06E-06	2937.85397	0	197.3375335	0
Sacramento	2028 Lawn and Garden - Misc - Rear Engine Riding Mowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	11.95470056	0
Sacramento	2028 Lawn and Garden - Misc - Snowblowers	Aggregate	15	Gasoline	0.000831	0.00084	0.000914	0.06294	0.0004034	0.109552987	0.000001928	1.46E-06	0.000002165	2.99E-06	7880.866065	0	1923.633962	0
Sacramento	2028 Lawn and Garden - Misc - Snowblowers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	194.2395489	0
Sacramento	2028 Lawn and Garden - Misc - Snowblowers	Aggregate	25	Gasoline	0.000002622	0.000002656	0.000002891	0.000269	1.89E-06	0.0004694	8.25E-09	6.24E-09	8.87E-09	1.22E-08	33.61998808	0	3.96217047	0
Sacramento	2028 Lawn and Garden - Misc - Snowblowers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	0.400081419	0
Sacramento	2028 Lawn and Garden - Misc - Snowblowers	Aggregate	5	Gasoline	0.0003755	0.00038	0.0004125	0.01975	0.0001606	0.045099548	0.000000723	5.46E-07	0.000000753	0.000001039	2887.367224	0	1446.19237	0
Sacramento	2028 Lawn and Garden - Misc - Snowblowers	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	146.0297328	0
Sacramento	2028 Lawn and Garden - Misc - Tillers	Aggregate	15	Gasoline	0.0009246	0.000934	0.0010172	0.05911	0.0005684	0.150056586	2.38E-06	1.80E-06	2.38E-06	3.28E-06	9182.188726	0	1523.819769	0
Sacramento	2028 Lawn and Garden - Misc - Tillers	Aggregate	2	Gasoline	0.00392697	0.00396981	0.00432999	0.0113837	0.000069965	0.066182	6.44E-06	4.86E-06	1.06E-06	1.46E-06	3645.917073	0	2062.011188	0
Sacramento	2028 Lawn and Garden - Misc - Tillers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	644.6369968	0
Sacramento	2028 Lawn and Garden - Misc - Tillers	Aggregate	5	Gasoline	0.0005753	0.0005805	0.0006325	0.029397	0.000189	0.06838	0.000000964	7.28E-07	1.15E-06	1.57E-06	4347.605256	0	1024.299799	0
Sacramento	2028 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	15	Gasoline	0.00005166	0.00005222	0.0000569	0.002855	0.00001996	0.007385	1.13E-07	8.52E-08	1.19E-07	1.64E-07	449.4129573	0	55.38898814	0
Sacramento	2028 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	2	Gasoline	0.380942825	0.384832953	0.419233519	2.116265388	0.02267506	11.1240122	0.0033004	0.0025003	0.00015063	0.00020782	588510.7198	0	123857.6899	0
Sacramento	2028 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	188929.8361	0
Sacramento	2028 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	25	Gasoline	0.00005755	0.00005812	0.00006335	0.002889	0.00002412	0.01138	1.28E-07	9.65E-08	1.54E-07	2.13E-07	601.1552492	0	25.49651795	0
Sacramento	2028 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	5	Gasoline	0.013996	0.014151	0.015405	0.2529	0.0015818	0.859460736	0.00016938	0.00012808	0.000012393	0.000017117	48701.80852	0	3993.721885	0
Sacramento	2028 Lawn and Garden - Misc - Trimmers/Edgers/Brush Cutters	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	3046.194837	0
Sacramento	2028 Lawn and Garden - Misc - Wood Splitters	Aggregate	15	Gasoline	0.0175791	0.0177798	0.019387	0.933427489	0.0090898	2.383619501	0.000061285	0.00004624	0.000037585	0.000051856	145904.6046	0	5021.957028	0
Sacramento	2028 Lawn and Garden - Misc - Wood Splitters	Aggregate	2	Gasoline	0.00034913	0.00035315	0.00038434	0.009488	0.00019521	0.021901527	5.45E-07	4.12E-07	3.75E-07	5.17E-07	1418.173205	0	134.5020619	0
Sacramento	2028 Lawn and Garden - Misc - Wood Splitters	Aggregate	25	Gasoline	1.05E-05	1.06E-05	0.000011457	0.0006432	4.58E-06	0.00154772	3.73E-08	2.82E-08	2.46E-08	3.41E-08	96.73602916	0	1.093508523	0
Sacramento	2028 Lawn and Garden - Misc - Wood Splitters	Aggregate	5	Gasoline	0.00108496	0.00109501	0.00119546	0.053876	0.00038876	0.126068911	3.14E-06	2.37E-06	2.08E-06	2.87E-06	8000.157273	0	483.8793678	0
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	100	Gasoline	0.001602011	0.00147353	0.001762915	0.089815858	0.004071364	1.700807917	0.000118584	8.96E-05	1.64E-05	2.45E-05	69919.4	18549.3	38.39	1298451
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	15	Gasoline	0.122150997	0.123372507	0.134419721	7.96776505	0.075107263	15.7042285	0.000201315	0.000266446	0.000273186	0.000377097	1068625.22	0	9963.082706	0
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	15	Diesel	1.96E-05	2.36E-05	2.81E-05	0.000122713	0.000147753	0.020290253	4.07E-06	5.39E-06	1.93E-07	1.66E-07	659.9764071	0	2.494489424	0
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	122451.152	0
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	175	Gasoline	0.000174899	0.000160872	0.000192466	0.007918854	0.000550281	0.213014857	1.53E-05	1.15E-05	2.12E-06	3.00E-06	8555.6	1244.65	2.58	166783.1
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	25	Gasoline	0.001711113	0.001728224	0.001882975	0.251110646	0.002528519	0.382145945	4.64E-06	6.14E-06	7.43E-06	1.02E-05	29193.63728	0	103.1171388	0
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	25	Diesel	8.15E-05	9.80E-05	0.000117096	0.000332751	0.000618351	0.081203275	1.63E-05	2.15E-05	7.71E-07	6.64E-07	2641.280314	0	5.006156793	0
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	648.7677529	0
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	5	Gasoline	0.025874169	0.02613291	0.028472945	1.061433682	0.007732931	2.50487819	2.95E-05	3.91E-05	4.07E-05	5.62E-05	159004.9135	0	3755.183583	0
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	5	Electric	0	0	0	0	0	0	0	0	0	0	0	0	46153.04015	0
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	50	Gasoline	0.000552662	0.000508339	0.000608171	0.04877625	0.00074376	0.265235877	1.83E-05	1.38E-05	3.22E-06	4.56E-06	13012.25	5715.9	11.83	200056.5
Sacramento	2028 Light Commercial - Misc - Air Compressors	Aggregate	50	Diesel	0.000477504	0.000568269	0.000687606	0.005620926	0.004123917	0.679126749	9.58E-05	8.81E-05	8.54E-06	5.56E-06	22089.8	21673.7	26.62	801926.9
Sacramento	2028 Light Commercial - Misc - Gas Compressors	Aggregate	100	Nat Gas	0	0	0.000215398	0.11181019	0.008487455	2.6737417	0	0	0	0	147952.75	15282.55	1.8	1344864.4
Sacramento	2028 Light Commercial - Misc - Gas Compressors	Aggregate	175	Nat Gas	0	0	6.01E-05	0.022743029	0.002271203	0.6958501	0	0	0	0	37996.5	2467.4	0.29	360240.4
Sacramento	2028 Light Commercial - Misc - Gas Compressors	Aggregate	300	Nat Gas	0	0	4.62E-05	0.026170062	0.002195066	0.71716299	0	0	0	0	39354.3	1974.65	0.24	414676.5
Sacramento	2028 Light Commercial - Misc - Gas Compressors	Aggregate	50	Nat Gas	0	0	3.95E-05	0.006991803	0.001434209	0.47579845	0	0	0	0	25279.9	7394.9	0.87	236636.8
Sacramento	2028 Light Commercial - Misc - Gas Compressors	Aggregate	600	Nat Gas	0	0	6.51E-05	0.03685617	0.003091385	1.0100046	0	0	0	0	55421.6	1726.45	0.2	583540.1
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	100	Gasoline	0.00054925	0.000505201	0.000604417	0.026495459	0.003475066	1.14038465	7.95E-05	6.01E-05	1.10E-05	1.57E-05	44800.1	8635.9	75.19	716779.7
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	100	Nat Gas	0	0	2.72E-06	0.002330602	0.000213514	0.073938341	0	0	0	0	4033.25	646.05	5.61	53622.15
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	15	Gasoline	0.113840197	0.114978599	0.125274191	6.348944042	0.059217287	16.15691449	0.000205273	0.000271685	0.000252725	0.000348855	989547.5502	0	22743.83525	0
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	15	Diesel	0.001023874	0.001231495	0.001471835	0.007174995	0.008657012	1.185152906	0.000241156	0.000319177	1.12E-05	9.69E-06	38549.19674	0	248.7169834	0
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	175	Gasoline	5.70E-05	5.24E-05	6.27E-05	0.006013207	0.000598643	0.184334852	1.32E-05	9.98E-06	1.83E-06	2.57E-06	7336.5	810.3	7.08	118303.8
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	175	Nat Gas	0	0	3.02E-06	0.002791109	0.000287803	0.107821933	0	0	0	0	5818.1	525.6	4.66	76737.6
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	2	Gasoline	0.350216014	0.353718176	0.385391361	5.998631717	0.102370357	13.02673468	0.000404566	0.000535454	0.00023078	0.000318561	883028.5493	0	54909.38297	0
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	16231.81483	0
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	25	Gasoline	0.004000999	0.00404101	0.004402855	0.37651219	0.002289059	0.581411018	7.14E-06	9.44E-06	1.13E-05	1.55E-05	44273.65164	0	436.125872	0
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	25	Diesel	0.001493563	0.001796427	0.00214702	0.0061265	0.011384466	1.493588687	0.000301942	0.000399629	1.42E-05	1.22E-05	48581.61665	0	181.9170656	0
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	5	Gasoline	0.032755402	0.033082957	0.036045322	1.528302925	0.007430413	3.224660399	4.05E-05	5.36E-05	5.55E-05	7.66E-05	214110.2198	0	12572.84844	0
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	50	Gasoline	0.002779969	0.002557016	0.003059187	0.202033265	0.005967892	2.302364385	0.000158723	0.000119924	2.80E-05	3.49E-05	99528.2	44716.15	389.41	1430916.8
Sacramento	2028 Light Commercial - Misc - Generator Sets	Aggregate	50	Diesel	0.000866519	0.001031229	0.001247787	0.012055411	0.010607557	1.871526094	0.00021747	0.000200073	2.36E-05	1.53E-05	60874.7	43621.15	129.19	1439497.95
Sacramento	2028 Light Commercial - Misc - Pressure Washers	Aggregate	15	Gasoline	0.040992455	0.04140238	0.045109697	3.004529804	0.020891988	5.86955224	7.48E-05	9.90E-05	0.000101965	0.000140749	400353.3816	0	13275.40019	0
Sacramento	2028 Light Commercial - Misc - Pressure Washers	Aggregate	15	Diesel	9.74E-06	1.17E-05	1.40E-05	0.000068291	8.23E-05	0.011282929	2.29E-06	3.03E-06	1.07E-07	9.22E-08	366.9972331	0	11.52030122	0
Sacramento	2028 Light Commercial - Misc - Pressure Washers	Aggregate	15	Electric	0	0	0	0	0	0	0	0	0	0	0	0	25207.57706	0
Sacramento	2028 Light Commercial - Misc - Pressure Washers	Aggregate	2	Gasoline	2.41E-05	2.44E-05	2.65E-05	0.000502179	8.21E-06	0.001132937	1.36E-08	1.80E-08	1.93E-08	2.66E-08	74.82850062	0	9.699452223	0
Sacramento	2028 Light Commercial - Misc - Pressure Washers	Aggregate	2	Electric	0	0	0	0	0	0	0	0	0	0	0	0	18.41750048	0
Sacramento	2028 Light Commercial - Misc - Pressure Washers	Aggregate	25	Gasoline	0.000644107	0.000650547	0.0007088	0.052708114	0.000316741	0.102968483	1.31E-06	1.74E-06	1.78E-06	2.46E-06	7013.575251	0	88.08150038	0
Sacramento	2028 Light Commercial - Misc - Pressure Washers	Aggregate	25	Diesel	3.77E-06	4.54E-06	5.43E-06	1.55E-05	2.88E-05	0.003778508	7.59E-07	1.00E-06	3.59E-08	3.09E-08	122.9026714	0	2.646229693	0
Sacramento	2028 Light Commercial - Misc - Pressure Washers	Aggregate	25	Electric	0	0	0	0	0	0	0	0	0	0	0	0	167.250793	0
Sacramento	2028 Light Commercial - Misc - Pressure Washers	Aggregate	5	Gasoline	0.076187976	0.076949855	0.08384022	3.833411579	0.03100099	8.648486393	0.000104001	0.000137649	0.000142389	0.00019655	557162.9955	0	34691.25972	0

Sacramento	2028 Portable Equipment - Non-Rental Generator	Aggregate	75 Diesel	0.000892992	0.00108052	0.001285909	0.013270775	0.009513299	1.78759607	0.000197302	0.000181518	1.65E-05	1.46E-05	58144.72739	56152.73666	39.19554056	3519878.336		
Sacramento	2028 Portable Equipment - Non-Rental Generator	Aggregate	750 Diesel	0.000652168	0.000789123	0.000939121	0.009391015	0.003964453	1.846432728	0.000216396	0.000199094	1.71E-05	1.51E-05	60058.49383	5264.319062	3.674581927	3635731.059		
Sacramento	2028 Portable Equipment - Non-Rental Generator	Aggregate	9999 Diesel	0.003475194	0.004204985	0.005004279	0.025103716	0.048859978	11.79588443	0.000998345	0.000918477	0.000109233	9.65E-05	383682.0273	19302.50323	13.47346707	23226767.35		
Sacramento	2028 Portable Equipment - Non-Rental Other	Aggregate	100 Diesel	0.000146719	0.000177531	0.000211276	0.006222657	0.002267373	0.975759501	0.00016228	0.000149297	9.04E-06	7.98E-06	31738.30547	22124.38932	66.14247469	1921325.955		
Sacramento	2028 Portable Equipment - Non-Rental Other	Aggregate	175 Diesel	0.000546073	0.000660749	0.000786345	0.023422686	0.00414659	4.211523461	0.000161672	0.000148739	3.90E-05	3.45E-05	136987.2676	64324.61338	192.3013209	8292729.229		
Sacramento	2028 Portable Equipment - Non-Rental Other	Aggregate	300 Diesel	0.000728757	0.000337296	0.00040141	0.002890468	0.002026563	1.380608784	9.40E-05	8.65E-05	1.28E-05	1.13E-05	449006.74526	11881.61648	35.52095863	2718497.22		
Sacramento	2028 Portable Equipment - Non-Rental Other	Aggregate	600 Diesel	0.000329341	0.000398502	0.000474251	0.003346958	0.003051584	1.615760764	0.000115085	0.000105878	1.50E-05	1.32E-05	52555.47975	7784.507352	23.27235221	3181524.842		
Sacramento	2028 Portable Equipment - Non-Rental Other	Aggregate	75 Diesel	0.000180899	0.000218888	0.000260495	0.004318986	0.003339064	0.677173053	5.61E-05	5.16E-05	6.27E-06	5.54E-06	22026.25258	20895.25658	62.46780277	1333392.257		
Sacramento	2028 Portable Equipment - Non-Rental Other	Aggregate	750 Diesel	7.03E-05	8.51E-05	0.000101275	0.001046811	0.000243335	0.559597064	1.81E-05	1.67E-05	5.18E-06	4.58E-06	18201.88533	1638.843653	4.89944257	1101878.446		
Sacramento	2028 Portable Equipment - Non-Rental Other	Aggregate	9999 Diesel	0.002646995	0.003202864	0.003811673	0.030218447	0.051496894	15.45154564	0.000706242	0.000649742	0.000143143	0.000126436	502588.8808	10242.77283	30.62151606	30424972.18		
Sacramento	2028 Portable Equipment - Non-Rental Pump	Aggregate	100 Diesel	0.000111286	0.000136561	0.000162519	0.003754157	0.001654851	0.591363691	0.000108223	9.96E-05	5.48E-06	4.84E-06	19235.15114	13959.95088	41.64526184	1164428.742		
Sacramento	2028 Portable Equipment - Non-Rental Pump	Aggregate	175 Diesel	0.00023266	0.000281519	0.000335031	0.008140602	0.002405578	1.456240681	8.06E-05	7.41E-05	1.35E-05	1.19E-05	47366.80662	23403.44707	69.81705662	2867420.727		
Sacramento	2028 Portable Equipment - Non-Rental Pump	Aggregate	300 Diesel	4.75E-05	5.75E-05	6.84E-05	0.00067471	0.000228581	0.351862408	9.69E-06	8.92E-06	3.26E-06	2.88E-06	11444.94785	3284.694326	9.79888514	692837.0949		
Sacramento	2028 Portable Equipment - Non-Rental Pump	Aggregate	50 Diesel	1.72E-05	2.09E-05	2.48E-05	0.000102544	9.05E-05	0.012523489	5.81E-06	5.35E-06	1.04E-07	9.21E-08	366.0396651	410.5867907	1.224860642	19932.02229		
Sacramento	2028 Portable Equipment - Non-Rental Pump	Aggregate	600 Diesel	0.000276077	0.000334054	0.000397552	0.003536719	0.000887622	1.8538735	4.90E-05	4.51E-05	1.72E-05	1.52E-05	60299.9928	8622.322605	25.72207349	3650350.563		
Sacramento	2028 Portable Equipment - Non-Rental Pump	Aggregate	75 Diesel	0.000161112	0.000194946	0.000232001	0.0038621	0.003073011	0.611001582	6.21E-05	5.71E-05	5.66E-06	5.00E-06	19873.9083	19297.57916	57.5684502	1203096.866		
Sacramento	2028 Portable Equipment - Rental Compressor	Aggregate	100 Diesel	2.62E-05	3.17E-05	3.77E-05	0.001000018	0.000277758	0.145792133	2.39E-05	2.20E-05	1.35E-06	1.19E-06	4742.147255	3446.106342	6.124303212	287073.0011		
Sacramento	2028 Portable Equipment - Rental Compressor	Aggregate	175 Diesel	0.000148316	0.000179462	0.000213575	0.007722645	0.000482024	1.421898095	2.33E-05	2.14E-05	1.32E-05	1.16E-05	46249.75318	21365.85932	37.97067992	2799798.22		
Sacramento	2028 Portable Equipment - Rental Compressor	Aggregate	300 Diesel	0.000112759	0.000136438	0.000162373	0.001896197	0.000228167	1.013748092	1.68E-05	1.55E-05	9.39E-06	8.30E-06	32973.95166	8270.65522	14.69832771	1996127.651		
Sacramento	2028 Portable Equipment - Rental Compressor	Aggregate	600 Diesel	0.000319919	0.000387102	0.000460683	0.003883943	0.000512827	1.99657058	3.64E-05	3.35E-05	1.85E-05	1.63E-05	64941.99329	7581.433952	13.47346707	3931361.029		
Sacramento	2028 Portable Equipment - Rental Compressor	Aggregate	75 Diesel	2.48E-05	3.00E-05	3.58E-05	0.000584909	0.000437533	0.091417444	2.65E-06	2.43E-06	8.47E-07	7.48E-07	2973.514246	2756.885073	4.89944257	180006.1475		
Sacramento	2028 Portable Equipment - Rental Compressor	Aggregate	750 Diesel	0.000167908	0.000203169	0.000241788	0.002221359	0.000914487	1.162258959	4.81E-05	4.43E-05	1.08E-05	9.51E-06	37804.53056	3446.106342	6.124303212	2288553.995		
Sacramento	2028 Portable Equipment - Rental Generator	Aggregate	100 Diesel	0.000733846	0.000887953	0.001056738	0.02114079	0.004989761	2.887636674	0.000476854	0.000438706	2.67E-05	2.36E-05	93925.49574	82021.30699	40.4204012	5685920.848		
Sacramento	2028 Portable Equipment - Rental Generator	Aggregate	175 Diesel	0.00090377	0.001093561	0.001301428	0.030010585	0.00205446	4.915283991	9.74E-05	8.96E-05	4.55E-05	4.02E-05	159878.315	71418.47471	46.54470441	9678473.741		
Sacramento	2028 Portable Equipment - Rental Generator	Aggregate	300 Diesel	0.000647492	0.000783465	0.000932388	0.005989253	0.000750522	2.659665357	5.64E-05	5.18E-05	2.46E-05	2.18E-05	86510.32502	26312.06963	17.14804899	5237032.36		
Sacramento	2028 Portable Equipment - Rental Generator	Aggregate	600 Diesel	0.001257354	0.001521398	0.001810589	0.014431716	0.001946345	5.449997201	0.000332651	0.000220039	5.05E-05	4.46E-05	177270.8089	26312.06963	17.14804899	10731354.46		
Sacramento	2028 Portable Equipment - Rental Generator	Aggregate	75 Diesel	0.000492446	0.00059586	0.000709123	0.008561799	0.006179779	1.22604086	5.19E-05	4.77E-05	1.13E-05	1.00E-05	39879.14983	37588.6709	24.49721285	2414144.185		
Sacramento	2028 Portable Equipment - Rental Generator	Aggregate	750 Diesel	0.0005271	0.000637791	0.000759023	0.002776248	0.004042304	1.284423758	0.000202616	0.000186406	1.19E-05	1.05E-05	41778.15696	3758.86709	2.449721285	2529103.432		
Sacramento	2028 Portable Equipment - Rental Generator	Aggregate	9999 Diesel	0.00040596	0.000491212	0.000584583	0.003371158	0.007353347	1.55965742	0.000162752	0.000149732	1.44E-05	1.28E-05	50730.61917	3758.86709	2.449721285	3071054.168		
Sacramento	2028 Portable Equipment - Rental Other	Aggregate	100 Diesel	6.82E-05	8.25E-05	9.81E-05	0.002050242	0.000465362	0.271703702	4.63E-05	4.26E-05	2.52E-06	2.22E-06	8837.643981	6501.861627	4.89944257	535000.0419		
Sacramento	2028 Portable Equipment - Rental Other	Aggregate	175 Diesel	0.000287438	0.000347799	0.00041391	0.006404784	0.001892673	0.984224618	6.64E-05	6.11E-05	9.11E-06	8.05E-06	32013.6484	13003.72325	9.79888514	1937994.252		
Sacramento	2028 Portable Equipment - Rental Other	Aggregate	75 Diesel	0.000158112	0.000191315	0.000227681	0.002478706	0.001748426	0.34343297	1.37E-05	1.26E-05	3.16E-06	2.79E-06	11105.71191	11378.25785	8.574024497	672300.9376		
Sacramento	2028 Portable Equipment - Rental Pump	Aggregate	100 Diesel	0.000267382	0.000323532	0.000385029	0.008346044	0.002020988	1.139221267	0.000195252	0.000179632	1.06E-05	9.32E-06	37055.18883	27897.43447	26.94693413	2243191.468		
Sacramento	2028 Portable Equipment - Rental Pump	Aggregate	175 Diesel	0.000235665	0.000285155	0.000339358	0.006239006	0.001798357	0.997287552	5.26E-05	4.84E-05	9.24E-06	8.16E-06	32438.54346	16484.84764	15.92318835	1963715.912		
Sacramento	2028 Portable Equipment - Rental Pump	Aggregate	300 Diesel	0.000349139	0.000422458	0.00050276	0.002626979	0.000755653	1.181738855	8.54E-05	7.86E-05	1.09E-05	9.67E-06	38438.14868	11412.58683	11.02374578	2326911.018		
Sacramento	2028 Portable Equipment - Rental Pump	Aggregate	600 Diesel	9.62E-05	0.00011637	0.00013849	0.000877692	0.000113323	0.418923298	8.65E-06	7.96E-06	3.88E-06	3.43E-06	13626.22202	2536.130406	2.449721285	824883.8001		
Sacramento	2028 Portable Equipment - Rental Pump	Aggregate	75 Diesel	0.000173072	0.000209417	0.000249223	0.004044187	0.003248325	0.630885981	8.40E-05	7.73E-05	5.84E-06	5.16E-06	20520.68361	17752.91284	17.14804899	1242250.38		
Sacramento	2028 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	120 Gasoline	0.004156344	0.004197906	0.004573802	0.00350836	0.00213697	1.706945719	0.000215493	0.000162818	2.11E-05	2.46E-05	69686.70241	0	218.139814	0		
Sacramento	2028 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	15 Gasoline	0.001668128	0.001684811	0.001835675	0.023453066	0.000490098	0.345839533	5.37E-05	4.06E-05	4.76E-06	5.19E-06	14490.72059	0	678.0785487	0		
Sacramento	2028 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	25 Gasoline	0.00090974	0.000918837	0.001001114	0.009503297	0.000818526	0.130719813	2.27E-05	1.71E-05	1.83E-06	2.00E-06	5550.940557	0	305.6129638	0		
Sacramento	2028 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2028 Recreational - All Terrain Vehicles (Atvs) Active	Aggregate	50 Gasoline	0.008390455	0.008474359	0.009233183	0.169274975	0.003735049	2.9639309	0.000371112	0.000280396	3.60E-05	4.34E-05	121561.1603	0	4860.894339	0		
Sacramento	2028 Recreational - Golf Carts	Aggregate	120 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2028 Recreational - Golf Carts	Aggregate	15 Gasoline	0.001880975	0.001899785	0.002068899	0.053376484	0.001497685	0.648697658	0.000144281	0.000109013	5.42E-06	9.70E-06	27568.17532	0	739.9605129	0		
Sacramento	2028 Recreational - Golf Carts	Aggregate	25 Gasoline	0.000557327	0.000562899	0.000613303	0.015815254	0.000443758	0.192206714	4.27E-05	3.23E-05	1.61E-06	2.87E-06	8168.348237	0	123.3267522	0		
Sacramento	2028 Recreational - Golf Carts	Aggregate	5 Gasoline	4.35E-05	4.39E-05	4.78E-05	0.001242226	3.47E-05	0.006864525	3.33E-06	2.51E-06	1.72E-07	1.18E-07	334.4957776	0	17.61810745	0		
Sacramento	2028 Recreational - Golf Carts	Aggregate	50 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2028 Recreational - Minibikes	Aggregate	120 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2028 Recreational - Minibikes	Aggregate	15 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2028 Recreational - Minibikes	Aggregate	25 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2028 Recreational - Minibikes	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2028 Recreational - Minibikes	Aggregate	50 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2028 Recreational - Off-Road Motorcycles Active	Aggregate	120 Gasoline	0.007013996	0.007084136	0.007718474	0.037842744	0.000267367	0.287740417	0.000102778	7.77E-05	4.83E-06	5.35E-06	13862.84957	0	469.6485854	0		
Sacramento	2028 Recreational - Off-Road Motorcycles Active	Aggregate	15 Gasoline	0.000605751	0.000611809	0.000666592	0.007529753	9.33E-05	0.053835088	1.60E-05	1.21E-05	1.47E-06	1.11E-06	2528.082837	0	123.9910712	0		
Sacramento	2028 Recreational - Off-Road Motorcycles Active	Aggregate	25 Gasoline	0.001916926	0.001936095	0.00210946	0.004427214	2.05E-05	0.0220639	2.32E-05	1.75E-05	6.22E-07	5.57E-07	1278.736696	0	53.26920864	0		
Sacramento	2028 Recreational - Off-Road Motorcycles Active	Aggregate	5 Gasoline	0.001997984	0.002017964	0.00219866	0.013729559	6.13E-05	0.074269289	5.77E-05	4.36E-05	1.96E-06	1.71E-06	3834.790985	0	184.7662049	0		
Sacramento	2028 Recreational - Off-Road Motorcycles Active	Aggregate	50 Gasoline	0.008991702	0.009081619	0.009894819	0.028665395	0.00022552	0.205563042	0.000113281	8.56E-05	4.73E-06	4.41E-06	10554.60255	0	373.9432862	0		
Sacramento	2028 Recreational - Snowmobiles Active	Aggregate	120 Gasoline	0	0	0	0	0	0	0	0	0	1.26E-08	0	0	0	0		
Sacramento	2028 Recreational - Snowmobiles Active	Aggregate	15 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2028 Recreational - Snowmobiles Active	Aggregate	25 Gasoline	0	0	0	0	0	0	0	0	0	1.05E-08	0	0	0	0		
Sacramento	2028 Recreational - Snowmobiles Active	Aggregate	5 Gasoline	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Sacramento	2028 Recreational - Snowmobiles Active	Aggregate	50 Gasoline	0	0	0	0	0	0	0	0	0	8.20E-08	0	0	0	0		
Sacramento	2028 Transport Refrigeration Unit - Instate Genset	Aggregate	25 Diesel	0.000254905	0.00260131	0.000367087	0.000283269	0.00384993	0.615406928	8.35E-05	7.67E-05	966.03	1.38E-08	2017.2	42525.24	54.34	0		
Sacramento	2028 Transport Refrigeration Unit - Instate Genset	Aggregate	50 Diesel	0.00014722	0.0015029	0.00021211	0.000016365	0.00153259	0.265805668	0.000017109	1.57E-05	417.21	5.96E-09	8645.8	16769.23	21.4	0		
Sacramento	2028 Transport Refrigeration Unit - Instate Trailer	Aggregate	25 Diesel	0.005083449	0.05190773	0.007321192	0.005648233	0.0500838	8.005019403	0.000977161	0.000900075	12566.81	1.79E-07	260377.43	396828.14	221.18	0		
Sacramento	2028 Transport Refrigeration Unit - Instate Trailer	Aggregate	50 Diesel	0.006685036	0.06250928	0.009612422	0.007428387	0.0590259	11.28652377	0.000565361	0.000520246	17718.41	2.53E-07	367114.17	493390.61	275.05671	0		
Sacramento	2028 Transport Refrigeration Unit - Instate Truck	Aggregate	23 Diesel	0.000300045	0.00306471	0.00043222	0.000333543	0.00387614	0.619452826	0.000199492	0.000183673	972.38	1.39E-08	20148.8	36369.91	106.9	0		
Sacramento	2028 Transport Refrigeration Unit - Out-Of-State Genset	Aggregate	25 Diesel	0.000228463	0.002332731	0.000328954	0.000253913	0.003431321	0.534318645	7.42E-05	6.84E-05	838.73531	1.20E-08	17379.66	36922	297.68189	0		
Sacramento	2028 Transport Refrigeration Unit - Out-Of-State Genset	Aggregate	50 Diesel	0.000093071	0.00095121	0.00013407	0.00010341	0.00091295	0.169285481	0.000016574	1.53E-05	265.66	3.80E-09	5506.31	10602.27	85.42	0		
Sacramento	2028 Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	25 Diesel	0.004718587	0.048195934	0.006798113	0.005241219	0.048476032	7.750322431	0.000947908	0.000872047	12166.99	1.74E-07	252092.96	384202.14	1412.43	0		
Sacramento	2028 Transport Refrigeration Unit - Out-Of-State Trailer	Aggregate	50 Diesel	0.0020353	0.020784	0.002929	0.0022597	0.01615	2.953531757	0.00022069	0.00020299	4636.62	6.62E-08	96068.85	129498.7	476	0		
Sacramento	2028 Transport Refrigeration Unit - Railcar TRU	Aggregate	25 Diesel	0.000196579	0.00200805	0.000282892	0.000218442	0.002121729	0.339300207	4.63E-05	4.26E-05	532.59	7.60E-09	11036.34	16819.97	51.31	0		
Sacramento	2028 Transport Refrigeration Unit - Railcar TRU	Aggregate	50 Diesel	4.53E-05	0.00046218	0.000065148	5.03E-05	0.00039771	0.078595568	3.30E-06	3.04E-06	123.34	1.76E-09	2556.46	3470.85	10.56	0		

Appendices

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Appendix 5.6-1 Site Cleanup Plan

TETRA TECH

SITE CLEANUP PLAN
FORMER LILY COMPANY PROPERTY
10153-10175 FOLSOM BOULEVARD
RANCHO CORDOVA, CALIFORNIA

March 16, 2022

Prepared for:

City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670

For Submittal to:

Central Valley Regional Water Quality Control Board
1120 Sun Center Drive, Suite 200
Rancho Cordova, California 95670

Prepared by:

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Tetra Tech Project 117-9040001

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1.0 INTRODUCTION

On behalf of the City of Rancho Cordova (the City) Tetra Tech, Inc. (Tetra Tech) prepared this Cleanup Plan to the Central Valley Regional Water Quality Control Board (RWQCB) for tentatively planned site cleanup activities at the former Lily Company property (now owned by the City), located at 10153 – 10175 Folsom Boulevard, Rancho Cordova, California (the Site) (Figure 1).

This Cleanup Plan was prepared for the purpose of applying for the California Department of Toxic Substances Control (DTSC) Equitable Community Revitalization Grant (ECRG), Site Cleanups category. The City may choose to revise the Cleanup Plan if the City's application for the ECRG is not approved by DTSC.

2.0 BACKGROUND

The cleanup activities proposed in this Cleanup Plan are based on results from previous site investigations and prior site remediation, which are documented in the following reports and summarized in the following subsections.

- *Phase I Environmental Site Assessment, Folsom Mather Center, 10153-10175 (odd) Folsom Boulevard, Rancho Cordova, California (Kleinfelder, 2008).*
- *Initial Findings, 10153 – 10175 Folsom Boulevard, Rancho Cordova, California* (Risk-Based Decisions, Inc., 2008)
- *Remedial Investigation Report for 10153 through 10175 Folsom Blvd, Rancho Cordova, California* (Risk-Based Decisions, Inc., 2010)
- *Installation and Operation of Extraction Well EW-1 at 10153-10175 Folsom Boulevard, Rancho Cordova (Risk-Based Decisions, Inc., 2014)*
- *Second Quarter 2015 Groundwater Monitoring and Remediation Progress Report for 10153 through 10175 Folsom Boulevard, Rancho Cordova, California* (Risk-Based Decisions, July 2015)
- *Groundwater Monitoring and Remediation Progress Report for 10153 through 10175 Folsom Boulevard, Rancho Cordova, California* (Risk-Based Decisions, Inc., July 2019).
- *10153 Folsom Boulevard, Rancho Cordova, CA 95670: Second Phase Soil Gas Sampling Report* (Risk-Based Decisions, Inc., November 2019).
- *Soil Gas Sampling Report 10153 Folsom Boulevard, Rancho Cordova, CA 95670* (Risk-Based Decisions, Inc., August 2020).
- *Additional Soil and Soil Vapor Testing, Former Lily Company Property, 10153-10175 Folsom Boulevard, Rancho Cordova, California* (Tetra Tech, January 2022)

2.1 Site Location and History

The Site is a multi-parcel commercial property, totaling 9.23-acres (APN 076-0020-019, -020 and -021). Figure 1 presents the Site location and parcel boundaries.

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The Site was developed in the early 1970s and was used as a strip mall. Various commercial businesses have operated at the Site. Businesses remained open at the Site until 2007. In the summer and fall of 2008, the onsite structures were demolished and removed. The Site is currently undeveloped and vacant.

The environmental impact observed at the Site is reportedly related to historical operation of a dry cleaner, Veterans Cleaners, which was located onsite as early as 1971 and operated until 2003. Tetrachloroethylene (PCE) was stored and dispensed from an approximate 45-gallon container by Veterans Cleaners, per records from the Sacramento County Environmental Management Department (SCEMD). PCE was stored in an above ground storage tank and drums near the back of the facility, in proximity to four surface drains. Reportedly, Veterans Cleaners generated chlorinated solvent wastes that were disposed by a third-party waste hauler. No release violations were found for the former dry cleaners.

2.2 Previous Site Investigations

The presence of PCE in the subsurface at the Site was initially identified in 2008 during a Phase II environmental site assessment (ESA) which included environmental sampling of soil, groundwater, and soil gas at the Site. Subsequent site investigations have been conducted and included the following:

- Soil gas sampling to a maximum depth of 46 feet below ground surface (bgs) in 2008
- Soil vapor extraction (SVE) pilot test in 2010
- Remedial investigations (RI) in 2010

After the RI, Site remediation activities included SVE and groundwater extraction, which are summarized in the following subsection.

From 2019 to present, additional soil gas sampling was conducted at the Site, which was triggered by the Site closure process and the discovery of rebounded soil gas concentrations.

The data collected from previous investigations can be found in the documents listed in Section 2.0. The current site conditions, summarized using the most recent site investigation data, are discussed in Section 2.4.

2.3 Previous Remediation Activities

Previous remediation activities at the Site included SVE and groundwater extraction.

The SVE was conducted using five (5) SVE wells (SVE-1a, SVE-1b, SVE-1c, SVE-2, and SVE3) (Figure 2):

- Well SVE-1a is screened from 5 to 15 feet bgs. The radius of influence (ROI) estimated for this well was 40 feet, based on a pilot test in 2010.

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- Well SVE-1b is screened from 15 to 35 feet bgs. The ROI estimated for this well was 100 feet.
- Well SVE-1c is screened from 35 to 55 feet bgs. The ROI estimated for this well was 200 feet.
- Well SVE-2 is screened from 5 to 55 feet bgs. The ROI estimated for this well was 110 feet.
- Well SVE-3 is screened from 5 to 55 feet bgs. The ROI estimated for this well was 150 feet.

The SVE operational periods are summarized below:

- A 5-day Pilot test: August 16, 2010 through August 20, 2010
- A 9-day source test: June 27, 2011 to July 5, 2011
- Operations of all five SVE wells from August 2011 – April 2015
- Operation of SVE-1c only from April 2015 – January 2016
- Rebound tests from January 2016 – February 2016
- Operation of SVE-1c and SVE-2 only from February 2016 – August 2016
- Permanent system shutdown on August 22, 2016, per approval from the RWQCB

The SVE system operated under Permit-to-Operate (numbers 22850 and 22851) from the Sacramento Metropolitan Air Quality Management District (SMAQMD). The extracted vapor was treated by granular activated carbon. It was estimated that approximately 7.8 pounds of PCE was removed from the subsurface during the SVE operational periods summarized above.

The groundwater extraction was conducted using a 6-inch extraction well that was installed to a total depth of 75 feet (Figure 2). The extraction well has a 0.020-inch wide slot stainless steel wire wrap screen from 55 to 75 feet and 0.020-inch slot PVC screen from 45 to 55 feet. The extraction well had an estimated ROI of over 150 feet.

The extracted groundwater was piped to a nearby sewer cleanout and conveyed to the Sacramento Regional County Sanitation District for treatment through the sewer line system in the Sacramento area. The concentrations of VOCs (PCE) in groundwater fell below the Sanitation District discharge limits, and therefore was discharged without on-site treatment.

Groundwater extraction was conducted from April 2014 to September 2017. Groundwater was extracted at a flow rate of up to 10 gallons per minute (gpm). Groundwater extraction was subsequently discontinued at the Site after the power supply was damaged by vandalism. It was estimated that 11 million gallons of groundwater was extracted during the operational period and a total of 2.72 pounds of PCE was removed through groundwater extraction.

2.4 Summary of Current Site conditions

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Soil

Soil sampling was conducted during the following events:

- Phase II ESA in 2008, where shallow soil samples were collected from depths up to 15 feet at locations near the former dry cleaner (Figure 2), and one deep soil sample collected from a depth of 36.5 – 37 feet bgs at a location near the backdoor of the former dry cleaner. The samples were selectively analyzed for total petroleum hydrocarbons (TPHs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), and RCRA 8 metals.
- RI in 2010, where composite soil samples were collected from 50 surface soil (immediately below pavement) sampling locations. The composite soil samples were analyzed for pesticides and CAM 17 metals.
- Soil sampling in 2021, where soil samples were collected at 5- and 10- feet bgs along the existing sewer line (Figure 2). The samples were analyzed for VOCs and gasoline range TPH. Composite soil samples were also formed from these soil samples (a 5-foot composite and a 10-foot composite), and the two composite samples were analyzed for VOCs, TPH, SVOCs, pesticides, PCBs, and CAM 17 metals.

The PCE soil data from these events are shown on Figure 2. The data shows during the 2008 Phase II ESA, PCE was detected at four locations with concentrations ranging from 5.0 to 34 microgram per kilogram (µg/kg). During the 2021 soil sampling event, PCE was detected at five locations along the sewer line with concentrations ranging from 1.4 (estimated) to 54 µg/kg. The highest PCE detection locations in 2008 and 2021 are close to each other, located at the northwest corner of the Site.

Based on the available data, the known soil impact historically was within the footprint of the former dry cleaner and near the sewer line section downstream of the former dry cleaner, at the northwest corner of the Site. Recently, soil impact was present at some locations along the sewer line section downstream of the former dry cleaner. The depth of impact was identified to be up to 14 feet bgs. However, only one soil sample was collected at a deeper depth (36.5 – 37 feet bgs). PCE was not detected in this deeper soil sample.

Groundwater

Groundwater sampling was conducted during the following events:

- Phase II ESA in 2008, where a grab groundwater sample was collected at a depth of approximately 56 feet bgs at a location near the former dry cleaner. The sample was analyzed for VOCs and TPH.
- RI in 2010, where grab groundwater samples were collected at depths of approximately 60 to 61 feet bgs at locations near the former dry cleaner but also in the parking lot south of the former strip mall. The samples were analyzed for VOCs and TPH.

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- During the RI in 2010 and during the remediation progress monitoring period from 2010 to 2019, where groundwater samples were collected from five monitoring wells and one extraction well. The samples were analyzed for VOCs and TPH in earlier years, and only VOCs after 2014.

The PCE groundwater data from these events are shown on Figure 3. For the permanent monitoring wells, only the initial PCE data (in 2010, prior to groundwater extraction) and the latest PCE data (in 2019, latest data after groundwater extraction was discontinued) are shown on Figure 3.

Prior to groundwater extraction, the groundwater impact appeared to be limited to the northwest corner of the Site. The highest PCE concentration detected prior to remediation was 320 microgram per liter (µg/L), at a grab groundwater sampling location near the backdoor of the former dry cleaner, near the sewer line where the PCE concentration in the permanent well at that location was 37 µg/L. At the permanent groundwater monitoring wells, the highest PCE concentration detected prior to remediation was at 52 µg/L, found at a location near the western Site boundary and the sewer line (i.e., at MW-3). After approximately five years of SVE and three years of groundwater extraction, the PCE concentration at MW-3 was at 13.7 µg/L in 2019. PCE concentrations also decreased at the other monitoring wells after Site remediation.

Soil Vapor

Soil vapor sampling was conducted during the following events:

- Phase II ESA in 2008, where shallow soil vapor samples were collected from depths up to 15 feet at locations near the former dry cleaner (Figure 2), and one deep soil vapor sample collected from a depth of 35 feet bgs at a location near the backdoor of the former dry cleaner. The samples were analyzed for VOCs.
- Soil vapor sampling in 2008, where soil vapor samples were collected from depths up to 46 feet bgs. The samples were analyzed for VOCs.
- Soil vapor sampling in 2016, where confirmation soil vapor samples were collected from locations near samples collected during the 2008 event. The samples were collected at depths of 5- and 45-feet bgs and analyzed for VOCs.
- Soil vapor sampling in 2019 (two events), where soil vapor samples were collected near the former dry cleaner area at depths of 5- and 10-feet bgs. The samples were analyzed for VOCs.
- Soil vapor sampling in 2020, where soil vapor samples were collected primarily from the former parking lot area of the former strip mall, south and east of the former dry cleaner. The samples were collected at depths of 5- and 15-feet bgs. The samples were analyzed for VOCs.
- Soil vapor sampling in 2021, where soil vapor samples were collected from the remaining area at the overall Site at depths of 5- and 15-feet bgs. The samples were analyzed for VOCs.

The 2019 – 2021 soil vapor samples were collected after the site remediation work described in Section 2.3 and was triggered by the site closure process. The data from

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the first 2019 event suggested that PCE concentrations in soil vapor rebounded after the 2016 confirmation sampling for SVE system shutdown. This finding and the site closure process triggered the subsequent soil vapor sampling events.

The current soil vapor conditions at the Site are reflected by the 2019 – 2021 data. The PCE soil vapor concentrations from 2019-2021 are shown on Figures 2 and 3.

As shown on Figures 2 and 3, the latest soil vapor data show that PCE concentrations in soil vapor exceed the San Francisco Bay RWQCB Environmental Screening Levels (ESLs) for vapor intrusion risk in the former dry cleaner area, primarily the northwest corner of the Site, as well as the former parking lot area just south of the former strip mall.

The elevated soil vapor concentrations in the former dry cleaner area are likely caused by residual PCE in the vadose zone:

- The detections of PCE in the soil in 2021 near the sewer line suggests that there is residual PCE in the soil along the sewer line. Although the 2021 PCE soil concentrations were low, partitioning calculation using the method in Appendix E of the DTSC Vapor Intrusion Guidance (2011) suggests the PCE vapor concentration in equilibrium with the PCE soil concentrations could still be high enough to cause the observed elevated PCE soil vapor concentrations. The locations of the PCE detections in soil correlate well with the locations where elevated PCE soil vapor concentrations were found.
- At the time the SVE system was shut down, the average SVE system influent PCE concentration (third quarter 2016) was 230 µg/m^3, suggesting there was still residual PCE in the vadose zone.

Compared to the potential impact from the residual PCE in the vadose zone, the elevated soil vapor concentrations detected since 2019 appear less likely a result of the volatilization of residual PCE in the groundwater, due to the concentrations of PCE in groundwater and the depth of the groundwater at the Site (approximately 55 feet bgs).

PCE soil vapor concentrations lower than the ones detected in the former dry cleaner area, but greater than the residential ESL, were found in the northern portion of the former parking lot of the former strip mall. The PCE in this area is likely caused by the migration of the soil vapor plume.

The City intends to redevelop the Site for mixed use, but primarily supporting new residential construction. The recent soil vapor sampling data suggest that in the former dry cleaner area and the former parking lot area, the PCE concentrations exceed the residential ESL for vapor intrusion consideration, which corresponds to a carcinogenic risk of 10^{-6}. As a result, the City intends to conduct additional site remediation to address the residual PCE in the vadose zone, which is believed to be the source of PCE exceedances in the soil vapor.

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3.0 PLAN FOR ADDITONAL SITE REMEDIATION

Due to the time constraint related to the redevelopment schedule, the additional site remediation the City intends to perform includes soil and sewer line excavation in the former dry cleaner area, and contingency in-situ soil treatment at a deeper depth in the former dry cleaner area and in the former parking lot area (Figure 4).

Former Dry Cleaner and Sewer Line Area

This remediation area is approximately 1.1 acres and includes the northwest corner of the Site where PCE vapor intrusion risk is above 10^{-4}, along with the former dry cleaner footprint and on-site sewer lines. Soil from this area will be excavated to a depth of 15 feet bgs and stockpiled and covered just east and south of the excavation area. The portions of the sewer line outside of the excavation area footprint will also be removed to approximately 2-feet below the base of the sewer (between 6- and 10-feet bgs). The excavation work will be completed by a licensed excavation contractor, with oversight provided by the City of Rancho Cordova or their representative (Tetra Tech). The excavation contractor will employ a competent person, as defined by OSHA, to design a safe excavation, implementing soil sloping or shoring as applicable.

As the anticipated PCE concentrations in the excavated soil are low, based on recent soil sampling along the sewer line, onsite soil treatment may be conducted prior to backfill the excavated soil should the profiling sampling results suggest there is still residual PCE in the stockpiled soil. The onsite treatment will be conducted via adding a dry chemical oxidant (potassium permanganate) to the soil as it's returned to the excavation for backfill and compaction. It is anticipated that a pug mill or equivalent will be used to mix the oxidant into the soil during backfill. The oxidant is intended to treat any residual PCE in soil (once activated by water, Section 3.6). The oxidant dosing will be determined via a bench scale test.

Below 15 feet, the excavation footprint may also be treated by in-situ oxidant injections. The purpose of the injections is to treat any residual PCE that may exist in the vadose zone at a deeper depth. A pre-design investigation (PDI) will be conducted to determine locations and depth intervals of the injections in this area (detailed in Section 3.3). A tentative injection plan based on the currently available information is detailed in Section 3.6.

Former Parking Lot Area

This remediation area includes the approximate 2-acre area outside the planned excavation footprint, that previously exhibited soil vapor PCE concentrations above 15 $\mu g/m^3$ (vapor intrusion risk greater than 10^{-6} for residential use). The PCE in soil vapor observed in this area may be caused by the following:

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- Soil vapor plume migrated from the former dry cleaner and sewer line area,
- Residual PCE in the groundwater, and/or
- Residual PCE in the vadose zone soil.

Since the soil vapor concentrations in this area are relatively low, and this area is in a cross-gradient direction of the former dry cleaner area, the PCE in the soil vapor in this area is more likely from migration of the soil vapor plume from the former dry cleaner area.

A PDI will be conducted to verify the soil and groundwater conditions in this area. In situ soil treatment in this area is contingent on the PDI findings. If PCE is detected in soil or groundwater in this area, this area may be selectively treated with one of the following options: oxidant injections, SVE, or SVE with air sparging.

For this cleanup plan, it is assumed there is residual PCE in the vadose zone soil in this area, which caused the concentrations of PCE detected in the soil vapor. Under this scenario, in situ oxidant injections will be performed. The tentative injection plan is detailed in Section 3.6.

The following subsections present the details of the cleanup plan.

3.1 Scope of Work

The proposed scope of work for the additional site remediation includes:

- Health and Safety, including preparation of a site-specific health and safety plan (HASP) and a perimeter air monitoring plan.
- Site preparation, including a utility clearance survey; placement of protective measures for any trees that will remain; surface preparation, to include removal of impervious surfaces in the planned excavation area (i.e., asphalt and concrete), and permitting. As the planned soil excavation area and resultant stockpile footprint will exceed 1-acre, the development of a storm water pollution prevention plan (SWPPP) is needed, and best management practices (BMPs) will be installed as per the SWPPP and maintained throughout the remediation activities
- PDI Sampling
- Soil Excavation and Stockpiling
- Stockpile Profiling
- Backfill and Compaction (with mixing of dry potassium permanganate during backfill)
- In Situ Soil Treatment

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3.2 Health and Safety

3.2.1 Site-Specific Health and Safety Plan

All on-Site work performed by Tetra Tech will be performed under a Site-specific Health and Safety Plan (HASP). A copy of the Tetra Tech HASP is attached as Appendix A. The Tetra Tech HASP was prepared to guide Tetra Tech employees only. Subcontractors operating on-site will also prepare their own HASP. The HASP outlines monitoring protocols and response actions.

3.2.2 Perimeter Air and Dust Monitoring Plan

Perimeter air and dust monitoring will be conducted during the soil disturbance activities such as excavation, stockpile handling, and backfill. The purpose of the perimeter air and dust monitoring is to protect members of the public from being exposed to potentially elevated concentrations of dust and/or contaminants (primarily PCE) while soil is being handled at the Site.

Daily air monitoring will be performed for monitoring of fugitive dust and VOCs. The air monitoring will be conducted at fixed perimeter air monitoring stations using hand-held photoionization detector (PID) instruments, continuous dust monitors, and summa canisters for periodic bulk air samples around the work area perimeter during soil disturbance activities.

The compounds to be monitored at fixed perimeter air monitoring stations are the following:

- PCE
- TCE
- Cis-1,2-DCE
- Concentrations of dust (to be measured as particles less than 10 microns in diameter, referred to as “PM10”)

As a conservative measure, two additional compounds - trans-1,2-DCE and vinyl chloride - will also be analyzed for when bulk air samples are collected. These two chemicals, while not of concern at this Site, are often associated with dry cleaner sites.

Details of the planned air monitoring activities are included in the *Perimeter Air and Dust Monitoring Plan* in Appendix B. The plan includes a description of field monitoring instruments, field monitoring protocols, air sampling procedures, screening levels, and meteorological monitoring. In summary, real-time ambient air monitoring for total VOCs and dust levels will be conducted at four perimeter monitoring locations, at 60-minute intervals each day when soil disturbance activities occur. A daily average dust

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concentration will also be recorded. In addition, quantitative air samples will be collected using Summa canisters for VOC analysis on three occasions throughout the soil excavation phase – from ground surface to 5-feet bgs (Event 1), from 5- to 10-feet bgs (Event 2), and from 10- to 15-feet bgs (Event 3).

The sample results will be compared to screening levels. Should sample results exceed screening levels then work practices will be modified in response to the exceedance. Such modifications could include additional soil wetting, and/or placement of additional visqueen atop the stockpile.

3.3 Site Preparation

The following site preparation tasks will be completed.

3.3.1 Utility Clearance Survey

Underground Service Alert (USA) will be notified, and the USA ticket will be maintained during the life of the project.

In addition, a licensed utility clearance company will be used to scan the proposed excavation and drilling areas for potential underground utility conflicts, supplemented by a prior geophysical investigation of the area in 2010. Based on the 2010 geophysical investigation report and findings from a recent utility survey for the 2021 soil gas sampling, utilities are known to exist in the proposed soil excavation area. Potholing will likely be conducted by the excavation contractor to determine the location of identified utilities and whether the utilities require abandonment and capping prior soil excavation.

3.3.2 Tree Protection

Trees are present in the northwest portion of the excavation area, and in the open area on the eastern half of the site. The City will be contacted to discuss removal/relocation of the trees that fall within the excavation area, or nearby tree roots that could be impacted by excavation. For trees not in the excavation area, the excavation contractor will erect, at a minimum, orange construction fencing around the drip line of each tree in the vicinity of the work area, prior to beginning soil excavation and stockpiling activities. Excavation equipment traffic and soil stockpiles will remain outside of these fenced areas.

3.3.3 SWPPP Preparation

Per the State Water Resources Control Board, Dischargers whose projects **disturb one (1) or more acres of soil** or whose projects disturb less than one acre but are part of a

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larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity Construction General Permit Order 2009-0009-DWQ. Construction activity subject to this permit includes clearing, grading and disturbances to the ground such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP) by a certified Qualified SWPPP Developer (QSD).

As the planned excavation area covers approximately 1-acre, and the resultant soil stockpile area will cover 1 to 2 acres, a SWPPP will be prepared for this project.

3.3.4 Surface Preparation

The existing surface of the planned soil excavation area consists of both vegetated soil and asphalt paved areas. Prior to soil excavation, the asphalt pavement will be removed and stockpiled on-site. Some concrete curbs and old lighting standards may remain, which should be segregated from the asphalt stockpile. The asphalt and concrete will be recycled.

An approximate 500-foot section of guard rail along the north and west sides of the excavation area will also be removed and properly disposed/recycled to facilitate soil excavation work. The west chain link fence section that is currently located inward from La Loma Avenue, at the top of the slope, will also be relocated to the back of the sidewalk along La Loma Avenue.

Silt fencing and/or straw wattles will be placed around the Site work area, primarily the west half of the Site, and perimeter storm drains protected along La Loma and Folsom Boulevard. The east half of the site is not anticipated to be used during this project. A simple rumble plate construction entrance is anticipated for knocking off loose soil from tires, as site vehicles will mainly operate on the asphalt parking lot areas, and no trucks or heavy equipment will be cycling on-and off-site. Any excavation equipment operating in the excavation will be cleaned of soil before leaving the site. A formal tire wash station is not anticipated.

The entire site is surrounded by a chain link fence with three locking gate entrances off Folsom Boulevard and La Loma Avenue. Any holes in the fencing will be repaired prior to excavation work to deter unauthorized site access afterhours.

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3.3.5 Permitting

Prior to beginning on-site work, applicable permits will be obtained, such as a tree permit, hydrant permit, grading permit, soil boring permit, well destruction permit, as necessary.

3.3.6 Well Abandonment

The existing wells onsite will be properly abandoned after obtaining well destruction permit from the Sacramento County Environmental Management Department.

3.3.7 Geotechnical Soil Evaluation

The selected contractor will perform a geotechnical assessment of the soil in the excavation area. This may include drilling of geotechnical soil borings, or the collection of bulk soil samples for laboratory analysis during excavation. This data will be used to guide backfill and compaction requirements for the excavation, taking into consideration the blending of a dry chemical oxidant into the soil during backfill, and the rebuilding of the slope along the west side of the excavation facing La Loma Avenue.

3.4 Pre-Design Investigation

The purpose of the PDI sampling is to provide current soil and groundwater data in the former dry cleaner and sewer line area and the former parking lot area (approximately three acres in total) (Figure 4). The purpose of the PDI is to supplement soil and groundwater data for the Site, which will be used to refine the in-situ soil treatment planned for the Site (detailed in Section 3.6). The PDI results will lead to an optimized plan for a targeted in-situ soil treatment, leading to cost reduction.

Tetra Tech will drill vertical soil borings to groundwater across the approximate 3-acre area on roughly 50 to100 foot centers, totaling 30 soil borings (Figure 4). Based on cobbly soil conditions between 15 and 25 feet bgs at the site, a sonic drill rig is anticipated for sample collection. A California C-57 licensed driller will be selected for drilling. Soil samples will be collected at 5-foot intervals down to first encountered groundwater (approximately 50-55 feet bgs) using a split-spoon or other appropriate soil coring device. Soil samples will be collected in the same manner as soil samples recently collected along the sewer line in December 2021, utilizing the Terracor field preservation method. The soil samples will be submitted to a California state-certified laboratory for analysis of VOCs by EPA Method 8260B. The samples will be stored in a chilled ice chest under chain of custody protocols prior to delivery to the laboratory.

Upon reaching first encountered groundwater, one grab groundwater sample will be collected from each soil boring. The groundwater sample will be collected through the

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drill rod using a small diameter stainless steel bailer (decontaminated between samples), new disposable bailer, or via new polyethene tubing fitted with a foot valve (positive displacement method). Each sample will be placed in laboratory-supplied containers appropriate for the selected analysis and submitted to a California state-certified laboratory for analysis of VOCs by EPA Method 8260B. The samples will be stored in a chilled ice chest under chain of custody protocols prior to delivery to the laboratory.

Each soil boring will be abandoned to 5-feet bgs (15-feet bgs in the proposed excavation area) with neat cement grout, placed downhole via a tremie pipe or through the drill rods. The grout placement will be observed by the Sacramento County Environmental Management Department. Excess soil cuttings will be used to backfill each boring from top of grout to ground surface.

All reusable drilling equipment will be decontaminated between each soil boring location and all reusable sampling equipment will be decontaminated between each use. Decontamination will consist of washing the equipment in a water/Liquinox solution, rinsing with clean water, and allowing to air dry. Decontamination liquids will be contained and temporarily stored in 55-gallon drums or other appropriate containers, and later applied to the excavated soil stockpile and allowed to absorb.

Excess soil cuttings will be placed on plastic and later incorporated into the soil excavation stockpile.

Two soil samples, one from the former dry cleaner and sewer line area, and one from the former parking lot area, will be analyzed for soil oxidant demand (SOD) for dosing consideration of the onsite soil treatment (during backfill) and the in-situ soil treatment (oxidant injection).

3.5 Soil Excavation and Stockpiling

The selected contractor will design and implement a safe excavation of the approximate 1.1-acre area to 15-feet bgs (Figure 4), including removal of the entire sewer as shown. The contractor's Competent Person, as defined by OSHA, will indicate an appropriate slope for the excavation and trench sidewalls based on soil competency (i.e., 1:1 or 1.5:1). The excavation work will be completed with standard excavation equipment (i.e., a track-excavator, haul trucks, wheeled loader, water truck). The existing slope facing La Loma Avenue will be taken down as part of the excavation. The existing top of slope facing the existing apartment complex on the north side of the excavation will be left in place, leaving an approximate 4-foot-wide undisturbed area along the site boundary.

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The City or their representative will provide daily oversight and direct the excavation work. The sewer line will be trench-excavated approximately 4-feet wide to approximately 2-feet below the base of the sewer in the areas that fall outside the 15-ft deep excavation area. Based on the varied sewer depth, this will be between 6-ft and 10-ft bgs. The entire length of the sewer line is approximately 650 linear feet.

The excavated soil will be stockpiled just east and south of the excavation limits on an asphalt-paved area. The soil excavated from along the sewer line will be segregated to allow for separate soil profiling, based on the dimensions above. The excavated soils will be staged on top of plastic sheeting and covered with plastic sheeting at the end of each day. The plastic sheeting will be secured over the stockpile(s) with sandbags and laced down with poly rope, if necessary, to prevent wind from lifting the plastic. The stockpile will be shaped with a loader or small bulldozer to facilitate easier covering and subsequent stockpile sampling. Straw wattles will be placed around the perimeter of the soil stockpile(s) to mitigate potential soil migration.

The total soil excavation volume, including the sewer line, is estimated at 27,000 bank cubic yards. The sewer line portion is estimated at 800 cubic yards. The resultant soil pile, placed across an approximate 1-acre portion of the parking lot, would be approximately 15- to 20-feet tall.

Routine air and dust monitoring will also be performed during soil disturbance work, in accordance with the attached *Perimeter Air and Dust Monitoring Plan* (Appendix B). Any dust will be mitigated with water spray from a water truck.

3.6 Stockpile Profiling

Following completion of the soil excavation, soil samples will be collected from the soil stockpile(s) for profiling purposes to determine VOC concentrations.

Discrete soil samples will be collected in a grid pattern across the soil stockpile from a depth of approximately 5-feet into the stockpile using a hand auger. A sample from 5-feet into the soil pile is expected to be representative as the soil will have been homogenized during excavation, transport and stockpile shaping. Discrete samples will be collected at rate of 12 per the first 5,000 cubic yards plus 1 sample per each additional 1,000 cubic yards from the primary soil stockpile (approximately 34 samples), and at a rate of 1 per 100 cubic yards from the soil removed for along the sewer line; approximately 8 samples, for better resolution in an area known to have low concentrations of PCE in soil. The stockpile sampling frequency is based on the DTSC borrow area stockpile sampling guidance (for import fill), with increased sample frequency along the sewer line.

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The samples (approximately 42) will be placed in laboratory-supplied glass jars and submitted to a California state-certified laboratory for analysis of VOCs by EPA Method 8260B. The samples will be stored in a chilled ice chest under chain of custody protocols prior to delivery to the laboratory.

The stockpile profiling results will be used to determine whether onsite soil treatment is needed during backfill, or if off-site disposal may be warranted for portions of the stockpile.

3.7 Backfill and Compaction

Since the available soil data suggest low residual concentrations of PCE in soil, it is anticipated that no soil will require off-site disposal. If PCE is detected in the stockpiles, onsite soil treatment will be conducted via mixing in dry potassium permanganate to the stockpiled soil before backfill, where the oxidant will be activated during backfill (when water is applied as part of the backfill process). The oxidant will be mixed into the backfill soil using a pug mill or equivalent as it is placed in the excavation. The tentative dosing is 0.3% by weight and will be refined per the results from the SOD bench scale testing. The stockpiled soil material will be returned to the excavation and compacted per geotechnical requirements. Compaction testing will be performed per geotechnical requirements, and water added to the soil as needed to meet moisture specifications.

Routine air and dust monitoring will also be performed during soil disturbance work, in accordance with the attached *Perimeter Air and Dust Monitoring Plan* (Appendix B). Any dust will be mitigated with water spray from a water truck.

3.8 In-Situ Soil Treatment

Former Dry Cleaner and Sewer Line Area

The purpose of the contingency in-situ soil treatment through oxidant injections is to treat any residual PCE that may exist in the vadose zone at a depth deeper than 15 feet in this area. The tentative injection plan is detailed as follows. This plan will be refined after the PDI.

The vadose zone permanganate injections are planned to be as follows:

- Injections will be at 20-feet centers (assuming a ROI of 10 feet), with a total of 153 locations in this area.
- Injections will be conducted at 15-, 20-, and 25-feet bgs.
- 3% by weight permanganate solution with a volume equaling 25% of the pore volume of the treatment zone will be injected. The injection concentration may be refined after the SOD bench scale testing.

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The areal and vertical extent of the injections may be refined after the PDI. Currently, it is conservatively assumed the entire 1.1 acre of the former dry cleaner and sewer line area will be injected. The maximum injection depth is planned to be 25 feet bgs. The oxidant is expected to be reacted with the residual PCE and the organics in the soil per the dosing information from the bench scale testing. A 30-feet separation distance to groundwater is planned, so that any potential excess oxidant may react with the 30 feet of soil column below the maximum injection depth and not reach the groundwater.

After injections, each injection boring will be abandoned to 5-feet bgs with neat cement grout, placed downhole via a tremie pipe or through the drill rods. The grout placement will be observed by the Sacramento County Environmental Management Department. No excess soil cuttings are anticipated.

Former Parking Lot Area

If the PDI results suggest there is residual PCE in the vadose zone soil in this area, permanganate injections will be conducted. The injections will be conducted similarly to the plan for the former dry cleaner and sewer line area, except that the injections will be conducted for the top 25 feet of the vadose zone. The tentatively planned injection locations are next to the PDI sampling locations (Figure 4), for a total of 14 locations. The locations may be refined after the PDI.

If the PDI results suggest that there is no residual PCE in the vadose zone soil, and depending on the levels of PCE detections in the groundwater, if any, the in-situ soil treatment in this area will include SVE and/or SVE with air sparging (for groundwater treatment). For this scenario, 10-15 SVE wells will be installed in this area. The wells will be operated as extraction and/or venting wells to improve air flow in the subsurface and accelerate the remediation progress. A trailered SVE system will be rented for operating the SVE wells. An air permit will be obtained prior to the SVE operation. If PCE is detected in the groundwater at a concentration greater than 20 µg/L, air sparging may be conducted in conjunction with the SVE. It is expected 3-6 months are needed to complete this treatment.

4.0 POST-EXCAVATION EFFECTIVENESS SAMPLING

To assess the effectiveness of the soil cleanup, follow-up soil vapor sampling will be completed across the approximate 3-acre area, collecting soil vapor samples from approximately the same 30 pre-excavation profile sample locations. The soil vapor sampling will be initiated approximately 1-month following completion of the remediation work.

The soil vapor samples will be collected using the Waterloo Membrane Sampler (WMS) system, consistent with the RWQCB-approved approach for recent soil gas sampling at the site.

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WMS devices will be installed at 5 and 15 feet bgs for soil vapor sampling at each location, installed in co-located separate soil borings. The WMS devices will be installed using a direct push technology (DPT) rig operated by TEG northern California, a California C-57 licensed driller who has installed WMS devices at the site for previous soil gas sampling events. Since the samplers will be installed for temporary use and removed after sampling collection, a boring permit is not required per confirmation received from the Sacramento County Environmental Management Department.

The installed WMS devices will be left in place for approximately 48 hours to ensure a reporting limit lower than the residential ESL for PCE, similar as previous sampling events. The soil gas samples will be analyzed by Eurofins Air Toxics using a modified United States Environmental Protection Agency (EPA) Method TO-17. A total of 40 soil gas samples will be analyzed from the 20 sampling locations. Trip blanks will also be collected and analyzed, per laboratory recommendation for WMS devices. After sampling is completed, the samplers will be pulled out of ground with the boreholes grouted with neat cement to 5-feet bgs. The top 5-feet of borehole will be backfilled with native on-site soil.

5.0 REPORTING

A summary report will be prepared at the conclusion of the project work. The report will document the field activities including all field records and summarize sampling results. Laboratory analytical data sheets and chain of custody forms will be included for all samples collected (soil, groundwater, soil vapor). Although not expected, if any soil is disposed off-site as a regulated waste (non-hazardous Class II waste or hazardous Class I waste) then copies of disposal manifests and/or landfill weight tags will be included to document proper disposal and the weight of soil disposed.

6.0 SCHEDULE

The project schedule depends on the status of the ECRG application. Currently DTSC expects to award the grants in June 2022.

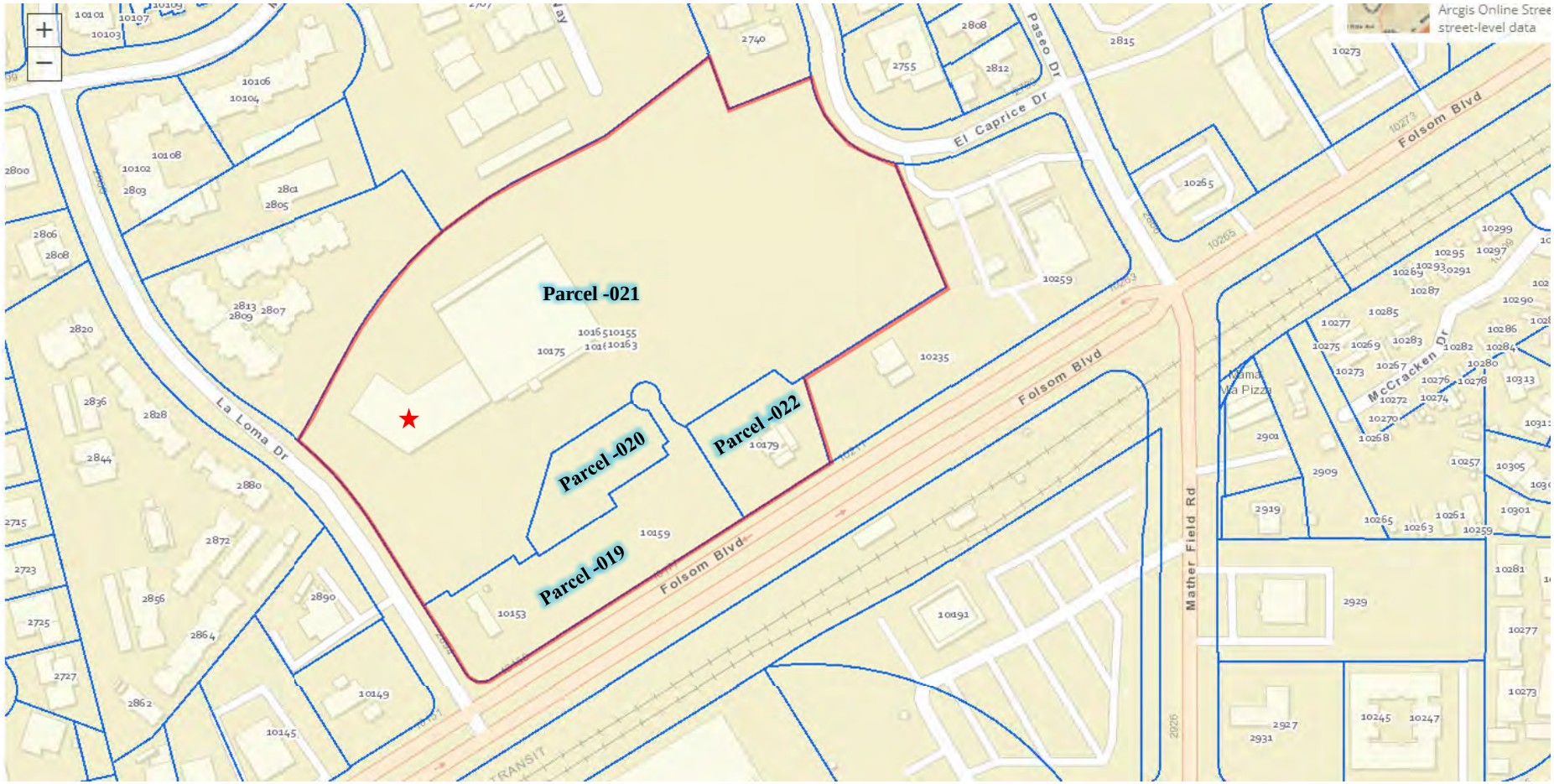
The field work described is expected to take approximately 6 months to complete. Prior to the field work, permitting and contracting related work is expected to take 2-3 months. The summary report is expected to be completed 2-3 months after completion of all field work and laboratory testing.

TETRA TECH, INC.
3101 Zinfandel Drive, Suite 200, Rancho Cordova, CA 95670
Tel 916.853.1800 Fax 916.853.1860 www.tetratech.com

FIGURES

Figure 1 Site Location Map

P:\PROJECTS\City of Rancho Cordova\10153 Folsom Blvd\Figures_Working.pptx



Property Boundary

Parcel Boundary

★ Former Veterans Cleaners tenant space (10161 Folsom Boulevard)

N

0 feet 150

TITLE: **Site Location Map**

LOCATION: **10153 Through 10179 Folsom Blvd, Rancho Cordova, California**

TETRA TECH

CHECKED:	BL
DRAFTED:	KDH
FILE:	117-9040001
DATE:	01-03-22

FIGURE: **1**

Figure 2 PCE In Soil and Soil Gas

TETRA TECH, INC.
3101 Zinfandel Drive, Suite 200, Rancho Cordova, CA 95670
Tel 916.853.1800 Fax 916.853.1860 www.tetratech.com

GB-7	
DEPTH (Ft, BGS)	PCE (µg/Kg)
1-2	5.5
3-4	ND

AVB-2	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
10	<13

GB-6	
DEPTH (Ft, BGS)	PCE (µg/Kg)
1-2	ND
2-4	ND

GB-3	
DEPTH (Ft, BGS)	PCE (µg/Kg)
1-2	7.9

GB-10	
DEPTH (Ft, BGS)	PCE (µg/Kg)
4-5	ND
11-12	ND

TTVP10	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

GB-5	
DEPTH (Ft, BGS)	PCE (µg/Kg)
1-2	ND
7-8	ND

GB-4	
DEPTH (Ft, BGS)	PCE (µg/Kg)
1-2	ND
7-8	ND

TTVP11	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

TTVP9	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

GB-8	
DEPTH (Ft, BGS)	PCE (µg/Kg)
1-2	ND
2-4	ND
7-8	ND

SG-8	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	2,000
10	1,200

AVB-3	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	15
10	<12

AVB-9	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	1,000
10	140

TTVP15	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	NS

B-1	
DEPTH (Ft, BGS)	PCE (µg/Kg)
11-11.5	ND
36.5-37	ND

TTVP8	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

GB-11	
DEPTH (Ft, BGS)	PCE (µg/Kg)
4-5	ND
14-15	ND

TTVP12	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

GB-9	
DEPTH (Ft, BGS)	PCE (µg/Kg)
4-5	ND
13-14	ND

DB-11	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	39
15	140

AVB-1	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	1,200
10	200

TTVP14	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

AVB-8	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	270
10	190

DB-12	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	140
15	160

AVB-4	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	48
10	150

SG-10	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<34

TTVP7	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	54

GB-1	
DEPTH (Ft, BGS)	PCE (µg/Kg)
1-2	5.0

DB-10	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	44
14	98

GB-12	
DEPTH (Ft, BGS)	PCE (µg/Kg)
4-5	ND
14-15	34

GB-2	
DEPTH (Ft, BGS)	PCE (µg/Kg)
1-2	ND

TTVP13	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	14

AVB-10	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	3,300
10	1,600

GB-14	
DEPTH (Ft, BGS)	PCE (µg/Kg)
4-5	ND
14-15	ND

DB-1	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	2,400
15	1,200

TTVP6	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

AVB-7	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	110
10	490

AVB-5	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	160
10	410

SG-9	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	1,400
10	1,100

DB-8	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	130
15	NS

AVB-6	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	95
10	400

DB-9	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	51

GB-13	
DEPTH (Ft, BGS)	PCE (µg/Kg)
4-5	ND
13-14	ND

DB-2	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	78
15	380

DB-4	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	15
15	<13

DB-3	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	56
15	62

TTVP1	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

TTVP2	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

DB-5	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	46

TTVP3	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

DB-6	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	75
15	240

DB-7	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
14	59

TTVP5	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

TTVP4	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

TTSB3	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	<0.70
10	<1.2

TTSB2	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	<0.72
10	<1.1

TTSB1	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	<0.82
10	<1.2

TTSB5	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	7.8
10	28

TTSB4	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	4.7 J
10	<0.97

TTSB7	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	<0.84
10	<0.97

TTSB8	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	<0.79
10	<0.97

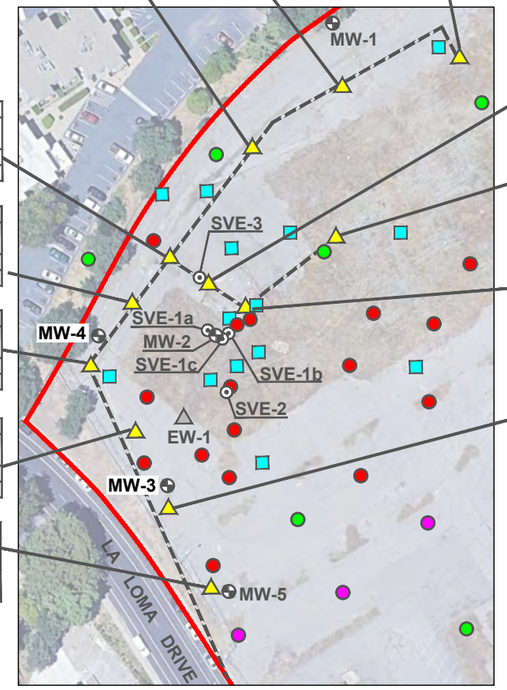
TTSB6	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	1.4 J
10	<1.2

TTSB9	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	1.3 J
10	<0.97

TTSB11	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	<0.97
10	<0.97

TTSB10	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	32
10	54

TTSB12	
DEPTH (Ft, BGS)	PCE (µg/Kg)
5	<0.97
10	<0.97



LEGEND

- PCE SOIL GAS CONCENTRATIONS GREATER THAN RESIDENTIAL ESL AND LOWER THAN COMMERCIAL ESL (2019-2021 DATA)
- PCE SOIL GAS CONCENTRATIONS LOWER THAN RESIDENTIAL ESL (2019-2021 DATA)
- PCE SOIL GAS CONCENTRATIONS GREATER THAN COMMERCIAL ESL (2019-2021 DATA)
- SANITARY SEWER LINE SOIL SAMPLING LOCATION, 5-FT AND 10-FT (DECEMBER 2021 DATA)
- GROUNDWATER EXTRACTION WELL
- HISTORICAL SOIL BORING (APPROXIMATE LOCATION, 2008 DATA)
- GROUNDWATER MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- SANITARY SEWER LINE LOCATION (APPROXIMATE)

N

0 120 240

SCALE IN FEET

TITLE: PCE IN SOIL AND SOIL GAS

LOCATION: 10153 Through 10179 Folsom Boulevard
Rancho Cordova, California

TETRA TECH

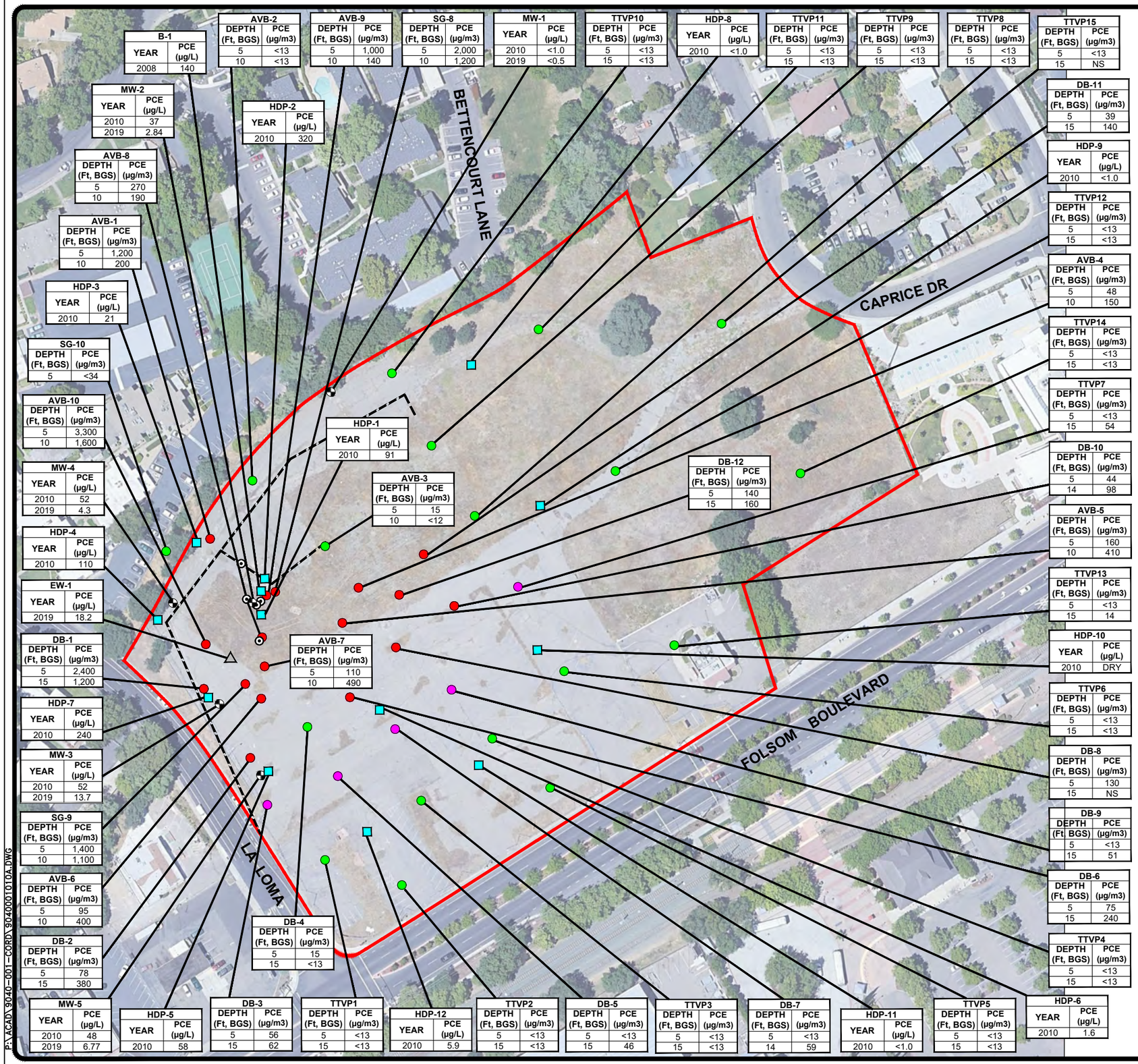
APPROVED	BL
DRAFTED	CP
PROJECT#	117-9040001
DATE	03-14-22

FIGURE 2

P:\ACAD\9040-001-CORD\9040001008A.DWG

Figure 3 PCE In Groundwater and Soil Gas

TETRA TECH, INC.
3101 Zinfandel Drive, Suite 200, Rancho Cordova, CA 95670
Tel 916.853.1800 Fax 916.853.1860 www.tetratech.com



B-1	
YEAR	PCE (µg/L)
2008	140

MW-2	
YEAR	PCE (µg/L)
2010	37
2019	2.84

AVB-8	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	270
10	190

AVB-1	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	1,200
10	200

HDP-3	
YEAR	PCE (µg/L)
2010	21

SG-10	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<34

AVB-10	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	3,300
10	1,600

MW-4	
YEAR	PCE (µg/L)
2010	52
2019	4.3

HDP-4	
YEAR	PCE (µg/L)
2010	110

EW-1	
YEAR	PCE (µg/L)
2019	18.2

DB-1	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	2,400
15	1,200

HDP-7	
YEAR	PCE (µg/L)
2010	240

MW-3	
YEAR	PCE (µg/L)
2010	52
2019	13.7

SG-9	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	1,400
10	1,100

AVB-6	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	95
10	400

DB-2	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	78
15	380

MW-5	
YEAR	PCE (µg/L)
2010	48
2019	6.77

HDP-5	
YEAR	PCE (µg/L)
2010	58

DB-3	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	56
15	62

TTVP1	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

HDP-12	
YEAR	PCE (µg/L)
2010	5.9

TTVP2	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

DB-5	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	46

TTVP3	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

DB-7	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
14	59

HDP-11	
YEAR	PCE (µg/L)
2010	<1.0

TTVP5	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

HDP-6	
YEAR	PCE (µg/L)
2010	1.6

DB-4	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	15
15	<13

AVB-7	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	110
10	490

HDP-1	
YEAR	PCE (µg/L)
2010	91

AVB-3	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	15
10	<12

DB-12	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	140
15	160

HDP-2	
YEAR	PCE (µg/L)
2010	320

AVB-2		AVB-9		SG-8		MW-1		TTVP10		HDP-8		TTVP11		TTVP9		TTVP8	
DEPTH (Ft, BGS)	PCE (µg/m3)	DEPTH (Ft, BGS)	PCE (µg/m3)	DEPTH (Ft, BGS)	PCE (µg/m3)	YEAR	PCE (µg/L)	DEPTH (Ft, BGS)	PCE (µg/m3)	YEAR	PCE (µg/L)	DEPTH (Ft, BGS)	PCE (µg/m3)	DEPTH (Ft, BGS)	PCE (µg/m3)	DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13	5	1,000	5	2,000	2010	<1.0	5	<13	2010	<1.0	5	<13	5	<13	5	<13
10	<13	10	140	10	1,200	2019	<0.5	15	<13			15	<13	15	<13	15	<13

TTVP15	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	NS

DB-11	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	39
15	140

HDP-9	
YEAR	PCE (µg/L)
2010	<1.0

TTVP12	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

AVB-4	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	48
10	150

TTVP14	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

TTVP7	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	54

DB-10	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	44
14	98

AVB-5	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	160
10	410

TTVP13	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	14

HDP-10	
YEAR	PCE (µg/L)
2010	DRY

TTVP6	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

DB-8	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	130
15	NS

DB-9	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	51

DB-6	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	75
15	240

TTVP4	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

N

LEGEND

- PCE SOIL GAS CONCENTRATIONS GREATER THAN RESIDENTIAL ESL AND LOWER THAN COMMERCIAL ESL (2019-2021 DATA)
- PCE SOIL GAS CONCENTRATIONS LOWER THAN RESIDENTIAL ESL (2019-2021 DATA)
- PCE SOIL GAS CONCENTRATIONS GREATER THAN COMMERCIAL ESL (2019-2021 DATA)
- GROUNDWATER EXTRACTION WELL
- HISTORICAL GRAB GROUNDWATER SAMPLING LOCATION (APPROXIMATE LOCATION, 2008 AND 2010 DATA)
- GROUNDWATER MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- SANITARY SEWER LINE LOCATION (APPROXIMATE)

NOTES:

1. SOIL GAS DATA ARE FROM MULTIPLE SAMPLING EVENTS FROM 2019 TO 2021.
2. GROUNDWATER DATA ARE FROM SAMPLING EVENTS IN 2008, 2010, AND 2019 AS NOTED.

0 120 240

SCALE IN FEET

TITLE: PCE IN GROUNDWATER AND SOIL GAS

LOCATION: 10153 Through 10179 Folsom Boulevard Rancho Cordova, California

TETRA TECH

APPROVED	BL
DRAFTED	CP
PROJECT#	117-9040001
DATE	03-15-22

FIGURE 3

P:\ACAD\9040-001-CORD\9040001010A.DWG

Figure 4 Additional Site Remediation Locations

TETRA TECH, INC.
3101 Zinfandel Drive, Suite 200, Rancho Cordova, CA 95670
Tel 916.853.1800 Fax 916.853.1860 www.tetratech.com

AVB-2	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
10	<13

AVB-3	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	15
10	<12

TTVP10	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

AVB-4	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	48
10	150

TTVP9	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

TTVP11	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

DB-11	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	39
15	140

TTVP8	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

TTVP15	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	NS

TTVP12	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

DB-12	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	140
15	160

TTVP14	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

AVB-5	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	160
10	410

TTVP7	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	54

DB-10	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	44
14	98

TTVP13	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	14

TTVP6	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

DB-8	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	130
15	NS

DB-9	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	51

TTVP4	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

AVB-9	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	1,000
10	140

AVB-8	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	270
10	190

AVB-1	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	1,200
10	200

AVB-7	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	110
10	490

AVB-10	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	3,300
10	1,600

DB-1	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	2,400
15	1,200

AVB-6	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	95
10	400

DB-2	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	78
15	380

DB-4	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	15
15	<13

DB-3	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	56
15	62

DB-6	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	75
15	240

TTVP1	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

TTVP2	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

DB-5	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	46

TTVP3	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

DB-7	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
14	59

TTVP5	
DEPTH (Ft, BGS)	PCE (µg/m3)
5	<13
15	<13

BETTENCOURT LANE

REMOVE ENTIRE OLD SEWER LINE

CAPRICE DR

PASEO DRIVE

FORMER DRY CLEANER AND SEWER LINE AREA

FORMER PARKING LOT AREA

FOLSOM BOULEVARD

LA LOMA DRIVE

MATHER FIELD ROAD

N

LEGEND

- RISK <= 10^{-6} AND HQ <=1
- 10^{-6} < RISK <= 10^{-4} AND HQ <= 1
- RISK > 10^{-4} OR HQ > 1
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- PRE-DESIGN INVESTIGATION LOCATION
- SANITARY SEWER LINE LOCATION (APPROXIMATE)
- SOIL EXCAVATION EXTENT

0 120 240

SCALE IN FEET

TITLE: ADDITIONAL SITE REMEDIATION LOCATIONS

LOCATION: 10153 Through 10179 Folsom Boulevard Rancho Cordova, California

TETRA TECH

APPROVED	BL
DRAFTED	CP
PROJECT#	117-9040001
DATE	03-14-22

FIGURE 4

P:\ACAD\9040-001-CORD\9040001009A.DWG

APPENDIX A
Health and Safety Plan

TETRA TECH, INC.
3101 Zinfandel Drive, Suite 200, Rancho Cordova, CA 95670
Tel 916.853.1800 Fax 916.853.1860 www.tetratech.com

HEALTH AND SAFETY PLAN

FOR

SOIL CLEANUP PLAN
FUTURE RANCHO CORDOVA CIVIC CENTER
10153 FOLSOM BOULEVARD
RANCHO CORDOVA, CALIFORNIA

Prepared for:
City of Rancho Cordova
2729 Prospect Park Drive
Rancho Cordova, CA 95670

Submitted by:
Tetra Tech, Inc.
3101 Zinfandel Drive
Suite 200
Rancho Cordova, California 95670

March 2022

117-9040001.05

REVIEWS AND APPROVALS
CLIENT NAME: City of Rancho Cordova
PROJECT NO.: 117-9040001
Soil Cleanup Plan – Future Civic Center
10153 Folsom Boulevard
Rancho Cordova, California

We the undersigned have read and approve of the health and safety requirements presented in this health and safety plan for onsite work activities at the Vacant Site – Future Civic Center

Name	Signature	Date
Keith Hoofard Tetra Tech Inc. Office Health & Safety Representative	DRAFT	
Keith Hoofard Tetra Tech Project Manager	DRAFT	
Betty Li Tetra Tech Program Manager	DRAFT	

This certifies that Tetra Tech has inspected the subject site and has assessed the type, risk level, and severity of hazards for the project and has selected appropriate personal protective equipment for site personnel in accordance with Occupational Safety and Health Administration Title 29 of the *Code of Federal Regulations*, Part 1910.132.

Certified by

Roberto Rolon CIH, REM Tetra Tech Health and Safety Director	DRAFT	

HASP-AT-A-GLANCE

This summary sheet is provided as a quick reference only. The full site-specific Health and Safety Plan is integral to the safe performance of project operations and must be applied in its entirety.

EMERGENCY INFORMATION

Site:	Vacant site, 10153 Folsom Boulevard, Rancho Cordova, California
Project Location	10153 Folsom Boulevard
Proposed Start Dates of Activities:	TBD 2022
Scope of Activities:	Perform excavation oversight, conduct perimeter air monitoring, and sample soil stockpiles.
Type/Status of Site:	Currently vacant with remnant paved areas and vegetation consisting of grasses and trees
Chemicals of Potential Concerns (COPC):	Tetrachloroethene (PCE), with lesser concentrations of trichloroethene (TCE) and cis-1,2-Dichloroethene (cis-1,2-DCE)
Route of Exposure:	Inhalation, ingestion, and skin absorption through direct contact.
Physical Hazards:	Slip, trip, and fall hazards; excavation to 15 feet across 1.1-acrea area; lifting; biological hazards; heat stress; noise; and working near excavation equipment.
Levels of Protection:	The standard level of protection for this project is considered Level D and/or Modified Level D. Safety glasses, steel-toe boots, reflective safety vest, nitrile gloves, hearing protection, and leather work gloves.
Engineering and Administrative Controls:	Excavation will not be entered by a Tetra Tech employee except when the excavation is shored or sloped 1:1 and authorized by the General Contractor's on-site OSHA excavation competent person. Heat stress prevention: Canopy for shade, liquids for rehydration, work-rest schedule, buddy system.
Air Monitoring Equipment:	Air monitoring and soil screening will be conducted using PID (ppbRAE), Thermo Scientific pDR dust monitors, and periodic collection of air samples for laboratory analysis of chemicals of concern.
Factors Prompting Monitoring:	Monitoring will be conducted pursuant to the Cleanup Plan and associated Air Monitoring Plan.
PID Action Levels for Worker Breathing Zone:	At or below 5 ppm, stay upwind, let area ventilate and reassess. Above 5 ppm sustained in BZ for 10 minutes: Stop work, move out of source area, let area ventilate, contact corporate H&S Manager for guidance.
Hazard Communication:	Chemical products brought onsite: decon solutions
Nearest Hospital Emergency Room:	*Mather VA Hospital* 10593 Peter A McCuen Blvd Mather, CA 95655 916-843-7000
Nearest Urgent Care:	*Concentra Urgent Care* 10670 White Rock Rd, Suite 100, Rancho Cordova, CA 95670 916-364-1733
Tetra Tech Contacts:	
Project Manager	Keith Hoofard: 916-853-1800 (direct), 916-709-4732 (mobile)
Corporate Health & Safety	Roberto Rolon: 407-448-9553
CORE Incident Intervention:	for non-life-threatening incidents, available 24/7: 1-855-683-9006
Client Contact	Stefan Heisler: City of Rancho Cordova, CA 916-851-8757

Site:	Vacant site, 10153 Folsom Boulevard, Rancho Cordova, California
Subcontractor Contacts:	See Section 2.0
See Section 13.10 for route and map to hospital and Section 13.11 for route and map to clinic.	

TETRA TECH

ACRONYMS AND ABBREVIATIONS

ACGIH	American Conference of Governmental Industrial Hygienists
ANSI	American National Standards Institute
ASTM	American Society of Testing and Materials
BTEX	Benzene, Toluene, Ethylbenzene, Xylenes
BZ	Breathing Zone
CFR	Code of Federal Regulations
CIH	Certified Industrial Hygienist
COC	Contaminants of Concern
CPEA	Certified Professional Environmental Auditor
CPR	Cardiopulmonary Resuscitation
CRZ	Contamination Reduction Zone
CSE	Confined Space Entry
dBA	Decibel (on A-weighted network)
DCE	Dichloroethene
DOT	Department of Transportation
DPT	Direct-Push Technology
EMS	Emergency Medical Services
EPA	Environmental Protection Agency
eV	Electron Volts
EZ	Exclusion Zone
FRA	Federal Railroad Administration
FS	Field Supervisor
GFCI	Ground Fault Circuit Interrupter
GHS	Globally Harmonized System
HASP	Health and Safety Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HSR	Health and Safety Representative
IDLH	Immediately Dangerous to Life and Health
IDW	Investigation Derived Waste
I.P.	Ionization Potential
IR	Incident Report
LEL	Lower Explosive Limit
MDS	Medical Data Sheet
NIOSH	National Institute for Occupational Safety and Health
NFPA	National Fire Protection Association
NPDES	National Pollution Discharge Elimination System
O&M	Operation and Maintenance
OSHA	Occupational Safety and Health Administration
PAH	Polynuclear Aromatic Hydrocarbons
PCB	Polychlorinated Biphenyl

PG	Professional Geologist
PCE	Tetrachloroethylene
PEL	Permissible Exposure Limit
PID	Photoionization Detector
PM	Project Manager
POL	Petroleum/Oil/Lubricants
PPE	Personal Protective Equipment
ppm	Parts Per Million
RCRA	Resource Conservation and Recovery Act
SDS	Safety Data Sheet (formerly MSDS)
SOP	Standard Operating Procedure
SOW	Scope of Work
SSC	Site Safety Coordinator
STEL	Short Term Exposure Limit
SWP	Safe Work Practice
SZ	Support Zone
TCE	Trichloroethylene
Tetra Tech	Tetra Tech, Inc.
TLV	Threshold Limit Value
TWA	Time-Weighted Average
UEL	Upper Explosive Limit
UL	Underwriters Laboratories
UN	United Nations
VC	Vinyl Chloride
VOC	Volatile Organic Compound

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1.0 INTRODUCTION

Tetra Tech Inc. (Tetra Tech) received a work authorization from the City of Rancho Cordova (City) to perform a soil cleanup at 10153 Folsom Boulevard in Rancho Cordova, California (the Site). The Site previously supported a multi-tenant shopping center, including a dry cleaner. The dry cleaner experienced of release of cleaning solvent (PCE) to the subsurface, impacting the northwest quadrant of the Site. The Site has been the focus of multiple rounds of subsurface investigation (soil, groundwater, soil vapor) as well as remediation efforts (groundwater and soil vapor extraction/treatment) by Others. The Regional Water Quality Control Board (RWQCB) has been the lead regulatory agency. Remediation efforts have been discontinued and the Site was razed several years back, remaining vacant. Residual soil vapor concentrations remain above residential and commercial screening criteria, and residual soil impacts exist along the sanitary sewer that once served the dry cleaner. The purpose of the soil cleanup is to mitigate residual PCE concentrations in subsurface soils to reduce soil vapor concentrations below residential screening criteria.

The cleanup efforts are anticipated to include a combination of pre-excavation soil and groundwater profile sampling (sonic drill rig) followed by soil excavation in the northwest corner of the site to a depth of 15 feet below grade. The entire length of the on-site sanitary sewer line will be over-excavated (6- to 10-feet deep), which extends outside the excavation limits. The excavation will be designed by the selected contractors Competent Person, as defined by OSHA. Excavated soils will be temporarily stockpiled a short distance away and covered with visqueen while awaiting backfill of the soils to the excavation. The excavation limit encompasses an approximate 1.1-acrea area. Some or all existing groundwater and extraction wells (vapor extraction and groundwater) will require abandonment as some are in the proposed excavation area. It is anticipated that each well will be over-drilled and removed using a hollow stem auger drill rig.

Based on the results of the pre-excavation soil and groundwater profile sampling, and the soil stockpile profile sampling, chemical oxidant (potassium permanganate – KMnO4) soil treatment may be conducted. This may include directly mixing crystalline KMno4 into the excavated soil as it is backfilled and/or oxidant injections at select profile boring locations. The oxidant application rate will be based on a bench scale treatability study of the excavated soil and detected PCE concentrations in soil and groundwater. A temporary soil vapor extraction (SVE) system may also be installed and operated for an approximate 2-month duration, based on the results of the pre-excavation soil and groundwater profile sampling. Up to 20 soil vapor extraction wells will be installed and manifolded to an SVE system equipped with granular active carbon (GAC) emissions controls. The SVE system will be permitted by the local air district. An electrical power drop (by the local utility) will be necessary to operate the SVE system.

The site-specific health and safety provisions in this document have been developed for use during drilling and sampling activities, soil excavation, stockpiling, and backfill, and potential oxidant treatments and/or short-term soil vapor extraction. This document addresses items specified under Occupational Safety and Health Administration (OSHA) Title 29 of the *Code of Federal Regulations* (CFR),

Part 1910.120(b), Hazardous Waste Operations (HAZWOPER) 120 and applicable California Occupational Safety and Health requirements.

This health and safety plan (HASP) must be present at the site during the performance of all Site activities and will be available to all onsite personnel who may be exposed to hazardous onsite conditions, including Tetra Tech and subcontractor personnel participating in site operations, and all authorized site visitors, including regulatory agency representatives. All onsite personnel, including Tetra Tech and subcontractor employees and site visitors, must be informed of site emergency response procedures and any potential health and safety hazards associated with onsite activities. Protocols established in this HASP are based on site conditions and health and safety hazards known or anticipated to be present and on available site data. The Tetra Tech Compliance Agreement form in **Appendix A** must be signed by all personnel before they enter the site.

This HASP is supported by the Tetra Tech Health and Safety Manual and safe work practices (SWPs) (**Appendix B**), which were developed to comply with the OSHA Hazardous Waste Operations standard and applicable sections of 29 CFR Part 1910 (General Industry Standards) and Part 1926 (Construction Standards).

This plan must be reviewed and approved by the Tetra Tech health and safety representative (HSR) and the Tetra Tech program and project managers (see the Reviews and Approvals Form after the Contents in this document). Specifications herein are subject to review and revision based on actual conditions encountered in the field during site activities. The HASP will be modified if the scope of work changes or if new information regarding site conditions, hazards, or contaminants of concern becomes available. If deviations are encountered from the field work plan, Tetra Tech and subcontractor personnel will notify the Project Lead and suspend work to assess changes to the work plan and the HASP. Significant revisions to this plan must be approved by the Tetra Tech program and project managers and the Tetra Tech HSR. Authorized modifications to the HASP will be tracked in the Record of Review/Revision [to be inserted into the HASP] and will be communicated to all project personnel.

2.0 PROJECT PERSONNEL AND RESPONSIBILITIES

This section describes responsibilities of project personnel, summarizes requirements for subcontractors and visitors who wish to enter the Site, and discusses HASP enforcement. Personnel assigned to these positions will exercise the primary responsibility of performing all of their work tasks in a manner that is consistent with the Tetra Tech Health and Safety Policy, the health and safety training they have received, this HASP, and in an overall manner that protects their personal safety and health and that of their coworkers. The Field Supervisor will be the primary point of contact for any questions regarding the health and safety procedures and the selected control measures that are to be implemented for activities at the Site.

The following personnel and organizations are associated with planned activities at the site. The organizational structure will be reviewed and updated as necessary during the course of the project.

Name/Title	Responsibility	Telephone No.
Client Representative:		
Stefan Heisler	City of Rancho Cordova Project Lead	(916) 851-8757
Tetra Tech Personnel:		
Betty Li	Program Manager	(916) 853-1800 (office) (617) 820-3613 (cell)
Keith Hoofard	Project Manager	(916) 853-4523 (office) (916) 709-4732 (cell)
Zack Laforet	Field Supervisor	(916) 853-1800 (office) (603) 801-1624 (cell)
Roberto Rolon	Corporate Health& Safety	(407) 448-9553
Keith Hoofard	Site Safety Coordinator (SSC)	(916) 853-4523 (office) (916) 709-4732 (cell)

Subcontractors:

Company Name	Contact	Telephone Number
GPRS (utility clearance)	Kelly Poitevint	800-231-3347
Cascade Drilling (well abandonment)	Rick Alcartado	916-638-1169
Cascade Drilling (soil & groundwater profile borings)	Rick Alcartado	916-638-1169
Calvada Surveying (locate 30 profile borings; relocate for post-remediation sampling)	Saul Melgarejo Jr., LSIT	951-280-9960 (office) 562-673-5123 (cell)
TBD (Excavation, Stockpile, Backfill)	TBD	TBD
Cascade Drilling (SVE well drilling)	Rick Alcartado	916-638-1169
EnviroSupply & Service (temp SVE system)	Joe Hunter	949-732-3318
TEG NorCal (post-remediation vapor sampling)	Mark Jerpbak	916-853-8010

2.1 PROJECT PERSONNEL

The Tetra Tech project manager, field supervisor, and site safety coordinator (SSC) will be responsible for implementation and enforcement of the provisions of this HASP. Their duties and the expectations for Tetra Tech employees are described in the following sections.

2.1.1 Project Manager

The Tetra Tech project manager (PM) has ultimate responsibility for ensuring implementation of the requirements set forth in this HASP. Some of this responsibility may be achieved through delegation to site-dedicated personnel that report directly to the project manager. The project manager shall regularly confer with site personnel regarding safety and health performance.

2.1.2 Field Supervisor

The Tetra Tech field supervisor (FS) will oversee and direct field activities and has day-to-day responsibility for ensuring HASP implementation. Subcontractor compliance with the HASP shall be monitored by the field supervisor. The field supervisor will report directly to the project manager any health and safety-related issues.

2.1.3 Site Safety Coordinator

A Site Safety Coordinator (SSC) is assigned by the project manager (PM) to provide health and safety oversight for this project. The SSC is responsible for the following:

- Being on site during all work activities to oversee health and safety issues for Tetra Tech employees, subcontractors, and visitors at the site.

- Conducting site-specific training which includes review of the HASP at the project initiation and conducting daily tailgate meetings to discuss planned tasks, identified hazards, and required hazard controls.
- Implementing the site-specific HASP including hazard communication, respiratory protection, personal protective equipment, and other associated safety and health programs.
- Verify that the HASP accurately reflects ALL site hazards and is revised or amended as new tasks are assigned or new hazards are recognized.
- Verifying onsite personnel have all necessary training, medical and respirator clearance, and respirator fit-tests as specified by the HASP.
- Advising the PM and/or client of any field practices or conditions that may endanger the health and safety of field personnel, subcontractors, or visitors.
- Recommending corrective actions for any conditions that may endanger the health and safety of field personnel, subcontractors, or visitors.
- Selecting, inspecting, maintaining, and enforcing proper use, cleaning, and maintenance of protective clothing and equipment.
- Monitoring onsite hazards and conditions (frequent site inspections).
- Maintaining visual or verbal communication with all site workers.
- Stopping work if any worksite condition, practice, or operation causes or presents a hazard that can reasonably be expected to result in immediate death, serious physical harm, or severe damage to the environment.
- Working closely with the PM and HSR to determine appropriate corrective action and/or prompt resolution to all hazards.
- Establishing and maintaining work zones and control points by overseeing control of entry and exit at site access points and recording the names and job assignments of all personnel who enter and exit the site.
- Arranging for required work area, personal or ambient hazard monitoring.
- Ensuring that all monitoring equipment used on site has been properly calibrated and is operated in accordance with manufacturer's recommendations and approved sampling methodologies.
- Creating and maintaining records of employee exposure and monitoring results for all onsite personnel.
- Monitoring workers for signs and symptoms of work-related exposures, such as chemical exposure, heat stress and fatigue.
- Conducting daily field inspections for early recognition of potential site and task hazards.
- Coordinating and supervising emergency response and providing emergency first aid and cardiopulmonary resuscitation (CPR) to team members, if required.
- Reporting all occupational illness, injuries, incidents and near-misses to the HSR and PM immediately after stabilization of the incident and notification of emergency medical providers.

- Assisting in conducting incident investigations and preparing reports of serious near-misses, illnesses, injuries, motor vehicle accidents, or property damage.

2.1.4 Health and Safety Representative

The Tetra Tech health and safety representative (HSR) is responsible for review of the project HASP. The HSR will also act in an advisory capacity to the project manager and site personnel for project-specific health and safety issues. The Tetra Tech project manager will establish a liaison between the City of Rancho Cordova representative and the HSR on matters relating to health and safety. The HSR responsibilities include the following:

- Provide information regarding site contaminants and physical and biological hazards.
- Establish air monitoring and decontamination procedures.
- Assign personal protective equipment based on task and potential hazards.
- Determine emergency action procedures.
- Stipulate training and medical surveillance requirements.
- Provide standard work practices to minimize potential injuries and exposures associated with hazardous waste site work.
- Modify this HASP, where and when necessary.

2.1.5 Tetra Tech Employees

Tetra Tech employees are expected to fully participate in implementing the site HASP by having the necessary training, attending site safety meetings, always wearing designated personal protective equipment (PPE), complying with site safety and health rules, and advising the Tetra Tech SSC of health and safety concerns at the site. Additionally, all Tetra Tech employees have the following rights and responsibilities:

- Tetra Tech employees are expected to and responsible for reporting health and safety hazards they face while performing their work. As such, employee reports of health and safety hazards are viewed as positive interactions and no employee of Tetra Tech will retaliate against any other employee who reports a health and safety hazard.
- Tetra Tech employees have the right to refuse to perform work involving significant safety hazards they feel have not been adequately addressed.
- Every Tetra Tech employee has the right to stop work if he/she feels any worksite condition, practice, or operation causes or presents a hazard that can reasonably be expected to result in immediate death, serious physical harm, or severe damage to the environment. Through observations and communication, all parties involved will then develop, communicate, and implement corrective actions necessary and appropriate to modify the task and to resume work. The stop work event will be reported as a near miss incident.

Note: In some cases, one person may be designated responsibilities for more than one position. For example, the Field Supervisor may also be responsible for the SSC duties. This action will be performed only as credentials, experience, and availability permit.

2.2 SUBCONTRACTORS

Subcontractor personnel participating in project operations will be required to read and comply with all sections of this plan. All subcontractor personnel entering the site must sign the Compliance Agreement form (**Appendix A**). Subcontractor personnel must comply with all applicable 29 CFR 1910.120 training, respirator fit testing, and medical surveillance requirements and other applicable OSHA General Industry and Construction Standards (Part 1926). Subcontractors are responsible for providing PPE required by this plan for their personnel (see Section 7.1, Protective Equipment and Clothing) and are directly responsible for the health and safety of their employees. Subcontractors will prepare a safety plan and/or Job Hazard Analysis for their work assignments which will be submitted to Tetra Tech for review.

2.3 SITE VISITORS

All authorized site visitors will be required to read the HASP and sign the Compliance Agreement form (**Appendix A**). Visitors will be expected to comply with relevant OSHA requirements. Visitors will also be expected to provide their own PPE required by the HASP. Visitors who have not met OSHA training, medical surveillance, and PPE requirements are not permitted to enter work areas where exposure to health and safety hazards is possible.

3.0 SITE BACKGROUND

The Site is a multi-parcel commercial property, totaling 9.23-acres (Figure 1). All former buildings have been razed and the Site sits vacant with the former asphalt paved parking areas intact. A former on-Site dry cleaner (Veterans Cleaners) tenant space was located at 10161 Folsom Boulevard (Parcel -021) and operated from approximately 1970 to 2003. The dry cleaner reportedly utilized a 45 gallon above ground tank to store tetrachloroethane (PCE). Figures showing the footprint boundary of the former dry cleaner, and dry-cleaning equipment layout, were not found.

A release of PCE to the subsurface was first discovered at the Site in 2008 after samples of soil, groundwater and soil vapor were collected from multiple soil borings in the vicinity of the dry cleaner. PCE was detected at concentrations up to:

34 micrograms per kilogram (µg/kg) in soil;

70,000 micrograms per cubic meter (µg/m3) in soil gas; and

140 micrograms per liter (µg/L) in groundwater.

Total petroleum hydrocarbons as gasoline (TPH-gas) was also detected in groundwater at a concentration of 100,000 µg/L in 2008. Subsequent TPH-gas and TPH-diesel concentrations were low to non-detect in groundwater monitoring wells through 2014. Benzene, toluene, ethyl benzene and xylenes (BTEX) compounds also appear to have been non-detect in groundwater through 2019.

Elevated concentrations of lead were also detected in soil above environmental screening levels, along with one soil sample containing TPH-motor oil above the environmental screening level. These detections were not confirmed during later sampling.

Trichloroethene (TCE) and cis-1,2-dichlorethene (cis-1,2-DCE) were originally detected at concentrations above California maximum contaminant levels (MCLs) prior to groundwater remediation, but concentrations decreased to non-detect after remediation (discussed below).

Depth to groundwater at the site ranges from approximately 50 to 55 feet below ground surface (bgs), with a groundwater flow direction ranging from north to northeast.

Since 2008, multiple Site characterization sampling events have been conducted in support of delineating the extent of impacts to soil, soil vapor and groundwater, along with on-site remediation consisting of soil vapor extraction (SVE) and groundwater extraction. The CV-RWQCB has been the lead agency providing oversight of site characterization and remediation.

- An SVE system operated at the site from approximately April 2011 through August 2016, removing approximately 7.8 pounds of PCE. PCE was detected in soil gas up to 70,000 µg/m3 prior to operation of the SVE system, and up to 280 µg/m3 following remediation. The RWQCB concurred that soil vapor had been adequately remediated and the SVE system was

subsequently dismantled. The SVE system was subsequently dismantled with concurrence from the RWQCB.

- A groundwater extraction system also operated at the site from April 2014 through August 2017 (shutdown due to vandalism). Approximately 11 million gallons of groundwater were extracted at approximately 10 gallons per minute and discharged (untreated) to the sanitary sewer from a single extraction well (EW-1). Well EW-1 is a 6-inch diameter extraction well screened from 45 to 75 feet bgs, with a reported radius of influence over 150-feet. PCE was detected in EW-1 at concentration of 150 µg/L prior to startup, decreasing to 11.5 µg/L during second quarter 2017. An estimated 2.7 pounds of PCE was removed by groundwater extraction.

Soil gas and groundwater confirmation samples were most recently collected in the vicinity of the former dry cleaner during three sampling events in 2019 (March, April, and October) and one in July 2020 as part of additional site characterization activities. PCE was detected as follows:

- Up to 3,300 µg/m3 (5-feet bgs) and 1,600 µg/m3 (10 feet bgs) at sample location AVB-10, located along the sanitary sewer line, distant from the rear of the former dry cleaner; and

Up to 18 µg/L in groundwater (EW-1). Upgradient well MW-5 contained PCE at a concentration of 6.77 µg/L. Downgradient well MW-1 was non-detect for PCE. Well MW-5 is located near the sanitary sewer line on La Loma (or the Site sewer lateral, depending on which figures are correct), presumed "downstream" from the former dry cleaner.

Tetra Tech conducted additional on-site soil and soil vapor sampling in December 2021 to evaluate current soil conditions along the sewer line, and to further evaluate soil vapor conditions south and east of the dry cleaner in areas not previously investigated. Low concentrations of PCE were detected in soil at two locations along the sewer line (TTSB5 and TTSB10) in both the 5- and 10-ft soil samples at concentrations ranging from 7.8 to 54 micrograms per kilogram (µg/Kg). Estimated low concentrations of PCE were detected in the 5-ft soil samples at three sewer line locations (TTSB4, TTSB6 and TTSB9) ranging from 1.3 to 4.7 µg/Kg. TCE was also detected at an estimated low concentration of 2.8 µg/Kg in the 5-ft soil sample from TTSB5. Low to estimated low concentrations of petroleum-related compounds (TPH-gas, naphthalene, toluene, trimethylbenzenes, and xylenes) were detected at locations TTSB6 through TTSB9. All soil detections were well below respective Environmental Screening Levels (ESLs) for human health (direct exposure) under both Residential and Commercial land use scenarios.

TPH, VOCs, and PCBs were not detected in the 5-ft or 10-ft composite soil samples from along the sewer line (TTCOMP-5 and TTCOMP-10). Low to estimated low concentrations of the organochlorine pesticides 4,4-DDE and dieldrin were detected in both the 5-ft and 10-ft composites soil samples. Estimated low concentrations of the SVOCs pyrene and fluoranthene were detected in the 5-ft composite soil sample. Low to estimated concentrations of 11 metals (arsenic, barium, beryllium, chromium, cobalt, copper, lead, mercury, nickel, vanadium, and zinc) were detected in both the 5-ft and 10-ft composite soil samples along the sewer line. The various detections of metals appear to represent naturally occurring background concentrations; no anomalous metals concentrations were detected. None of the chemicals detected in the two composite soil samples exceed their respective Title 22 Total

Threshold Limit Concentration (TTLC) values for classification as a hazardous waste (should the soil be excavated and transported off-site for disposal).

PCE was not detected above the laboratory reporting limit of 13 µg/m3 in the 30 soil vapor samples collected at 5-feet in depth. PCE was only detected in soil vapor at 15-feet in depth from two locations at concentrations of 54 µg/m3 (TTVMP7-15) and 14 µg/m3 (TTVMP13-15). Both detections are below the commercial PCE soil vapor ESL value of 67 µg/m3. Only location TTVMP7-15 exceeds the residential PCE soil vapor ESL value of 15 µg/m3 (at 54 µg/m3). PCE degradation compounds were not detected in any of the soil vapor samples. Low concentrations of petroleum-related compounds (xylenes and toluene) were detected in soil vapor at various depths at TTVP1, TTVP4, TTVP6, TTVP7 and TTVP10. The concentrations were well below their ESLs for commercial or residential uses.

4.0 SCOPE OF WORK

This section discusses the activities that are to be performed at the Site. Table 5-1 of this HASP provides information related to each of the tasks associated with the scope of work. The planned activities involved in this effort are presented in detail in the Tetra Tech **Soil Cleanup Plan, 10153 – 10175 Folsom Boulevard, Rancho Cordova, California, dated March 15, 2022.** If tasks other than those described below are to be performed, Table 5-1 and this section will be modified accordingly.

Field operations to be performed by Tetra Tech and subcontractor personnel include:

- Mark Site for USA/Utility Clearance
  - Tetra Tech will mark all proposed drilling locations and soil excavation area and subcontract an on-site utility locator to scan the subsurface for utility conflicts.
- Well Abandonment
  - Eleven existing site wells will be abandoned before beginning soil excavation activities. Tetra Tech will subcontract well abandonment through a CA- licensed well driller, and obtain drilling permits from Sacramento County. Tetra Tech will provide field oversight.
- Pre-excavation Profile Drilling
  - Tetra Tech will subcontract with a CA-licensed well driller to collect soil and groundwater samples from approximately 30 locations in a grid pattern. Soil samples will be collected at 5-foot intervals down to groundwater (approx. 55-feet), where a grab groundwater sample will also be collected. Tetra Tech will place samples in containers appropriate for selected analyses. County drilling permits are required for borings completed withing 20-feet of groundwater.
- Soil excavation, stockpiling, backfill and compaction
  - Tetra Tech or the Client will subcontract with a licensed excavation company to design the soil excavation in the northwest corner of the site, including removal of the section of sanitary sewer that extends outside the excavation limits to the east. The contractor will also coordinate with utility companies to abandon any utilities that enter the excavation arear. The excavation will be designed by an OSHA-competent person. The soil will be stockpiled and covered for subsequent profile sampling. Tetra Tech will provide field oversight.
- Stockpile profile sampling
  - Tetra Tech will collect samples of the stockpiled soil for laboratory analysis.
- Addition of Dry Oxidants to Soil During Backfill
  - Based on the results of the profile sampling, a dry chemical oxidant (KMnO4) may be mixed into the soil during backfill and compaction. The excavation contractor or their subcontractor will perform this work utilizing personal protective equipment (PPE) recommended by the oxidant manufacturer. Tetra Tech will not be directly involved in this task.

- Air and Dust Monitoring
    - During active soil excavation, stockpiling and backfill, Tetra Tech will perform perimeter air and dust monitoring. Monitoring instruments will include a photoionizing detector (PID), real-time dust monitors, and the periodic collection of air samples for laboratory analysis. A portable weather station will be set up to collect regular meteorological data. The details of the air monitoring are presented in the Air Monitoring Plan.
- Post-Backfill Oxidant Injections (optional)
    - Following backfill and compaction to original grade and based on the results of the pre-excavation profile drilling, liquid oxidants (KMnO4) may be injected into select soil borings. Tetra Tech will contract with a licensed CA-well driller to perform this task. Tetra Tech will provide field oversight. Appropriate PPE will be donned for handling the KMnO4, per manufacturer guidance and SDS information.
- Short-Term Soil Vapor Extraction (optional)
    - Following backfill and compaction, and based on pre-excavation profile sampling, short term soil vapor extraction may be completed. Tetra Tech will contract with a licensed CA-well driller to install 15 to 20 soil vapor extraction wells to approximately 35 feet below grade. A subcontractor will supply and setup a temporary SVE system with granular activated carbon emissions control. As there is no power at the site, Tetra Tech will hire a subcontractor to install a power drop and wire the SVE trailer to the power supply. Tetra Tech will operate the SVE system for approximately 2-months, performing routine operations, maintenance, and system monitoring, including collection of compliance air samples. The SVE vendor will recycle or dispose of the spent carbon after system shutdown.
- Post-Cleanup Soil Vapor Sampling
    - To assess the effectiveness of the soil cleanup activities, soil vapor samples will be collected from 30 locations, corresponding to the pre-excavation profile soil borings. The soil vapor sampling will be similar to recent soil vapor sampling events. Waterloo Membrane Samplers (WMS) will be installed at depths of 5-feet and 15-feet below grade. The WMS samplers will be retrieved 48-hours following installation for laboratory analysis. Grout borings with neat cement. Tetra Tech will contract with a CA-licensed well driller to perform this work.

5.0 HAZARD ASSESSMENT AND CONTROL

Field activities and physical features of the site may expose field personnel to a variety of health and safety hazards. This section provides information on potential hazards related to site activities and the nature of hazardous material impacts. Potential chemical, physical, and biological hazards related to site activities and conditions are discussed below.

5.1 CHEMICAL HAZARDS

The chemical contaminants of concern on this site are:

Media	VOCs
Soil	Cis-1,2-DCE PCE TCE
Soil Gas	Cis-1,2-DCE PCE TCE
Groundwater	Cis-1,2-DCE PCE TCE

Specific information on potential chemical hazards at the site is provided in **Table 5-1**, including exposure limits, anticipated exposure routes, and toxic effects. Potential routes of exposure include dermal (skin and eye) contact and absorption, inhalation, and ingestion. Dermal contact and accidental ingestion can occur because of improper decontamination or PPE usage. Inhalation can occur because of airborne contaminants (either vapors or dusts) generated or released during site activities. The chemicals may also contaminate equipment, vehicles, instruments, and personnel.

The Safety Data Sheets (SDS) included in **Appendix C** to this HASP summarize health and safety information for hazardous materials that will be brought to the site, such as treatment chemicals, laboratory reagents, decontamination solutions, and sample preservatives.

TABLE 5-1 CHEMICAL HAZARDS (*list major and toxic COCs*)

Chemical	Exposure Limits	Routes of Entry	Toxic Effects
Tetrachloroethene (PCE)	PEL = 100 ppm TLV = 25 ppm IDLH = 150 ppm	Inhalation, skin absorption, ingestion, skin and/or eye contact	irritation eyes, skin, nose, throat, respiratory system; nausea; flush face, neck; dizziness, incoordination; headache, drowsiness; skin erythema (skin redness); liver damage; [potential occupational carcinogen]
Trichloroethene (TCE)	PEL = 25 ppm TLV = 10 ppm IDLH = 1,000 ppm	Inhalation, skin absorption, ingestion, skin and/or eye contact	irritation eyes, skin; headache, visual disturbance, lassitude (weakness, exhaustion), dizziness, tremor, drowsiness, nausea, vomiting; dermatitis; cardiac arrhythmias, paresthesia; liver injury; [potential occupational carcinogen]
Cis-1,2-DCE	PEL = 200 ppm TLV = 200 ppm IDLH = 1,000 ppm	inhalation, ingestion, skin and/or eye contact	irritation eyes, respiratory system; central nervous system depression

Notes:
ACGIH American Conference of Governmental Industrial Hygienists
Ca Carcinogen
IDLH Immediately dangerous to life or health (NIOSH)
NL Not listed
OSHA Occupational Safety and Health Administration
PEL Permissible exposure limit (OSHA legal limit)
ppm Part per million
STEL Short Term Exposure Limit
TLV Threshold Limit Value (ACGIH recommended value)

Exposure to the Contaminants of Concern (COC) will be prevented through the implementation of applicable Tetra Tech safe work practices (**Appendix B**) including avoiding contact with media (soils, groundwater, etc.), working from an upwind location, screening with real-time direct-reading instruments, use of PPE, minimizing the generation of dust, proper decontamination, and hand washing prior to conducting hand to mouth activities.

A minimum of two project personnel (the “buddy” system) is required when Level C PPE or higher is required to protect against chemical exposures via inhalation or dermal contact/absorption.

5.2 PHYSICAL HAZARDS

Physical hazards associated with site activities present a potential threat to onsite personnel. The following physical hazards may be present during the performance of site activities:

- Excessive noise (> 85 dBA)
- Slips, trips, and falls
- Traffic and heavy equipment hazards
- Manual lifting/material handling
- Pinch/compression points
- Heat stress
- Underground utilities
- Overhead power lines and structures
- Power and hand tools
- Suspended loads

Site-specific physical hazards include the following:

- Drilling/excavation/trenching activities.
- Installation of a soil vapor extraction system with power drop.
- On-site traffic associated with haul trucks.

Tetra Tech SWPs for protection against these physical hazards are provided in **Appendix B**.

A minimum of two project personnel (the "buddy" system) is required for the following hazardous operations or site conditions:

- Electrical work
- Working over or near water
- Heavy lifting (pumps and hoses)
- Excavation work
- Instances of extreme heat illness risk
- Instances of extreme hypothermia risk
- Confined space entry
- Working at heights/fall hazard

5.3 BIOLOGICAL HAZARDS

The Site is located within the City of Rancho Cordova and has been razed. Native vegetation (weeds) has grown across the former building footprints on the west half of the Site, and through cracks in the asphalt paved areas that remain, with the east half remaining vegetated. Therefore, biological hazards will be limited to urban animals such as rats, raccoons, possums, and feral cats and dogs that may be encountered during field operations. Personnel should look for signs of animal activities (i.e., tracks, foraging areas, etc.) and avoid those areas, where possible. Biting or stinging insects and spiders (e.g., fleas, mosquitos, etc.) may also be a potential concern.

Homeless persons have also been seen on-Site and residing in vehicles parked along La Loma Avenue.

For purposes of this HASP, site personnel are categorized as Class B in the Bloodborne Pathogens Program, which pertain to jobs where required tasks do not, but could involve exposure to blood, bodily fluids, or tissues – for example, in the event first aid or CPR is administered. The implementation of Universal Precautions will minimize the chance of contracting blood borne disease.

The Tetra Tech Safe Work Practice for Biohazards is provided in **Appendix B**.

5.4 TASK HAZARD ANALYSIS SUMMARY

Table 5-2 provides a task hazard analysis matrix of the planned field activities listed in Section 4.0 for quick identification of chemical, physical, and biological hazards that may be encountered as part of site conditions and that are inherent to one or more tasks. **Table 5-3** provides a detailed list of required control measures for each site and task hazard listed in Table 5-2. The table also refers to Tetra Tech Safe Work Practices (SWP) which have been developed to address many common health and safety hazards. The SWPs must be reviewed prior to mobilization for understanding and hazard control planning purposes. The applicable SWPs should also be reviewed as part of the daily tailgate safety meeting to focus on that day's planned work and associated hazards.

TABLE 5-2
TASK HAZARD ANALYSIS MATRIX

	TASKS				
HAZARDS	**USA/Utility Clearance**	**Any Drilling Activities (pre- and post-excavation)**	**Excavation Related Activities (excavation, stockpiling, stockpile sampling, backfilling)**	**Chemical Oxidant Applications (soil mixing or injections)**	**Temporary Soil Vapor Extraction System Installation and Operation**
Exposure to COCs/ airborne dust		X	X	X (oxidant dust)	
Heavy Equipment		X	X	X	X
Vehicle Traffic		X	X	X	X
Excessive Noise		X	X	X	X
Pinch/compression points		X	X	X	
Power/hand tools		X	X	X	
Sun (UV) exposure	X	X	X	X	X
Heat Stress (depending on season)		X	X	X	X
Slips, trips, falls	X	X	X	X	X
Underground utilities		X	X		X
Manual lifting/ material handling		X	X	X	X

TABLE 5-3
HAZARD CONTROL SUMMARY

Potential Hazard	Controls
Exposure to COCs	1. Stand upwind of chemical products (i.e oxidant dust)/COC sources whenever possible. 2. Minimize direct contact and contact time with contaminated media. 3. Do not consume food/drink, apply cosmetics or smoke in work areas. 4. Wear assigned PPE (minimum modified Level D). 5. Use direct-reading monitor (PID) to assess total VOCs at worker breathing zone and at source. Adhere to prescribed action levels. 6. Review chemical hazard information on chemical and physical properties, toxic effects, and exposure limits. 7. Promptly report any encounter of unknown materials, strong odors, free product, and any possible signs or symptoms of chemical exposure.
Heavy Equipment	1. Review SWP 5-7 in Appendix B. 2. Wear ANSI Class 2 or higher reflective safety vest. 3. Maintain line of vision with operator. Use established hand signals. 4. Keep a safe distance (swing radius + boom).
Vehicle Traffic	1. Review TT program DCN 4-4. 2. Wear ANSI Class 2 or higher reflective safety vest. 3. Use cones, flags, barricades, caution tape and signage to define work area and warn oncoming traffic (per Work Zone Plan). 4. Use vehicle with flashers/arrowboard/strobe to warn/direct traffic (not applicable). 5. Engage police escort for high-traffic locations (not applicable).
Excessive Noise (> 85 dBA)	1. Obey posted signage for areas requiring hearing protection. 2. Wear required hearing protection when noisy equipment such as drill rig, jackhammer, cut saw, air compressor, blower, generator, etc. is operating onsite. 3. Use rule of thumb to know when to use hearing protection (if you must raise your voice to be heard at arm's length.
Heat Stress	**1.** Follow SWP 5-15 for heat stress. Follow TT Procedures for Heat Illness Prevention.**!** 2. Pre-hydrate and stay hydrated. Fill out and comply with TT heat Illness Prevention Checklist. Avoid alcohol, salt, and caffeine. Eat more fruit and vegetables. 3. Provide and use shade pursuant to Procedures for Heat Illness Prevention 4. Acclimate slowly. Take rest breaks as needed in shade or air-conditioned space. 5. Wear cotton, light-colored clothing, and cooling garments (dew rags). 6. Schedule work for cooler parts of the day (early AM/late PM).

TABLE 5-3 HAZARD CONTROL SUMMARY	
Potential Hazard	Controls
	7. Check oral temperature and pulse if early signs and symptoms appear (flushed skin, fatigue, dizziness, nausea, headache). 8. Get IMMEDIATE medical attention if heat stroke is suspected.
Slips, trips, falls (STF)	1. Preview work area to identify site hazards and correct promptly. If not possible, place barricades/caution tape and communicate locations to all onsite workers. 2. Wear sturdy safety boots with non-skid sole and good tread for traction. 3. Avoid wet, slick, and icy surfaces. Dry, cover or provide friction surface for safe passage OR use alternate route.
Underground utilities	1. Refer to SWP 5-35. 2. Conduct utility clearance with One Call System (811) for public areas and third-party contractor for private property. 3. Railroads: Before any DIGGING near Client signals, obtain proper clearance and instructions from the Local Signals and Communications Supervisor (not applicable).
Material handling/ manual lifting	1. Review SWP 5-19. 2. Use mechanical lifting device or a lifting aid where needed. 3. Plan the lift. Check route for clearance. 4. Bend at the knees and use leg muscles when lifting. 5. Use the buddy system when lifting heavy (> 35 lbs.) or awkward objects. 6. Do not bend or twist the body while lifting.

6.0 SITE CONTROL

To control the impact and spread of contamination and prevent employee exposures to chemical and physical hazards during site operations, onsite work areas may be divided into an exclusion zone, a decontamination zone, and a support zone. Work and support areas will be established based on necessary security measures, ambient air data, and site-specific conditions.

Access to the exclusion and decontamination zones will be restricted to authorized personnel. Any visitors to these areas must present proper identification and be authorized to be on site. The Tetra Tech SSC will identify work areas that visitors or personnel are authorized to enter and will enforce site control measures.

The following sections describe the exclusion zone, the decontamination zone, and the support zone as well as procedures to be followed in each.

The entire Site is secured by a gated chain link fence; thus no other vehicle or pedestrian traffic will be on-Site.

6.1 WORK ZONES

6.1.1 Exclusion Zone

An Exclusion Zone will be established at each intrusive operation (e.g., drilling, well abandonment, excavation) and waste staging area (soil stockpile). Exclusion zone size and dimensions will vary based on activities. The perimeter of the exclusion zone and an appropriate radius around work task areas will be demarcated by a physical barrier, such as barricade tape or traffic cones, to restrict access. Signs will be posted to inform and direct site personnel and site visitors.

A daily roster with the date of each person's entrance into the exclusion zone; the person's name, signature, and organization; and the time of entry and exit will be kept for all personnel working in the zone. Visitors will not be permitted to enter the exclusion zone without proper qualifications, equipment, and Tetra Tech SSC authorization and escort.

Exclusion zones will remain marked until the SSC has evaluated the restoration effort and has authorized changing the zone status.

6.1.2 Decontamination Zone

This zone will occur at the interface of the Exclusion Zone and the Support Zone and will provide for the transfer of construction materials and equipment, the decontamination of transport vehicles handling contaminated soils prior to entering the Support Zone, and the decontamination of personnel, PPE, and equipment prior to entering the Support Zone. Access to this Zone will be restricted to personnel who meet all HAZWOPER training and medical surveillance requirements and have the required PPE. No food or drink consumption or smoking is permitted in this Zone.

6.1.3 Support Zone

The support zone will consist of any uncontaminated and nonhazardous part of the site and should be situated in an area generally upwind of any exclusion zone whenever possible. The Support Zone for this project will include a staging area where site vehicles can be parked, equipment will be unloaded, and where food and drink containers will be maintained. The support zones will be established in clean areas of the site. Site visitors not meeting training, medical surveillance, and PPE requirements must stay in the support zone.

For this Site, the entire Site is fenced and thus serves as the Exclusion Zone.

6.2 SITE SECURITY AND SITE VISITORS

Tetra Tech will retain control over the active operational areas. The SSC will serve as a focal point for site personnel and will serve as the final line of security for the work areas. All work will cease in the event of unauthorized personnel entering the exclusion zone. Work will remain suspended until the unauthorized visitor can be removed. Local police may be contacted to remove unauthorized persons who refuse to leave the Site. The SSC or designee will serve as the primary enforcement contact for removing unauthorized visitors.

All authorized visitors will generally gain initial access to the site by coordinating with the Tetra Tech project manager. Once onsite, all visitors entering the Site will be required to receive the site-specific training, complete the sign-in form, and will be escorted at all times. All visitors are required to observe the personal protective equipment and site restrictions in effect at the time of their visit.

Authorized site visitors may include:

- Personnel invited to observe or participate in operations by Tetra Tech
- Federal, state and local regulatory personnel (i.e. Environmental Protection Agency [EPA], OSHA, RWQCB)
- Property Owners
- Client representatives
- Other authorized visitors

6.3 COMMUNICATIONS

Successful communication between field teams and personnel in the support zone is essential. The following communication systems will be available during site activities:

- Cellular telephones

The hand signals listed below can be used by site personnel in emergency situations or when verbal communication is difficult.

Signal	Definition
Hands clutching throat	Out of air or cannot breathe
Hands on top of head	Need assistance
Thumbs up	Okay, I am all right, or I understand
Thumbs down	No or negative
Arms waving upright	Send backup support
Gripping partner's wrist	Exit area immediately

7.0 PERSONAL PROTECTIVE EQUIPMENT

The level of personal protection to be used for work tasks at the Site have been selected based on known or anticipated physical hazards; types and concentrations of contaminants that may be encountered on site; and contaminant properties, toxicity, exposure routes, and matrixes.

Modified Level D PPE is the minimum acceptable level required for routine work at the Site, which includes the following items:

- Standard work clothes – long sleeves, long pants, or coveralls
- Chemical-resistant clothing (such as Tyvek® or Saranex® coveralls) (optional)
- Leather work gloves (physical hazards)
- Chemical-resistant gloves: nitrile
- Safety boots with steel toe protection
- Disposable boot covers or chemical-resistant outer boots (optional)
- Safety glasses with side shields or goggles
- Hard hat
- ANSI Class 2 or better high-visibility safety vest
- Hearing protection (ear plugs or muffs with minimum 25 dB noise reduction rating)
- Any addition PPE recommended by the chemical oxidant (KMnO4) manufacturer (i.e. respiratory protection).

Personnel must maintain proficiency in the use and care of PPE that is to be worn. Only PPE that meets the following ANSI standards are to be worn:

- Eye protection – ANSI Z87.1-1989
- Head protection – ANSI Z89.1-1986
- Foot protection – ANSI Z41-1991

8.0 DECONTAMINATION PROCEDURES

Decontamination is the process of removing or neutralizing contaminants on personnel or equipment. When properly conducted, decontamination procedures protect workers from contaminants that may have accumulated on PPE, tools, and other equipment. Proper decontamination also prevents transport of potentially harmful materials to uncontaminated areas. Personnel and equipment decontamination procedures are described in the following sections.

8.1 PERSONNEL DECONTAMINATION

Personnel decontamination at the site will be limited by using disposable PPE whenever possible. Personnel and PPE will be decontaminated with potable water or a mixture of detergent and water. Liquid and solid wastes generated during decontamination will be collected and drummed.

For routine activities, the following decontamination procedures will be followed:

- ***Disposable PPE***: nitrile gloves will be placed in a plastic disposal bag.
- ***Non-Disposable PPE***: leather or other work gloves and boots are to be decontaminated as necessary by washing with a Liquinox® or Alconox® solution and rinsing them with hot water. Remove and retain neoprene boots for reuse, if possible.
- Thoroughly wash the hands and face with water and soap.

Used, disposable PPE will be collected in sealable containers and will be disposed of in accordance with procedures described in the Work Plan (pending characterization, if necessary). Personnel decontamination procedures may be modified as necessary while on site.

8.2 EQUIPMENT DECONTAMINATION

Decontamination of all sampling and field monitoring equipment used during site activities will be required. Equipment decontamination procedures are based on guidelines appropriate for low-level contamination. Additional procedures may be found in EPA SOP No. 2006, titled “Sampling Equipment Decontamination” dated August 11, 1994.

Sampling and field equipment will be decontaminated before and after each use as described below.

- Scrub the equipment with a brush in a bucket containing Liquinox® or Alconox® solution and distilled water.
- Triple-rinse the equipment with distilled water and allow it to air-dry.
- Reassemble the equipment and place it on plastic or aluminum foil in a clean area. If aluminum foil is used, wrap the equipment with the dull side of the aluminum foil toward the equipment.

Other field equipment can be decontaminated with hot water and/or protected from exposure by covering with disposable covers such as plastic to minimize required decontamination activities. Wastewater from equipment decontamination activities will be transferred to the onsite treatment plant for treatment and disposal.

9.0 AIR MONITORING

Real-time direct-reading monitoring instruments will be used to evaluate source areas (i.e., sample locations, wells, excavation areas, etc.), worker breathing zones, and the Site perimeter. A Photoionization Detector (PID) with a 10.6 eV lamp will be used at each source location to detect the presence of any VOCs, as well as real-time perimeter dust monitors. Background levels will be determined and noted prior to recording the level at the monitored points. The background readings will be taken away from any areas of potential contamination. These readings, any influencing conditions (i.e., weather, temperature, humidity) and site location must be documented in the field operations logbook or other site documentation (e.g., sample log sheet).

The instruments will be maintained, and field calibrated by qualified field personnel (SSC). Operational checks and field calibration will be performed on all instruments each day prior to their use according to manufacturer's recommendations (for example, the PID must be field calibrated daily, and an additional field calibration must be performed at the end of each day to determine any significant instrument drift). Periodic operational checks or re-calibration using calibration gas should be performed if elevated readings are noted during the day to ensure there is limited instrument drift. These operational checks and calibration efforts will be performed in a manner that complies with the employee's health and safety training, the manufacturer's recommendations, and with the applicable manufacturer standard operating procedure. All calibration efforts must be documented.

Figure 9-1 is provided for documenting these calibration efforts. This information may instead be recorded in a field operations logbook, provided that the information specified in Figure 9-1 is recorded. This required information includes the following:

- Date calibration was performed
- Individual calibrating the instrument
- Instrument name, model, and serial number
- Any relevant instrument settings and resultant readings (before and after) calibration
- Identification of the calibration standard (lot no., source concentration, supplier)
- Any relevant comments or remarks

Real-time air monitoring frequency will be every 60 minutes after the background level is established and prior to a change in operations that might increase the risk of exposure.

An Air and Dust Monitoring Plan has been prepared for this Site, detailing additional monitoring tasks.

FIGURE 9-1

DOCUMENTATION OF FIELD CALIBRATION

SITE NAME: Vacant Site – Rancho Cordova Civic Center site PROJECT NO.: 117-9040

Date of Calibration	Instrument Name and Model	Instrument I.D. Number	Person Performing Calibration	Instrument Settings		Instrument Readings		Calibration Standard (Lot # _____)	Remarks/ Comments
				Pre-Calibration	Post-Calibration	Pre-Calibration	Post-Calibration	PID: 10 ppm Isobutylene in air	

10.0 CONFINED SPACE ENTRY

It is not anticipated, under the proposed scope of work, that confined space and permit-required confined space activities will be conducted. **Therefore, personnel under the provisions of this HASP are not allowed, under any circumstances, to enter confined spaces**. Entry is defined as breaking the plane of the opening to the confined space with any body part.

Activities will include oversight of excavation and trenching for utilities; resulting trenches may represent confined spaces. Tetra Tech employees will not be entering the trenches or other potential confined spaces. Any sampling of soil from excavations or trenches will performed by sampling soil from backhoe/excavation bucket. The resulting soil excavation sidewalls will be sloped 1:1, resulting in a safe excavation.

However, should future work require confined space entry, Tetra Tech and subcontractor personnel conducting the entry will first receive confined space entry training for the category of confined space(s) to be entered (permit-required or non-permit-required) and for the designated role each employee will play in the entry operation (i.e., attendant, entrant, supervisor, or rescue). Training will be in accordance with the revised OSHA permit-required confined space entry (CSE) standard (29 CFR 1910.146). The purpose of the CSE procedure is to protect employees from potentially hazardous environments and to facilitate immediate rescue in an emergency.

A confined space is defined as an area which has the following characteristics:

- Is large enough and so configured that an employee can bodily enter and perform assigned work.
- Has limited or restricted means for entry or exit (for example, tanks, manholes, sewers, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry).
- Is not designed for continuous employee occupancy.

Additionally, a Permit-Required Confined Space must also have one or more of the following characteristics:

- Contains or has a potential to contain a hazardous atmosphere.
- Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly caving walls or by a floor that slopes downward and tapers to a smaller cross-section.
- Contains any other recognized, serious, safety or health hazard.

11.0 TRAINING AND MEDICAL SURVEILLANCE REQUIREMENTS

11.1 INTRODUCTORY/REFRESHER/SUPERVISORY HAZWOPER AND OSHA TRAINING

All onsite personnel who may be exposed to hazardous conditions, including Tetra Tech and subcontractor personnel and site visitors who will participate in onsite activities, will be required to meet training requirements outlined in 29 CFR 1910.120, "Hazardous Waste Operations and Emergency Response." All general site workers must have completed the 40-hour initial HAZWOPER training Project managers and field supervisors will have received 8-hour HAZWOPER Supervisor training and all site personnel must have current 8-hour HAZWOPER annual refresher training. At least one site person must be current in basic first aid, CPR and bloodborne pathogens (1910.1200). All Tetra Tech site personnel have received the updated hazard communication/GHS training as of the December 1, 2013 OSHA due date.

Additional required client-required training for onsite personnel includes: **None**

Documentation of 40-hour initial HAZWOPER, 8-hour HAZWOPER supervisor, and annual 8-hour HAZWOPER refresher training, as well as site-specific training are maintained by the PM and by the SSC, either on-Site or at the Tetra Tech office. Copies of certificates or other official documentation will be used to fulfill this requirement.

Depending on the work to be performed by a subcontractor, additional OSHA-required health and safety training may include confined space entry operations, excavation safety, and Construction Competent Person (by specialty). The selected excavation contractor will have a Competent Person to design the soil excavation work and perform routine inspections of progress. Tetra Tech subcontractors must provide copies of training certificates for all subcontractor personnel participating in site activities, as requested.

11.2 SITE-SPECIFIC TRAINING

11.2.1 HASP Review

Tetra Tech will provide site-specific training to all Tetra Tech and subcontractor personnel who will perform work at the Site. Site-specific training will also be provided to all authorized site visitors who wish to enter the exclusion zones to perform functions that may or may not be directly related to Site or Tetra Tech operations. All personnel and visitors entering the site will be required to review this HASP and sign the Compliance Agreement Form (HSP-4).

Site-specific training will include:

- Contents of this HASP
- Emergency response procedures (evacuation and assembly points)
- Names of designated personnel responsible for site health and safety
- Site and operation hazards and required controls
- PPE requirements
- Spill response procedures
- Review of the contents of relevant SDSs

11.2.2 Daily Safety Tailgate Meetings

The Tetra Tech SSC will conduct a brief meeting daily to discuss operations planned for that day, which must be attended by all onsite Tetra Tech and subcontractor personnel. The daily safety meeting will address:

- Expected conditions at the site;
- Daily activities;
- Job hazard analysis review;
- Stop-work authority;
- Safety deficiencies previously observed and status of corrective action;
- Any changes in the emergency procedures; and,
- Personnel bee allergies or medical conditions which are important for coworkers to be aware.

The meeting discussions will be documented on the Daily Tailgate Safety Meeting (Form HST-2) (**Appendix A**), which will be signed daily by all Site workers. All safety-critical questions and the SSC responses/directions will be documented on this Form.

11.3 MEDICAL SURVEILLANCE

All Tetra Tech and subcontractor personnel involved in on-Site activities must participate in a medical surveillance program as required by 29 CFR 1910.120(f). Tetra Tech has established an employee medical surveillance program with CORE Occupational Health. Employee HAZWOPER medical clearance and respirator clearance reports are maintained at the Corporate Health and Safety office and by the Tetra Tech Rancho Cordova, California office health & safety coordinator. Subcontractors must provide evidence of current medical clearance for HAZWOPER sites. No additional site-specific medical monitoring is required for activities at this site.

11.4 SITE VISITORS

Site visitors wishing to enter the exclusion zone will be required to produce the necessary information supporting clearance to the site, including information attesting to training and medical surveillance.

12.0 SPILL PREVENTION AND CONTAINMENT PROGRAM

12.1 SCOPE AND APPLICATION

This program applies to the single or aggregate accumulation of bulk storage materials (over 55-gallons). As the classification of certain materials such as Investigation Derived Waste (IDW) is unknown, these materials will be treated as hazardous, pending laboratory certification to the contrary. The types of materials for which this program will apply are as follows:

- IDW such as decontamination fluids, soil cuttings, and purge and well development waters, concrete coring water, etc.
- Resource Storage – Limited fuel and lubricant storage (in equipment and trucks). No bulk storage of fuels will be conducted on-site. Equipment will be serviced and fueled by an off-site vendor as needed.

The spill containment and control will be engaged any time there is a release of the above-identified materials from a containment system or vessel to minimize associated hazards.

12.2 POTENTIAL SPILL AREAS

Potential spill areas will be periodically monitored in an ongoing attempt to prevent and control further potential contamination of the environment. Currently, limited areas are vulnerable to this hazard including:

- Bare soil areas adjacent to the asphalt paved parking areas (i.e. diesel fuel release from heavy equipment)

The primary substances stored or handled onsite with the potential to be released are soil treatment chemicals (oxidants). The potential for these substances to be released is minimal as they will be intentionally mixed into backfill soil or injected into the subsurface as an approved form of soil treatment. A ruptured fuel tank or fuel line on a drill rig or piece excavation equipment is possible, but not expected.

Safety Data Sheets[1] (SDS) for all hazardous substances/materials brought onsite are included in the HASP (**Appendix C**) and should be consulted in case of a spill or release. The two main goals will be to contain and clean up any spills.

It is anticipated that the IDW (pre-excavation soil borings) generated by this scope of work will be placed in the resulting soil stockpile area and profiled. The results of sample analyses will determine disposal and/or oxidant treatment methods when the soil is returned to the excavation.

[1] Formerly Material Safety Data Sheets (MSDSs)

12.3 CONTAINMENT AREAS

To facilitate leak and spill inspection and response, and to minimize potential hazards which may impact the integrity of the storage containers, the staging area for these substances will be structured as follows:

12.3.1 IDW

Currently, all soil generated during the scope of the work will be profiled, treated with oxidant if needed, and returned to the excavation. Any construction related debris (asphalt, concrete, discovered piping) and well abonnement casing/vault boxes will be transported off-site for recycling or disposal.

12.4 MATERIALS HANDLING

To minimize the hazards associated with moving drums and containers (i.e., lifting, pinch and compression points), material handling will be supported in the following manner:

- A drum cart with pneumatic tires will be required if drums are to be moved at the IDW storage area. This cart will be used to relocate drums within the staging and satellite storage location.

Other means of material handling will be evaluated by the SSC based on their ability to minimize or eliminate material handling hazards.

12.5 LEAK AND SPILL DETECTION

To establish an early detection of potential spills or leaks, a periodic walk-around by the personnel staging materials in the work area will be conducted during working hours to visually determine that storage vessels or excavation equipment is not leaking, and that soil piles are appropriated covered and secured. If a leak is detected, or a soil pile is uncovered, the Field Supervisor will be notified, and the Spill Containment/Control Response Plan as specified in **Section 12.8** will be engaged. Inspections will be documented in the project logbook.

12.6 PERSONNEL TRAINING

Personnel will be instructed in the procedures for incipient spill prevention, containment, and collection of hazardous materials in the site-specific training. The Field Supervisor and/or the SSC will serve as the Spill Response Coordinators for this operation, should the need arise. Should an incidental spill occur, these individuals will engage incident response measures. It will be the responsibility of these individuals to insure they have the supplies and equipment specified in Section 12.7 to support this function. Insufficient supplies or resources should be reported to the Field Supervisor.

12.7 SPILL PREVENTION AND CONTAINMENT EQUIPMENT

The following represents the minimum equipment that will always be maintained at the staging areas for the purpose of supporting this Spill Containment/Control Plan.

- Sand, clean fill, vermiculite, or other non-combustible absorbent (Oil-dry)
- Extra drums should the need to transfer material from leaking containers arise.
- Pumps (Gas or Electric as necessary for transferring liquids from leaking containers)/tubing

- Shovels, rakes, and brooms
- Container labels
- Personal Protective Equipment (nitrile outer gloves, splash face shield, impermeable over-boots, rain suit)
- General spill prevention equipment such as a shovel, broom, 55-gallon Department of Transportation (DOT) drum UN 1A2, and absorbent material will be maintained onsite to respond to any spill based on the nature of the task to be performed.

12.8 SPILL CONTAINMENT/CONTROL RESPONSE PLAN

This section describes the procedures the Tetra Tech field personnel will employ upon the detection of a spill or leak.

- Notify the SSO or FOL immediately upon detection of a leak or spill, or uncovered soil stockpile.
- Employ the PPE stored at the staging area. Initiate incidental spill response measures. Take immediate actions to stop the leak or spill by plugging or patching the container or raising the leak to the highest point in the vessel. Spread the absorbent material in the area of the spill, covering it completely.
- Transfer the material to a new vessel; collect and containerize the absorbent material. Label the new container appropriately. Await analyses for treatment and disposal options.
- Re-containerize spills, including 2-inch of top cover (if over soils) impacted by the spill. Await test results for treatment or disposal options.
- If the spill cannot be controlled or contained, initiate emergency alerting procedures for that area to remove non-essential personnel.
- Recover the soil stockpiles as needed during windy conditions.

It is not anticipated that a spill will occur that the field crew cannot handle. Should this occur, notification of the appropriate emergency response agencies will be carried out by the Field Supervisor or SSC in accordance with the procedures specified in Section 13.0.

13.0 EMERGENCY ACTION PLAN

13.1 INTRODUCTION

This section describes emergency response planning procedures to be implemented for the site. This Emergency Action Plan conforms to the requirements of 29 CFR 1910.38(a), as allowed in 29 CFR 1910.120(l)(1)(ii). The following sections discuss pre-emergency planning, personnel roles and lines of authority, emergency recognition and prevention, evacuation routes and procedures, emergency contacts and notifications, hospital route directions, emergency medical treatment procedures, fire or explosion, spills or leaks, emergency equipment and facilities, and reporting.

13.2 PRE-EMERGENCY PLANNING

Initial hazard/risk assessment efforts have identified exposure to physical, chemical, and biological hazards and fire as the most probable emergencies that could be encountered during activities at the Site. To minimize or eliminate the potential for these emergency situations and to reduce the severity of any potential incident, pre-emergency planning activities associated with this project include the following:

- Coordinate with the Site project manager and/or local emergency response personnel to ensure that Tetra Tech emergency actions are compatible with existing emergency response procedures
- Establish and maintain information at the project staging area (e.g., support zone) for easy access in the event of an emergency:
    - Tetra Tech HASP
    - Logbook identifying personnel onsite each day
    - Emergency Contacts List (multiple copies; and posted)
    - Maps to Hospital and Clinic Physician (copies should be placed in each vehicle)
    - Chemical Inventory (used onsite), with Safety Data Sheets (SDSs) (**Appendix C**)

During the project kickoff meeting and daily tailgate safety meetings, all onsite employees will be trained in and reminded of the provisions of this Section, site communication systems, and site evacuation routes. The emergency response provisions will be reviewed on a regular basis by the Tetra Tech SSC and will be revised, if necessary, to ensure that they are adequate and consistent with prevailing site conditions.

13.3 PERSONNEL ROLES AND LINES OF AUTHORITY

The Tetra Tech SSC has primary responsibility for responding to and correcting emergency situations and for taking the appropriate measures to ensure the safety of site personnel and the public. The SSC will coordinate responding to emergencies. Possible actions may include evacuation of personnel from the site area. The SSC is also responsible for ensuring that corrective measures have been implemented, appropriate authorities have been notified, and follow-up reports have been completed.

The SSC will also be responsible for the following:

- Identifying a chain of command for emergency action
- Educating site workers to the hazards and control measures associated with planned activities at the Site, and providing early recognition and prevention where possible
- Periodically perform practice drills as appropriate to ensure site workers are familiar with incidental response measures.
- Provide the necessary equipment to safely accomplish identified tasks.
- Provide first aid kit, emergency eye wash, fire extinguishers and spill kits and place them in strategic locations for quick access.

Individual subcontractors are required to cooperate with the SSC, within the parameters of their scopes of work.

Project personnel are required to report all serious near misses, injuries, illnesses, spills, releases, fires, explosions, equipment or property damage, and motor vehicle accidents to the SSC. The SSC must be notified of any onsite emergencies and is responsible for ensuring that the appropriate emergency procedures described in this section are followed.

13.4 EMERGENCY RECOGNITION AND PREVENTION

Table 5-1 lists potential site chemical hazards, and Table 5-2 provides information on the health and safety hazards associated with the different tasks planned for the site. Onsite personnel will be made familiar with this information and with techniques of hazard recognition through prior health and safety training and site-specific briefings.

13.4.1 Recognition

Many chemical, physical and biological hazards that could lead to emergency scenarios are generally recognizable by visual observation. Thus, hazard identification should include pre-work and periodic 360° walk-around surveys, equipment and tool inspections, and background surveys with direct-reading air monitoring instrumentation.

The field supervisor, SSC, and subcontractor supervisor will be responsible for performing surveys of work areas prior to initiating site operations and periodically while operations are being conducted. Site surveys will be conducted at all work locations prior to the commitment of resources and personnel. This will be done for the purpose of removing or barricading identified physical hazards. Additionally, site surveys will be conducted at least once a week at all resource/staging areas. All site surveys conducted during this effort will be documented in the Project or Field Operations Logbook and survey findings will be discussed with field personnel as part of the tailgate safety meetings. In addition, site personnel will be responsible for reporting hazardous situations. Where potential hazards exist, Tetra Tech will initiate control measures to prevent adverse effects to human health and the environment.

13.4.2 Prevention

Tetra Tech and subcontractor personnel will minimize the potential for emergencies by following the direction and guidance provided within this HASP as well as the SWPs and applicable OSHA regulations as they apply to the tasks to be conducted. Additionally, prevention will be facilitated through employment of offensive and defensive measures in removing or denying access to hazards identified through the site survey activities. Preparation through acquiring and placing emergency equipment in the work areas will also aid in controlling incidents from escalating into an emergency.

The above actions will provide early recognition for potential emergency situations. Should an incident occur, Tetra Tech will take measures in the beginning stages to control these situations. However, if the field supervisor and the SSC determine that an incident has progressed to a serious emergency, Tetra Tech will withdraw and notify the appropriate response agencies listed in **Table 13-1.**

13.5 EVACUATION PROCEDURES AND PLACES OF REFUGE

An evacuation will be initiated whenever specified hazard controls are insufficient to protect the health, safety or welfare of site workers. Specific examples of conditions that may initiate an evacuation include, but are not limited to the following:

- Severe weather conditions
- Fire or explosion
- Monitoring instrumentation readings which indicate levels of contamination that are greater than instituted action levels
- Personnel showing signs or symptoms of potential exposure to site contaminants or natural stresses (e.g., heat stress, hypothermia, or snake bite)
- Injury or illness requiring medical transport and care
- Major spill or release

Field activities at the Site will involve Tetra Tech personnel working within proximity to each other; therefore, hand signals and voice commands will be sufficient to alert site personnel of an emergency. In the event of an emergency, the following procedures will be followed:

- Initiate an evacuation by hand signals or voice commands, immediately stop all activities, and report to designated refuge point. **The Site safe place of refuge will be** identified prior to the commencement of site activities within an identified area as determined by the SSC.
- Describe to the SSC (who will serve as the Incident Coordinator) what has occurred and as many details as possible
- Once all personnel have been evacuated, begin appropriate response procedures to control the situation (incipient response measures for fire, spill, and injury (first aid) and site control and security measures, as necessary.

Evacuation procedures will be discussed prior to the initiation of any site work. Evacuation routes from the site and safe places of refuge are dependent upon the location at which work is being performed and the circumstances under which an evacuation is required. Additionally, site location and meteorological conditions (i.e., wind speed and direction) may dictate evacuation routes. As a result, refuge points will be selected and communicated daily to the workers relative to the site location where work is being performed. Evacuation should always take place in an upwind direction from the site.

Whenever possible, the safe place of refuge will also serve as the telephone communications point for that area. During an evacuation, personnel will remain at the refuge location until directed otherwise by the SSC or the onsite Incident Commander of the Emergency Response Team. The SSC will take a head count at this location to account for and to confirm the location of all site personnel. Emergency response personnel will be immediately notified of any unaccounted personnel.

13.6 DECONTAMINATION PROCEDURES

During an evacuation, decontamination procedures will be performed only if doing so does not further jeopardize the welfare of site workers. However, it is unlikely that an evacuation would occur which would require workers to evacuate the site without first performing decontamination procedures. A supply of clean decon water is available at a metered fire hydrant on Site.

13.7 INITIAL RESPONSE AND EMERGENCY NOTIFICATIONS

The Tetra Tech SSC must survey the situation and avoid taking any action or delay that could endanger anyone's life. Tetra Tech personnel may perform rescue operations from emergency situations and may provide initial medical support for injury/illness requiring only "basic first-aid" level support, and only within the limits of training obtained by site personnel. Basic first-aid is considered treatment that can be rendered by a trained first-aid provider at the injury location and not requiring follow-up treatment or examination by a physician (for example: minor cuts, bruises, stings, scrapes, and burns). Personnel providing medical assistance are also required to be trained in the requirements of OSHA's Bloodborne Pathogen Standard (29 CFR 1910.1030). Medical attention above first-aid level support will require assistance from the designated emergency response agencies.

Basic first aid measures for chemical exposures and non-medical initial responses are summarized below:

Chemical Exposure	***Skin Contact:*** ▪ Remove contaminated clothing. ▪ Wash immediately with water. ▪ Use soap if available. ▪ If irritation persists, seek medical attention. ***Eye Contact:*** ▪ ***Flush eyes with water for 15 minutes.*** ▪ ***If symptoms persist, seek medical attention.*** ***Inhalation:*** ▪ ***Remove person from contaminated atmosphere.*** ▪ ***If necessary, provide CPR. Seek medical attention.*** ▪ ***DO NOT ENTER A CONFINED SPACE TO RESCUE SOMEONE WHO HAS BEEN OVERCOME UNLESS PROPERLY TRAINED/EQUIPPED AND ALL CSE PROTOCOLS ARE FOLLOWED WITH QUALIFIED ATTENDANT ONSITE.*** ***Ingestion:*** ▪ ***NEVER induce vomiting on an unconscious person.*** ▪ ***NEVER induce vomiting when ingestion of acids, alkalis, or petroleum products is suspected.*** ▪ ***Contact the poison control center (see Table 13-1 for telephone number).*** ▪ ***Administer CPR, if necessary. Seek medical attention.*** ***Possible Exposure Symptoms:*** • ***Headache, dizziness, nausea, drowsiness, respiratory tract, skin or eye irritation***
Snake Bite	• Follow the standard notification procedures (call 911). Notify emergency response personnel of the nature of the snake bite. • If possible, take photo of snake. • Have victim remain calm until ambulance team arrives. • Keep the bite location below the heart at all times. • Apply a pressure wrap (for extremities) just above and over the bite area. With a couple wraps of the pressure wrap in place over the bite area, apply a splint, and continue the application of the pressure wrap. The purpose for the splint is to restrict the movement of the extremity. This, along with the pressure wrap, will aid in restricting the toxins from leaving the site of the bite.
Incipient Stage Fire	• A fire that cannot be readily extinguished with one 10-pound fire extinguisher will be considered major and may require evacuation of project and/or site personnel to safe areas. • Only attempt to put out fire if you are trained in the use of the fire extinguisher, have confidence that you can put the fire out, and you have a route of escape from the fire.
Minor Spill or Leak	• Use onsite spill kit to contain/absorb and remove spilled materials. • See details on spill prevention and containment in SWP 5-47.
Major Spill or Leak	• Evacuate the affected area and relocate personnel to an upwind location. • Inform the Tetra Tech SSC, a Tetra Tech office, and a site representative immediately. • Locate the source of the spill or leak, and stop the flow if it is safe to do so. • Begin containment and recovery of spilled or leaked materials. • Notify the client and appropriate local, state, and federal agencies.

Workers who are ill or who have suffered a non-serious injury may be transported by site personnel to nearby medical facilities, provided that such transport does not aggravate or further endanger the welfare of the injured/ill person.

Personnel requiring treatment greater than first aid will constitute an emergency for which the appropriate agency must be notified. If an exposure to hazardous materials has occurred, provide information on the chemical, physical, and toxicological properties of the subject chemical(s) to medical services personnel.

If an emergency cannot be handled using onsite resources, personnel will evacuate to a safe place of refuge and the appropriate emergency response agencies will be notified. It has been determined that most potential emergency situations would be better supported by outside emergency responders. These agencies are located within a reasonable distance from the area of site operations, which ensures adequate emergency response time.

If site personnel cannot control the incident through offensive and defensive measures, the field supervisor (or SSC, if designated) will enact the following emergency notification procedures to secure additional assistance:

- Call 911 or other emergency contacts (Table 13-1) to report the emergency and provide the following information:
    - Location of emergency
    - Type of emergency
    - Number of injured personnel
    - Brief description of what occurred.

Stay on the phone and follow the instructions given by the operator. The operator will then notify and dispatch the proper emergency response agencies.

The Emergency contacts list will also be posted [*insert emergency contact list location*] and be placed in all project vehicles. In case of any emergency (e.g., injury, illness, spill/release, and fire), verbal notification to the Tetra Tech project manager must be provided as soon as possible. If project personnel determine that the situation could either directly or indirectly threaten human health or the environment, the Tetra Tech Project Manager will contact the appropriate emergency response agencies.

The nearest medical facility to the site is the Mather VA Hospital. Maps and directions to these facilities are provided in **Section 13.10** and **Section 13.11**, respectively.

For non-life-threatening incidents (e.g., muscle strains and sprains, and minor lacerations), personnel are encouraged to contact CORE **(888-449-7787**) for guidance on first aid and medical treatment. CORE may direct the affected employee to the Chartis/AIG-authorized medical clinic/physician for further evaluation of a work-related injury or illness. **The authorized doctor offices or clinics have agreed to accept workers compensation patients without an appointment.** Information for the clinic nearest to the Site is provided below:

Concentra Urgent Care
10670 White Rock Rd, Suite 100, Rancho Cordova, CA 95670
916-364-1733

Table 13-1 EMERGENCY CONTACTS	
LOCAL EMERGENCY SERVICES	
Emergency	911
City/State Police	Police: (916) 362-5115
City/State Fire Department	Fire: (916) 859-4300 (Metro Fire Sacramento
EMS/Ambulance	911
One Call or state program name	811
Utility - Pacific Gas & Electric Company	(800) 743-5000
CLIENT CONTACTS	
Stefan Heisler City of Rancho Cordova Project Lead	(916) 851-8757
MEDICAL SERVICES	
Nearest Hospital Address:	Mather VA Hospital 10593 Peter A McCuen Blvd Mather, CA 95655 916-843-7000
Nearest Urgent Care Address:	Concentra Medical Centers: (916) 364-1733 10670 White Rock Rd Ste 100 Rancho Cordova, CA 95670
CORE Occupational Health (24/7)	1-855-683-9006 (for non-life-threatening incidents)
National Poison Control Center (ingestion, snake bites etc.)	1-800-222-1222

Table 13-1 EMERGENCY CONTACTS	
NATIONAL CHEMICAL EMERGENCY	
Chemtrec National Response Center	800-424-9300/800-424-8802
TETRA TECH CONTACTS	
Project Manager: Keith Hoofard	(916) 853-1800 (office) (916) 709-4732 (cell)
Health and Safety, Tetra Tech Corporate Roberto Rolon	(407) 448-9553
SUBCONTRACTOR	
GPRS (utility clearance) Cascade Drilling (well abandonment) Cascade Drilling (soil & groundwater profile borings) Calvada Surveying (locate 30 profile borings; relocate for post-remediation sampling) TBD (Excavation, Stockpile, Backfill) Cascade Drilling (SVE well drilling) EnviroSupply & Service (temp SVE system) TEG NorCal (post-remediation vapor sampling)	800-231-3347 916-638-1169 916-638-1169 951-280-9960 (office); 562-673-5123 (cell) TBD 916-638-1169 949-732-3318 916-853-8010

13.8 EMERGENCY AND PERSONAL PROTECTIVE EQUIPMENT

A first aid kit, a wall-mounted eyewash station or sufficient quantity of eye wash bottles, a spill kit containing absorbent materials and polyethylene sheeting along with an empty drum and shovel to respond to small spills, and a 10-pound ABC-rated fire extinguisher will be maintained onsite at all active work locations and shall be immediately available for use in the event of an emergency. PPE used in daily activities will serve as the primary defense for all chemical and physical/biological hazards encountered. Emergency situations surpassing the level of protection offered by the prescribed PPE will constitute an emergency and require evacuation and notification of the appropriate response agency.

13.9 INCIDENT REPORTING

All emergency situations require follow-up and reporting. After the initial response (e.g., first aid, etc.) to an injury or illness has taken place or emergency responders have been notified, the incidence and details of the incident must be properly reported and documented. Within one (1) hour of occurrence, any occupational injury or illness must be reported to the HSR/Corporate Health & Safety Director at (610) 348-7197. **Appendix A** includes the Tetra Tech Incident Report (Form IR) and the Supplemental Forms A (employee injury or illness), B (property and equipment damage, spills and releases) and C (motor vehicle accidents). All applicable reports must be completed and submitted to the Tetra Tech project manager within 24 hours of an emergency. The project manager will review the report and then forward it to the Tetra Tech HSR for review. The report must include proposed actions to prevent similar incidents from occurring. The HSR must be fully informed of the corrective action process to ensure appropriate and sufficient response measures have been implemented.

TOTAL is Tetra Tech's online incident reporting system which is the preferred means of reporting incidents. Tetra Tech will use TOTAL to directly report health and safety incidents, notify key personnel, and initiate the process for properly investigating and addressing the causes of incidents, including near-miss events. An incident is considered any unplanned event that includes several types of near misses, events where no loss was incurred, or incidents that resulted in injuries or illness, property or equipment damage, chemical spills, fires, or damage to motor vehicles. Incidents must be entered into TOTAL within 24 hours of its occurrence by the PM, field supervisor, or SSC.

TOTAL is accessed from the Tetra Tech Intranet site at https://my.tetratech.com/ or from the following web address: http://totalhs.tetratech.com/.

It should be noted that "near misses" as well as actual injuries and illnesses should be reported. By identifying near miss situations, possible recommendations for preventing a recurrence can be made. Near misses should be reviewed with field personnel during the daily pre-work site briefing.

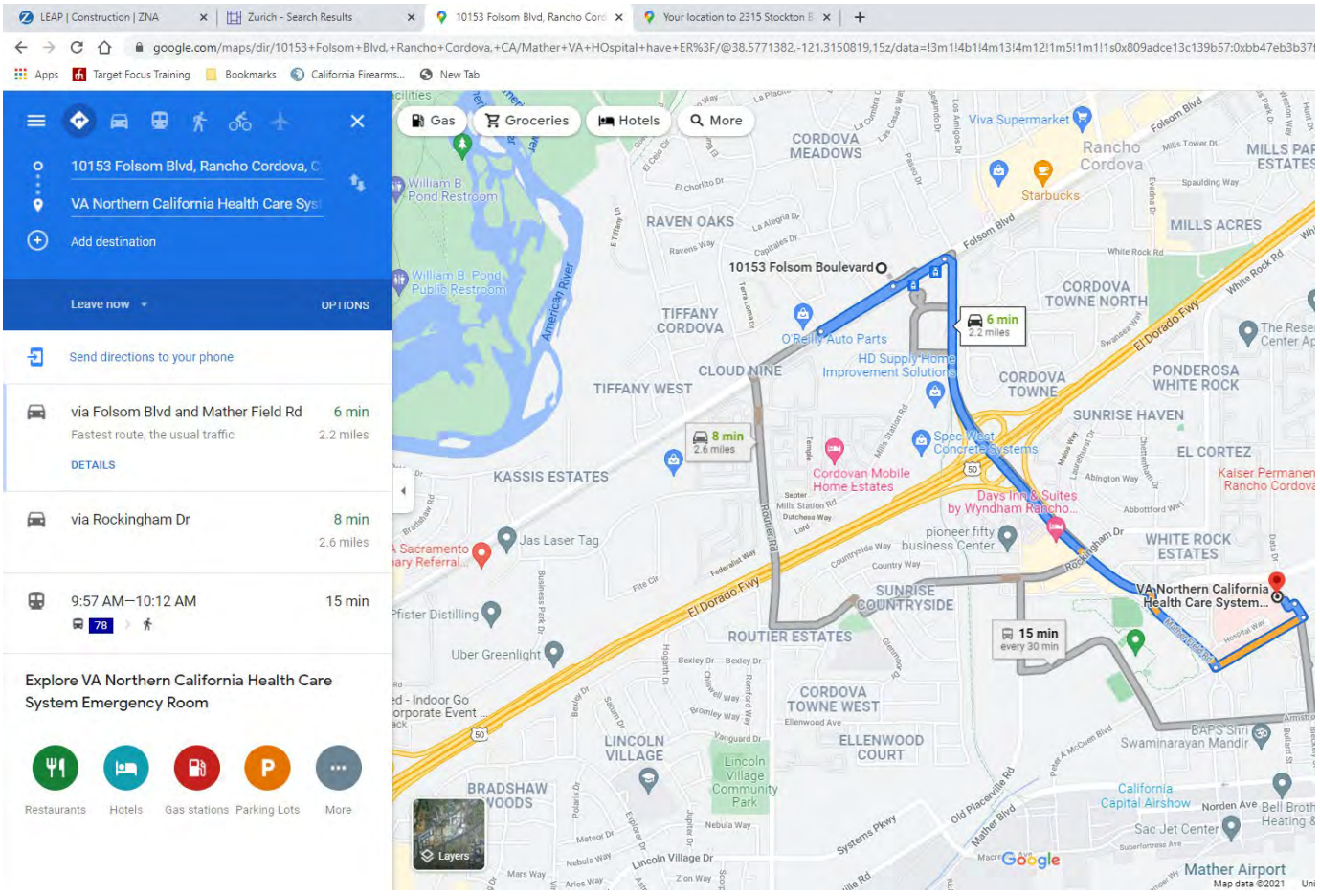
13.10 EMERGENCY ROUTE TO HOSPITAL

Before performing any site activities, Tetra Tech personnel will conduct a pre-emergency hospital run to familiarize themselves with the route to the local hospital.

Mather VA Hospital: (916) 843-7000

10535 Hospital Way, Mather, CA 95655

2.2 miles/6 minutes



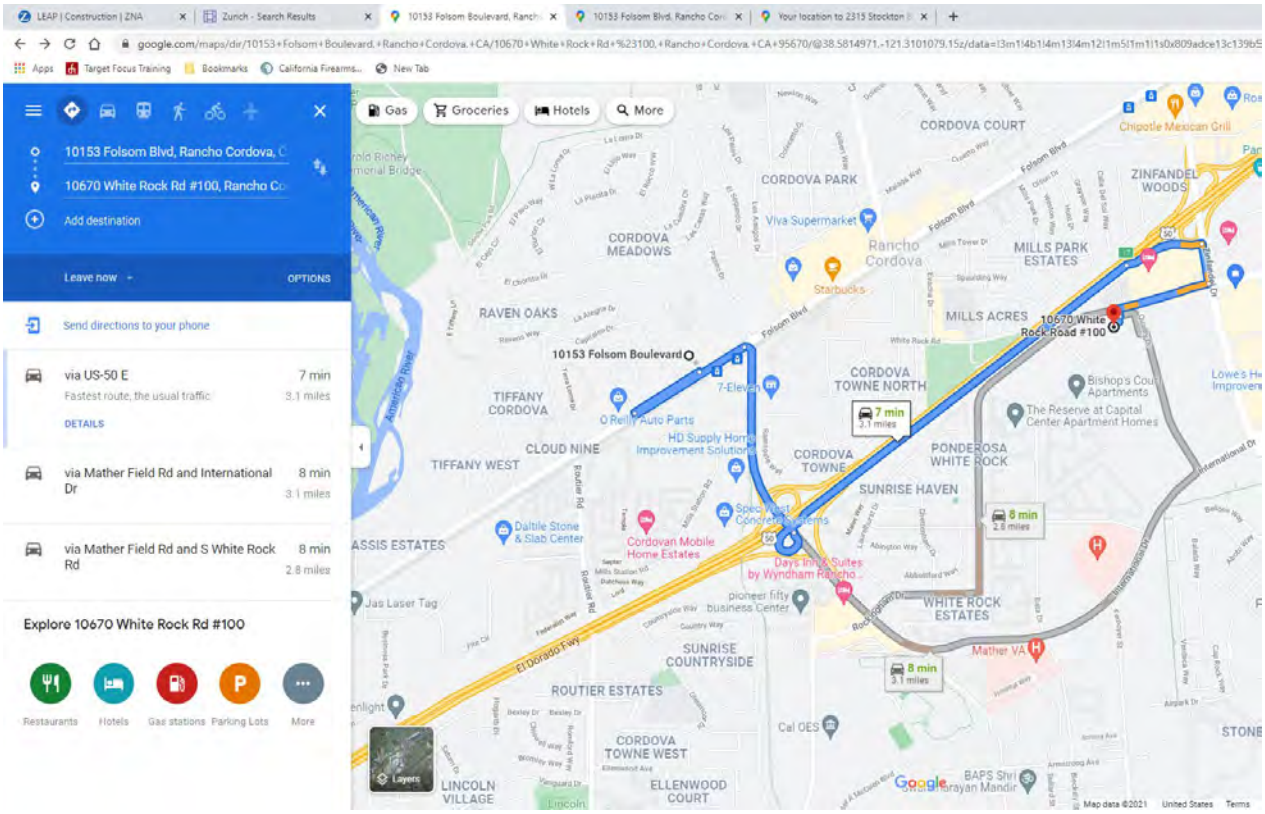
TETRA TECH

13.11 ROUTE TO WORKERS COMPENSATION CLINIC

Concentra Medical Centers: (916) 364-1733

10670 White Rock Rd, Ste 100
Rancho Cordova, CA 95670

3.1 miles/7 minutes



14.0 RECORDKEEPING AND POSTINGS

The Tetra Tech SSC shall ensure the following materials/documents are maintained at the Site and used as required:

- A complete copy of this HASP with all attachments
- Incident Report forms (IR and supplemental forms A, B and C) (Appendix A)
- SDSs for all chemicals brought on site, including decon solutions, fuels, sample preservatives, calibration gases, etc. (Appendix D)
- Follow-up reports
- A full-size OSHA Job Safety and Health Poster (posted onsite for long-term projects > 1 year)
- Emergency Contacts (Table 13-1,) extra copy for posting)

14.1 MATERIALS TO BE POSTED OR ACCESSIBLE ONSITE

The following documentation is to be posted at the site for quick reference purposes:

Chemical Inventory Listing - This list represents all chemicals brought on site, including treatment chemicals, decontamination solutions, sample preservatives, fuels, calibration gases, etc. This list should be posted in a central area. **Will be in Appendix of Health & Safety Plan.**

SDSs - The SDSs should also be in a central area accessible to all site personnel. These documents should match all the listings on the chemical inventory list for all substances employed on site. It is acceptable to have these documents within a central folder and the chemical inventory as the table of contents.

The OSHA Job Safety & Health Protection Poster - This poster, as directed by 29 CFR 1903.2 (a)(1), should be conspicuously posted in places where notices to employees are normally posted. Each SSC shall ensure that this poster is not defaced, altered, or covered by other material.

Emergency Phone Numbers and Directions to the Hospital(s) - This list of numbers and the directions will be maintained at all phone communications points and in each site vehicle.

Hearing Conservation Standard (29 CFR 1910.95) - This standard will be posted anytime hearing protection or other noise abatement procedures are employed.

Placards and Labels - Where chemical inventories have been separated, because of quantities and incompatibilities, these areas will be conspicuously marked using Department of Transportation placards and 2012-updated Hazard Communication/GHS (29 CFR 1910.1200 [f]) labels.

APPENDIX A
TETRA TECH FORMS

Form HSP-4 HASP Compliance Agreement
Form HST-2 Daily Tailgate Safety Meeting
Form SSC-1 Daily Site Log
Form AF-1 Field Audit Checklist
Form JSA-1 Job Safety Analysis
Incident Report Forms IR, IR-A, IR-B, IR-C

	TETRA TECH, INC. HEALTH AND SAFETY PLAN COMPLIANCE AGREEMENT	Revision Date: 10/1/2008 Document Control Number: FORM HSP-4 Page 1 of 1

Project Name: _____

Project Number: _____

I have read and understand the health and safety plan indicated above and agree to comply with all of its provisions. I understand that I could be prohibited from working on the project for violating any of the safety requirements specified in the plan.

Name	Signature	Employer	Date

TETRA TECH, INC.

DAILY TAILGATE SAFETY MEETING FORM

This form describes the requirements and responsibilities for implementing an incident and injury-free workplace by providing guidance on the daily tailgate safety meeting discussion.

Daily tailgate safety meetings shall be held in a safe location at the start of each work day, shift or task change. The daily tailgate safety meetings shall review the planned work activities for the day, discuss and resolve the risks and mitigations, discuss any health, safety, security and environment (HSSE) concerns and raise the HSSE consciousness of each worker before they start work.

The Field Team Leader (FTL) or Site Safety Officer (SSO) will decide on the location of the daily tailgate safety meetings based on the overall safety of the individuals attending the meeting. Maintaining minimal background noise and establishing more comfortable areas for the meeting location is also preferred. Ultimately, the weather and surrounding environment could be the most limiting factor on the location of the meeting.

For this project, the Project Manager (PM) will:

- Verify that all work activities for this project are consistent with Document Control Number (DCN) 01-05, Health and Safety Management System, as well as any associated practices and permit requirements.
- Carry out all duties specified in the Health and Safety Management System.
- Ensure that all site personnel involved in a work activity are competent and correctly prepared for the work they will perform.
- Verify or delegate the responsibility to verify that the daily toolbox meeting is carried out.

For this project, the FTL will:

- Carry out all duties specified by the PM, as consistent with DCN 01-05.
- Conduct or supervise all work identified and agreed upon in the scope of work.
- Participate in the daily tailgate safety meeting whenever the scope of work requires a permit to work.
- Verify in the daily tailgate safety meeting, the specific roles and responsibilities of the FTL and SSO are clearly understood by all members of the workforce.

For this project, the SSO will:

- Carry out all duties specified by the PM, as consistent with DCN 01-05.
- Be accountable for the safe, responsible and reliable delivery of all work activities.
- Lead or designate an alternative conductor to lead the daily tailgate safety meeting.
- Verify in the daily tailgate safety meeting that workers have a clear understanding of the scope of work, hazards, controls and mitigations of the project.
- Verify in the daily tailgate safety meeting, the specific procedures and policies relevant to the project and are clearly understood by all members of the workforce.

Either the SSO or FTL will facilitate the daily tailgate safety meeting each day. At least one, if not both individuals shall have a thorough understanding of the following:

- Tetra Tech's hazard/risk assessment process
- The site-specific HASP.

- The contract scope of work.
- The subcontractors on site and their health and safety officer.
- Site requirements of the client.

These meetings prior to starting work shall include, but are not limited to:

- The completion of the daily tailgate safety meeting form.
- A review of relevant Health and Safety Plan (HASP) elements.
    - Reviews of the HASP shall be performed when updated, modified or when deemed necessary by the SSO or FTL.
- A review of all applicable permits.
- Any applicable Hazard Communication (HAZCOM) information review, including MSDSs, and labels.
- A review of 'Stop Work' procedures and responsibilities.
- Address any risks arising from the site walk, including but not limited to, equipment and materials use and location.
- Complete and review a Job Safety Analysis (JSA), appropriate Safe Work Practices (SWP) and applicable Activity Hazard Analysis (AHA) for the tasks to be completed.
- Implement the controls set forth in the JSA, SWP and AHA. Verify that all parties on site have a complete understanding of the work plan and controls that are in place.
- In addition, allocate resources and complete permits.

TETRA TECH, INC.

DAILY TAILGATE SAFETY MEETING FORM (Continued)

Date: _____ Time: _____ Project No.: _____

Client: _____ Site Location: _____

Site activities planned for today: _____

Does each job and task have a valid SWP, AHA, or JSA associated with it? Yes ☐ No ☐

Has everyone signed off on the HASP? Yes ☐ No ☐

Have newly identified risks been controlled and documented? Yes ☐ No ☐

Do not proceed unless the answer to all the above questions is Yes.

Current weather conditions: _____

Safety Topics Discussed
Review of Stop Work Authority
Are there multiple operations on site? Yes ☐ No ☐ If yes, describe.
Does the work activity require a MoC? Yes ☐ No ☐ If yes, has the MoC been authorized by the PM? Yes ☐ No ☐
Permits required? Yes ☐ No ☐ If yes, list permits covered in safety meeting.
Protective clothing and equipment for activities planned for today:
Chemical, physical, and biological hazards identified for activities planned for today:
Equipment hazards identified for activities planned for today:
Review of emergency procedures from HASP (including muster point locations):

TETRA TECH, INC.

DAILY TAILGATE SAFETY MEETING FORM (Continued)

Site-safety discussion topics:
Review anticipated temperature for the day: _____ Could expected temperatures trigger High Heat Procedures: Yes ☐ No ☐ If yes, review High heat procedures.
Discuss the following: • Encouragement to drink plenty of water; • Reminder of the employees right to take a cool down rest period,
Drinking water replentishment schedule.
Identify exact location of work site and identify location of where hospital route map is posted..
Best practices observed: Lessons learned, near misses, other observations: Post-job review: Any "stop work" interventions:

Attendees

By signing in below, I certify that I understand the hazards and risk controls associated with each task I am to perform. I understand the permit requirements applicable to the work being performed and am aware that all tasks must be assessed. I am also aware of my obligation to "stop work." Furthermore, I am physically and mentally fit for duty and am not under the influence of any type of medication, drugs or alcohol that could affect my ability to work safety. I am aware of my responsibility to bring any injury, illness, or other safety issue to the attention of the SSO.

By signing out below, I certify that I am uninjured unless I have already informed the FTL, PM, or SSO.

Sign In Signature and Time	Sign Out Signature and Time

TETRA TECH, INC.

DAILY TAILGATE SAFETY MEETING FORM (Continued)

At the conclusion of this day, I certify that the job site is being left in a safe condition and there were no unissued reports of property damage, spill, fire, explosion, injury, illness, or first aid.

In Meeting Conducted by:

_____ _____

Name Title

_____

Signature

Out Meeting Conducted by:

_____ _____

Name Title

_____

Signature

	TETRA TECH, INC. DAILY SITE LOG	Revision Date: 10/1/2008 Document Control Number: FORM SSC-1 Page 1 of 1

Site Name: _____ Date: _____

Site Safety Coordinator:_____ Project Number:_____

Name (print)	Company	I have received site-specific training	Time	
			In	Out

Comments:

_____

_____

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	TETRA TECH, INC. FIELD AUDIT CHECKLIST	Revision Date: 5/28/09 Document Control Number: AF-1 Page 1 of 3

Project Name: _____ Project No.: _____

Field Location: _____ Completed by: _____

Project Manager: _____ Site Safety Coordinator: _____

General Items		In Compliance?		
Health and Safety Plan Requirements		Yes	No	NA
1	Approved health and safety plan (HASP) on site or available			
2	Names of on-site personnel recorded in field logbook or daily log			
3	HASP compliance agreement form signed by all on-site personnel			
4	Material Safety Data Sheets on site or available			
5	Designated site safety coordinator present			
6	Daily tailgate safety meetings conducted and documented			
7	On-site personnel meet HASP requirements for medical examinations, fit testing, and training (including subcontractors)			
8	Compliance with specified safe work practices			
9	Documentation of training, medical examinations, and fit tests available from employer			
10	Exclusion, decontamination, and support zones delineated and enforced			
11	Windsock or ribbons in place to indicate wind direction			
12	Illness and injury prevention program reports completed (California only)			
Emergency Planning				
13	Emergency telephone numbers posted			
14	Emergency route to hospital posted			
15	Local emergency providers notified of site activities			

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16	Adequate safety equipment inventory available			
17	First aid provider and supplies available			
18	Eyewash stations in place			
Air Monitoring				
19	Monitoring equipment specified in HASP available and in working order			
20	Monitoring equipment calibrated and calibration records available			
21	Personnel know how to operate monitoring equipment and equipment manuals available on site			
23	Environmental and personnel monitoring performed as specified in HASP			

Safety Items		In Compliance?		
Personal Protection		Yes	No	NA
1	Splash suit			
2	Chemical protective clothing			
3	Safety glasses or goggles			
4	Gloves			
5	Overboots			
6	Hard hat			
7	Dust mask			
8	Hearing protection			
9	Respirator			
Instrumentation				
10	Combustible gas meter			
11	Oxygen meter			

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12	Organic vapor analyzer			
Supplies				
13	Decontamination equipment and supplies			
14	Fire extinguishers			
15	Spill cleanup supplies			
Corrective Action Taken During Audit:				
Corrective Action Still Needed:				

Note: NA = Not applicable

_____ _____

Auditor's Signature Site Safety Coordinator's Signature

_____

Date

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APPENDIX B
SAFE WORK PRACTICES

SWP 5-1 General Safe Work Practices for Field Work
SWP 5-2 HAZWOPER Field Work
SWP 5-4 Safe Drilling Practices
SWP 5-7 Use of Heavy Equipment
DCN 4-5 Excavation and Trenching
SWP 5-14 Spill and Discharge Control Practices
SWP 5-15 Heat Illness Prevention and Monitoring
SWP 5-17 Biohazard Safety
SWP 5-19 Safe Lifting and Carrying Procedures
SWP 5-26 Prevention of Sun Exposure
SWP 5-35 Underground Utilities
SWP 5-47 Spill Prevention and Clean-up
SWP 5-51 Hand Tools

To prevent injuries and adverse health effects, the following general safe work practices (SWP) are to be followed when conducting work involving known and unknown site hazards. These SWPs establish a pattern of general precautions and measures for reducing risks associated with field operations not conducted on hazardous waste sites. This list is not inclusive and may be amended as necessary.

- Be familiar with and knowledgeable of and adhere to all instructions in the construction health and safety plan (C-HASP), job safety analysis, job hazard analysis, work permit or other health and safety documentation.
- At a minimum, a safety meeting will be held at the start of each project to discuss the hazards of the site and site work. Additional meetings will be held, as necessary, to address new or continuing safety and health concerns.
- Be aware of the location of the nearest telephone and all emergency telephone numbers.
- Attend a briefing on the anticipated hazards, equipment requirements, SWPs, emergency procedures, and communication methods before going on site.
- Plan and delineate entrance, exit, and emergency escape routes.
- Rehearse unfamiliar operations prior to implementation.
- Use the "buddy system" whenever respiratory protection, fall protection, or other protective equipment is in use. Buddies should establish hand signals or other means of emergency communication in case radios break down or are unavailable.
- In order to assist each other in the event of an emergency, buddies should maintain visual contact with each other and with other on-site team members by remaining in close proximity.
- Do not bring nonessential vehicles and equipment onto the site.
- Immediately report all injuries, illnesses, and unsafe conditions, practices, and equipment to the site safety coordinator (SSC).
- Maintain a portion of the site field logbook as a project safety log. The project safety log will be used to record the names, entry and exit dates, and times on site of all Tetra Tech personnel, subcontractor personnel, and project site visitors; and other information related to safety matters.

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- A portable eyewash station should be located in the support zone if corrosive materials are used or stored on the site.
- Smoking is not allowed on Tetra Tech projects sites, except in designated smoking areas.
- Do not bring matches and lighters in the exclusion zone or contamination reduction zone.
- Observe coworkers for signs of toxic exposure and heat or cold stress.
- Inform coworkers of nonvisual effects of illness if you experience them, such as headaches, dizziness, nausea, or blurred vision.
- Anyone known to be under the influence of drugs or intoxicating substances that impair the employee's ability to safely perform assigned duties shall not be allowed on the job while in that condition.
- Horseplay, scuffling, and other acts that tend to have an adverse influence on the safety or well-being of the employees is prohibited.
- Work shall be well planned to prevent injuries in the handling of materials and when working with equipment.
- No one shall knowingly be permitted or required to work while the employee's ability or alertness is so impaired by fatigue, illness, or other causes that might unnecessarily expose the employee or others to injury.
- Use proper lifting techniques. Heavy objects will be lifted using the large muscles of the leg instead of the smaller muscles of the back.
- Wear appropriate footwear and all other protective equipment required for work.
- Cleanse thoroughly after handling hazardous substances.
- Maintain all tools and equipment in good condition.
- First aid kits shall be located in a prominent location and stocked with basic first aid supplies.

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Revision Date	Document Authorizer	Revision Details
10/1/2008	Chris McClain	NEW

To prevent injuries and adverse health effects, the following general safe work practices (SWP) are to be followed when conducting work involving known and unknown site hazards on hazardous waste sites. These SWPs establish a pattern of general precautions and measures for reducing risks associated with hazardous site operations. This list is not inclusive and may be amended as necessary.

- Do not eat, drink, chew gum or tobacco, take medication, or smoke in contaminated or potentially contaminated areas or where the possibility for contact with site contamination exists.
- Wash hands and face thoroughly upon leaving a contaminated or suspected contaminated area. If a source of potable water is not available at the work site that can be used for hands-washing, the use of waterless hand cleaning products will be used, followed by actual hand-washing as soon as practicable upon exiting the site. A thorough shower and wash must be conducted as soon as possible if excessive skin contamination occurs.
- Avoid contact with potentially contaminated substances. Do not walk through puddles, pools, mud, or other such areas. Avoid, whenever possible, kneeling on the ground or leaning or sitting on drums, equipment, or the ground. Do not place monitoring equipment on potentially contaminated surfaces.
- Remove beards or facial hair that interferes with a satisfactory qualitative respirator fit test or routine pre-entry positive and negative pressure checks.
- Be familiar with and knowledgeable of and adhere to all instructions in the site-specific health and safety plan (HASP). At a minimum, a safety meeting will be held at the start of each project to discuss the HASP. Additional meetings will be held, as necessary, to address new or continuing safety and health concerns.
- Be aware of the location of the nearest telephone and all emergency telephone numbers.
- Attend a briefing on the anticipated hazards, equipment requirements, SWPs, emergency procedures, and communication methods before going on site.
- Plan and delineate entrance, exit, and emergency escape routes.
- Rehearse unfamiliar operations prior to implementation.

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- Use the "buddy system" whenever respiratory protection equipment is in use. Buddies should establish hand signals or other means of emergency communication in case radios break down or are unavailable.
- Buddies should maintain visual contact with each other and with other on-site team members by remaining in close proximity in order to assist each other in case of emergency.
- Minimize the number of personnel and equipment in contaminated areas (such as the exclusion zone). Nonessential vehicles and equipment should remain within the support zone.
- Establish appropriate support, contamination reduction, and exclusion zones.
- Establish appropriate decontamination procedures for leaving the site.
- Immediately report all injuries, illnesses, and unsafe conditions, practices, and equipment to the site safety coordinator (SSC).
- Maintain a portion of the site field logbook as a project safety log. The project safety log will be used to record the names, entry and exit dates, and times on site of all Tetra Tech personnel, subcontractor personnel, and project site visitors; air quality and personal exposure monitoring data; and other information related to safety matters. Form SSC-1, Daily Site Log, may be used to record names of on-site personnel.
- A portable eyewash station should be located in the support zone if chemical splashes to eyes are possible.
- Do not bring matches and lighters in the exclusion zone or contamination reduction zone. Flames and open fires are not permitted on site.
- Observe coworkers for signs of toxic exposure and heat or cold stress.
- Inform coworkers of nonvisual effects of illness if you experience them, such as headaches, dizziness, nausea, or blurred vision.

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Revision Date	Document Authorizer	Revision Details
10/1/2008	Chris McClain	Update from 1998 format

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This document establishes safe work practices (SWP) to follow during drilling operations. These SWPs are based on suggested safety procedures provided in the National Drilling Association's "Drilling Safety Guide." Procedures to follow before, during, and after drilling are listed below.

Before beginning any drill operation, each employee must conform to the following requirements:

- Wear a hard hat, safety glasses or goggles, steel-toed work boots, a shirt and full-length pants when working with or near the drill rig. Shirts must be tucked in at the belt.
- Do not wear loose or frayed clothing, loose long hair, or loose jewelry while working with rotating equipment.
- Do not eat, drink, or smoke near the drill rig.
- Identify all underground utility and buried structure locations before drilling.
- Ensure that drill masts or other projecting devices will be farther than 25 feet in any direction from overhead power lines.
- Ensure that the drill rig and any other machinery used is inspected daily by competent, qualified individuals. The site safety coordinator (SSC) will ensure compliance with this precaution.
- Drill rig operators will be instructed to report any abnormalities, such as equipment failure, oozing liquids, and unusual odors, to their supervisors or the SSC.
- Establish hand-signal communications for use when verbal communication is difficult. One person per work team will be designated to give hand signals to equipment operators.

While the drill rig is operating, employees must:

- Wear appropriate respiratory and personal protective equipment (PPE) when conditions warrant their use.
- Avoid direct contact with known or suspected contaminated surfaces.
- Move tools, materials, cords, hoses, and debris to prevent tripping hazards and contact with moving drill rig parts.

- Adequately secure tools, materials, and equipment subject to displacement or falling.
- Store flammable materials away from ignition sources and in approved containers.
- Maintain adequate clearance of the drill rig and mast from overhead transmission lines. The minimum clearance is 25 feet unless special permission is granted by the utility company. Call the local utility company for proper clearance.
- Only qualified and licensed personnel should operate drill rigs.
- Workers should not assume that the drill rig operator is keeping track of the rig's exact location. Workers should never walk directly behind or beside heavy equipment without the operator's knowledge.
- Workers should maintain visual contact with drill rig operators at all times.
- When an operator must maneuver equipment in tight quarters, the presence of a second person is required to ensure adequate clearance. If much backing is required, two ground guides will be used: one in the direction the equipment is moving, and the other in the operator's normal field of vision to relay signals.
- Auger sections and other equipment are extremely heavy. All lifting precautions should be taken before moving heavy equipment. Appropriate equipment, such as chains, hoists, straps, and other equipment, should be used to safely transport heavy equipment too heavy to safely lift.
- Proper personal lifting techniques will be used. Workers should lift using their legs, not their backs.
- Workers will not use equipment they are not familiar with. This precaution applies to heavy as well as light equipment.
- All personnel not essential to work activities will be kept out of the work area.
- Workers will be aware of their footing at all times.
- Workers will remain alert at all times.

After drilling operations are completed, employees should do the following:

- Shut down machinery before repairing or lubricating parts (except parts that must be in motion for lubrication).
- Shut down mechanical equipment prior to and during fueling operations. When refueling or transferring fuel, containers and equipment must be bonded to prevent the buildup of static electricity.
- Keep drill rigs in the exclusion zone until work has been completed. Such equipment should then be decontaminated within the designated decontamination area.
- Engage parking brakes when equipment is not in use.
- Implement an ongoing maintenance program for all tools and equipment. All tools and moving equipment should be inspected regularly to ensure that parts are secured, are intact, and have no cracks or areas of weakness. The equipment must turn smoothly without wobbling and must operate in accordance with manufacturer specifications. Defective items should be promptly repaired or replaced. Maintenance and repair logs will be kept.
- Store tools in clean, secure areas to prevent damage, loss, or theft.

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Revision Date	Document Authorizer	Revision Details
10/1/2008	Chris McClain	Update from 1998 format

1.0 PURPOSE

The purpose of this procedure is to identify minimum requirements, and to provide guidance to Tetra Tech Inc. (Tetra Tech) project personnel concerning the management of construction tools and equipment on construction projects.

2.0 SCOPE

This procedure applies to all Tetra Tech projects that include a construction, O&M, and/or UXO component, including remediation construction.

3.0 MINIMUM REQUIREMENTS

3.1 Definitions

3.1.1 Construction Equipment

For the purposes of this procedure, construction equipment shall mean heavy equipment, such as excavators, scrapers, off-road trucks, dozers, road graders, compactors, dredges, and cranes; light equipment, such as skid-steers, forklifts, generators, and light plants; and operating systems such as screens, crushers, conveyors, pugmills, mobile treatment plants, and pumps. Any discussion of construction equipment shall be understood not to include cars, pickup trucks, flatbed trucks, etc. registered for use on public roadways, which shall be called vehicles hereinafter. Also for the purposes of this procedure, construction equipment shall be synonymous with Contractor's Equipment, a term also commonly used in the construction industry to designate the types of equipment described above.

3.1.2 Terms

The terms "should, may, and might" as used in statements in this procedure are intended to denote a discretionary consideration; the terms "shall & must" are intended to impose a mandatory requirement. The terms "is, are, & will" as used in statements in this procedure are intended to denote discretionary or mandatory requirements that are addressed in other department/disciplines' procedures. However, nothing contained herein should be interpreted as to prohibit development and approval of project-specific procedures or plans that take exception to mandatory direction presented in this procedure provided that the appropriate level of approval, (Executive Vice President of Construction, Business Line Executive Vice President, or the Vice President ESQ Services as appropriate) is obtained for deviations from such requirements.

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3.1.3 Tools of the Trade

Specific hand tools and or equipment (e.g., manlifts, trucks, trenchers, and pumps) normally provided by or to workers for the performance of their particular work activity.

3.2 Roles & Responsibilities

3.2.1 Equipment Supervisor

Depending on the project's equipment needs, an individual may be designated as the Equipment Supervisor. Responsibilities of the Equipment Supervisor include:

- Determination of the equipment needs for the project;
- Providing input to the Work Plan concerning equipment;
- Identification of Contract and legal/regulatory requirements for mobilization of equipment on client facilities;
- Submit required certifications, inspection reports, and test reports for equipment;
- Arranging for the mobilization/demobilization of equipment in support of the project's schedule, providing required notices, such as mobilization details and dates, and obtaining Contractual or legally required approvals for mobilization;
- Receipt inspection of equipment arriving at the site, including coordination of any client or third party inspection;
- Coordination with equipment yard personnel or vendors regarding equipment maintenance;
- Ensuring implementation of safe work practices for equipment utilization; and
- Assuring that the return of demobilized equipment is performed in accordance with the terms of the rental/lease/PO agreement and documented correctly, or, for Tetra Tech owned equipment, that the equipment transfer form is completed and coordinated with the Equipment Manager; and
- All other responsibilities as assigned by the Project Manager or Site Supervisor

3.3 Safe Operation Requirements for Tools

3.3.1 Manual T-Post Drivers

There shall be no use of manual fence post drivers, such as those typically used to drive T-posts, without prior approval from the Site Safety Coordinator or the Vice President of Construction. Any approval of the use of such a tool shall require the implementation of an Activity Hazard Analysis (AHA) to identify and control the hazards presented by the tool. The AHA shall address appropriate PPE and position for the task in order to avoid injury to the worker.

3.3.2 Tools

The Site Supervisor shall determine the nature and quantity of tools required for the construction effort and shall ensure that adequate tools are provided in support of the schedule.

Tools may be assigned to workers or crews for the duration of their activities and shall be stored in gang boxes or other secured storage areas when not in use.

The Site Supervisor may designate certain tools to be issued from a tool control area on a daily basis. These tools should be signed out at the beginning of the work, returned to the tool control area at the end of the work, and signed back in.

3.3.3 Worker Provided Personal Tools

Workers may be required to provide personal tools of the trade for their particular work. Master mechanics, for example, may be required to provide tools required for repairs and maintenance of construction equipment and vehicles. Requirements for workers to provide their own tools shall be established based on the project requirements and shall be discussed at the Pre-Job Conference to be held in accordance with the requirements of the Labor Relations Guidelines LR-8, Pre-Job Conferences.

Any worker required or offering to provide personal tools shall be required to present a list of personal tools being provided upon reporting to the project site. The Site Supervisor shall inventory the tools against this list for verification that all listed tools have been provided. The list shall then be maintained for use in performing an inventory of the tools when the worker is to leave the site at the end of the worker's assignment and shall be the basis for any claims for loss or damage.

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The Site Supervisor shall ensure that any personal tools brought onto the project site receive a safety inspection. The safety inspection shall include as a minimum, the items addressed in Section 3.3.4 of this procedure.

The Site Supervisor should ensure that secure, lockable facilities are provided for the storage of worker provided personal tools.

The worker shall be responsible for notification of lost or damaged tools immediately on discovery of the loss. The limits of the project's liability (if any) for loss or damage to personal tools provided by the workers should be established at the Pre-Job Conference.

Use of personal tools, other than addressed above, either by manual or by Tetra Tech nonmanual personnel, should not be allowed except as specifically authorized by the Project Manager or Site Supervisor. Project personnel should be notified that Tetra Tech will not be liable for any theft, loss, or damage of unauthorized personal tools on the project site.

3.3.4 Tool Safety Inspection

OSHA 29 CFR Part 1926 Subpart I Tools – Hand and Power provides guidance for tool safety. All tools shall be inspected for the following minimum features by the person using the tool prior to starting the work:

- Proper general condition of tools, electrical cords, and air hoses;
- Presence and serviceability of guards and safety devices;
- Proper electrical grounding or double insulation protection;
- Power tools properly equipped with constant pressure switches;
- Tool retainers installed on pneumatic tools;
- Proper adjustment of the tool; and
- Confirming that the load rating of the tool is sufficient for the work to be performed.

Unsafe tools shall be removed from service and the Site Supervisor advised of the condition for corrective action. An Out of Service tag should be placed on all unsafe or defective tools to prevent their inadvertent use by others. These tools should be physically segregated from the acceptable tools.

3.3.5 Environmental Safety and Quality Policy Implementation

Proper selection of construction equipment can impact employee health, consideration should be given to ergonomic design when selecting construction equipment.

Selection of construction equipment and vehicles may have significant impacts on the environment, either adverse or beneficial. Proper selection of the size and type of equipment and vehicles can reduce the adverse impacts from their operation.

Project procurement practices for construction equipment, parts, supplies, lubricants, and fuel shall be consistent with the principles of pollution prevention. For example, consideration should be given to such factors as rent versus buy options, disposable versus reusable filters, recycled versus virgin oils/fluids, recycling versus disposal of spent fluids and used parts, and fuel efficiency and economy of operation.

Spent fluids, filters, and used parts shall be recycled to the extent practical, or otherwise disposed of in accordance with the environmental compliance elements of the Work Plan or EHS plan.

Proper utilization of construction equipment and vehicles can also reduce adverse impacts on the environment. (For example, it is Tetra Tech's policy to not allow unattended equipment and vehicles to be left with motors running. This is not only a safety consideration; it reduces adverse environmental impacts and is generally cost effective due to reduced fuel consumption.)

3.3.6 Insurance

The Project Manager shall ensure that all construction equipment, including Tetra Tech-owned or rental/lease equipment, is covered by appropriate insurance policies for the intended use of the equipment. Property insurance on construction equipment is normally arranged by Tetra Tech if Tetra Tech bears the risk of loss or if Tetra Tech is required to arrange such insurance. However, all rented/leased construction equipment valued in excess of $100,000, and all cranes regardless of their value shall be reported to the Administration and Compliance Department via the 'Insurance Request for Leased Equipment' (Attachement 5, and available in Tetra Links and from procurement) for specific inclusion under the Tetra Tech property insurance policy. The procurement representative should be contacted to ensure that this

occurs in each case. Notification is not required for equipment valued under $100,000 except when the construction equipment provider requests a certificate of insurance be provided, or the equipment is a crane.

The Project Manager, usually through the designated procurement representative, should ensure that duplicate insurance coverage is not provided through the equipment provider since this will increase the rental rates. In those cases where the provider requires insurance certificates to verify coverage by Tetra Tech, the procurement representative should be contacted to obtain the appropriate documentation.

A Vehicle Insurance Form (available from the Vehicle Insurance Coordinator, Tetra Links or procurement) shall be processed and sent to the Vehicle Insurance Coordinator for all vehicles (leased, rented, or owned) which are registered and operated off jobsites on public highways.

3.3.7 Receipt and Inspection

All construction equipment shall be subject to a receipt inspection by a competent person and any Contract or otherwise required additional person(s) prior to acceptance at the project site. The inspections and tests shall be in accordance with the manufacturer's recommendations. Most vendors provide a form for notation of any existing damage to the equipment to be filled out on receipt. The equipment should be inspected carefully to determine its condition, including any damage, missing or non-functional equipment. The agreement should be used as a basis to determine that everything required (e.g., the equipment, its condition, manuals, spares, documentation of inspections, and certifications) has been provided. All discrepancies should be noted on the form. A pre-inspection of the equipment prior to transport to the Project site should be considered. Particular attention shall be given to the following items:

- All safety equipment and its condition;
- Operator (when provided) certification for the equipment;
- Posted operating and safety instructions;
- All pollution control devices and their condition;
- Safe entry and egress, with steps, ladders, handholds, and platforms provided as required, including safe access to perform routine checks, maintenance, and refueling operations;
- Leaking fluids, such as hydraulic oil, engine oil, transmission fluid, and coolant;

- Deteriorated or cracked hydraulic and coolant hoses which could result in leaks or spills;
- Guard belts, gears, shafts, pulleys, fly wheels and other reciprocating, rotating or moving parts shall be guarded to protect workers from becoming caught on, in or between machinery; and
- Presence of the manufacturer operation and maintenance manual.

Equipment or vehicles with deficient conditions relating to safety or protection of the environment shall not be placed into service until the deficiencies have been corrected and documented.

All construction equipment shall be subject to an operational check prior to acceptance at the project site. The operational check should verify that the equipment has the capability to function as intended or as required through the full range of its intended use.

Receipt of construction equipment shall be documented; with a copy of the receipt inspection report provided to the Equipment Supervisor and to the equipment purchase order file. Documentation should include entries for date and time of receipt, condition of equipment, mileage or engine hours at time of receipt, information on next scheduled maintenance, and a record of operating and maintenance manuals received with the equipment. Photographs or a video record of the equipment on receipt should be taken if conditions are noted that would warrant further documentation.

Construction equipment providers will often include terms and conditions on receipt documentation to be signed when construction equipment is delivered to the project site. **Project personnel requested to sign this receipt documentation shall not sign any delivery forms unless authorized to do so by Legal of the Project Manager. Further, if they are required to sign delivery forms, they shall be instructed to cross out all terms and conditions, on both the front and back of the forms, before signing.** Alternately, the person receiving the construction equipment should enter the following statement in the immediate vicinity of their signature: “In lieu of the terms and conditions set forth on this document, the Original Purchase Order (or appropriate form of agreement) terms and conditions apply to the receipt of this item(s).” These actions are necessary to avoid acceptance of additional or different terms and conditions.

Construction equipment delivered to the project site should be accompanied with operating and maintenance manuals. Cranes and lifting equipment shall include certification of satisfactory completion of annual inspection and have load charts posted in the cab. Additionally, some

construction equipment may be supplied with common replacement parts, such as filters and belts, and any specialized tools required for routine operation or maintenance. (i.e. forks, buckets, lift arms, and tool carries) These items should be carefully inventoried upon receipt, and documented on the receipt inspection report. Responsibility for protection and maintenance of the construction equipment shall be verified, and all measures necessary to protect the construction equipment from damage or loss will be instituted in accordance with the agreement, operating, and maintenance manuals or other instructions as appropriate.

Disposition requirements for construction equipment found to not be in accordance with the rental/lease/sale agreement when received shall be confirmed with the vendor immediately.

A sample Equipment/Vehicle Inspection Report is included as Attachment 1 to this procedure.

3.3.8 Protection from Environmental Extremes

Consideration shall be given to the environmental conditions to which the construction equipment will be exposed to during its time at the project site or during transportation. The manufacturer's instructions shall be reviewed and followed to ensure adequate protection from damage due to environmental conditions.

Adequate protection to the construction equipment's cooling system shall be verified by ensuring that the appropriate coolant/antifreeze mixture, as recommended by the manufacturer, has been used.

Appropriate procedures for operating or storing construction equipment, such as water treatment systems, shall be developed in accordance with the manufacturer's instructions. Measures such as draining and venting the system, providing auxiliary heat sources (e.g., heat tape), dry storage, shaft rotation, fluid levels, shall be taken to protect construction equipment subject to damage from environmental conditions.

Manufacturer's instructions concerning periodic operation of construction equipment shall be followed.

A means of ensuring that appropriate protective measures are instituted and performed as required should be implemented through the establishment of site procedures, logs, and/or checklists.

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3.3.9 Equipment Inspections

All construction equipment shall be inspected daily (when in use) for safety and operability, including manufacturer's recommended daily inspections. The inspection form/checklist should note any deficiencies for correction and serve as documentation of the inspection performance. The Equipment Supervisor shall be notified of any deficiency immediately. A Daily Equipment Inspection form, a sample of which is included as Attachment 2 to this procedure, should be filled out at the start of the shift and provided to the Equipment Supervisor. Other supplemental forms which may be used in conjunction with Attachment 2 are the equipment specific "Pre-operation Inspection" and/or "Function Tests" forms, which are normally supplied by the equipment manufacturer. This information is usually found in the equipment's Operation Manual.

Government property control procedures usually require the implementation of a vehicle utilization log for vehicles when used on government projects; other projects should also implement a similar system for logging use of these vehicles. The log should be kept in the vehicle and an entry made for each use, including name of the driver, purpose of the trip, starting mileage, ending mileage, fuel purchased, maintenance performed, and any damage incurred. The log sheets should be transmiTetra Teched as required in the contract documents and the project's documentation plan. Copies of the log sheets will be maintained and filed as discussed in Section 3.3.12 of this procedure.

A separate Daily Equipment Inspection Report should be filled out for each shift if construction equipment is utilized on multiple shifts.

The Equipment Supervisor should use the information on Daily Equipment Inspection forms to schedule any repairs or preventive maintenance required for the equipment. Equipment with missing or defective safety features should not be put in service until repairs have been performed to bring the equipment into compliance with any applicable Tetra Tech H&S Program and/or regulatory requirements.

Implementation of the daily equipment inspections should be the subject of periodic verification inspections performed by the Project Manager, Site Supervisor, and/or the Site Safety Coordinator (SSC). These periodic inspections should include verification that the required maintenance is being performed in a timely manner to ensure that unsafe conditions or impacts to the environment (e.g., spills, releases, and discharges) are not created by delays in correcting deficiencies noted on the Daily Equipment Inspection Forms.

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Rigging equipment, wire rope, nylon or KEVLAR slings and chokers shall be inspected by a competent person prior to use each shift; particular attention shall be paid to the rigging condition and presence of load/certification tags.

Cranes (weight handling equipment) shall be subjected to annual and certification inspections per OSHA guidelines. Mobile and crawler cranes shall be inspected on a monthly basis; a sample checklist form is included as Attachment 3 to this procedure.

Construction equipment to be demobilized shall be given a final inspection, similar to the receipt inspection, to identify and document, by means of written description and pictures, the condition of the equipment as it leaves the project site. Where possible, a concurrent inspection by the vendor is preferred. Additionally, some projects, particularly USACE projects, require a certificate of decontamination prior to the equipment leaving the site.

3.3.10 Operator Qualifications

Tetra Tech employees operating vehicles or construction equipment on public rights of way shall be required to have in their possession a valid driver's license appropriate to the location where the item is being operated and containing the appropriate endorsement for the type of vehicle or construction equipment being operated. A Commercial Driver's License (CDL) may be required for operation of some construction equipment on public rights of way, or as a specific requirement of a client's safety program. In addition, individual states may require specific licenses or certifications for operators of certain equipment, such as forklifts, and hoisting equipment. Additionally, the client's safety program may include license or certification requirements for personnel operating equipment on their property. The contract documents should be reviewed carefully to ensure that any such requirements are incorporated into the project's Work Plan or HASP. The Site Supervisor shall verify that the operator possesses the required license(s). Copies of licenses should be maintained in the on-site project employee file.

Any agreements for the rental or lease of vehicles or equipment should be reviewed for any provider's requirements for licensing or certification of operators to ensure that any such requirements are incorporated into the project's Work Plan or HASP.

Operators shall be required to demonstrate their proficiency in operating the construction equipment to be assigned to them prior to being allowed to work. Crane operators shall have qualifications for the type of crane to be operated.

Operator proficiency may be demonstrated through a performance test such as those

developed by the International Union of Operating Engineers, or by equipment manufacturers such as Caterpillar. These performance tests include exercises developed to demonstrate operator proficiency in various aspects of equipment operation, including daily operator inspections, ability to follow directions, ability to understand equipment limitations and operating guidelines, safety, and productivity. Also included are checklists that assist an observer in evaluating all of the various aspects of equipment operation. Attachment 4 is an example of Operator/Driver Observation Checklist.

Where it is not possible or practical to demonstrate operator proficiency through a performance test as described above, there should be a period of observation of the operator during the initial period of performance, whether the operator is a new employee or a current employee who is being assigned to a different type of equipment than previously operated on the project site. This observation may be performed by a knowledgeable member of the management team or a designated craft employee such as a foreman or steward. The above referenced checklists could be used for this observation in lieu of the performance test.

Operators shall be physically fit to perform their duties and may be required to participate in the Tetra Tech Medical Surveillance program.

3.3.11 Refresher Training and Evaluation

Refresher training in relevant topics shall be provided to Crane (as defined by OSHA 1910.180(a) operators, and Powered Industrial Truck (PIT) as defined by OSHA 1910.178(a)(1) operators prior to be allowed to continue operating when:

- The operator has been observed to operate the PIT/Crane in an unsafe manner.
- The operator has been involved in an accident or near-miss incident.
- The operator has received an evaluation that reveals that the operator is not operating the PIT/Crane safely.
- The operator is assigned to operate a different type of PIT/Crane; or
- A condition in the workplace changes in a manner that could affect safe operation of the PIT/Crane.

An evaluation of each PIT/Crane operator's performance shall be conducted at least once every three years.

Refresher training in relevant topics shall be provided to all other construction equipment operators when:

- The operator has been observed to operate the equipment in an unsafe manner.
- The operator has been involved in an accident or near-miss incident.
- The operator has received an evaluation that reveals that the operator is not operating the equipment safely.
- The operator is assigned to drive a different type of equipment; or
- A condition in the workplace changes in a manner that could affect safe operation of the equipment.

The employer shall certify that each operator has been trained and evaluated. The certification shall include the name of the operator, the type of equipment, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation.

3.3.12 Repairs

All construction equipment shall be repaired as necessary and maintained in good working order. Repairs to rented/leased construction equipment shall be in accordance with the terms of the rental/lease agreement. Repairs to rented/leased and Tetra Tech's construction equipment shall be documented and a record of the repairs maintained in the project files. Copies of the repair records are to be forwarded to the equipment yard for Tetra Tech-owned equipment.

Construction equipment with deficiencies noted on the Daily Inspection Report should be repaired promptly. The Equipment Supervisor, with input from the Environmental and Safety Supervisor as appropriate, should evaluate if a piece of equipment or a vehicle should be removed from service until the deficiency is corrected.

Construction equipment that develops a fluid leak such as engine oil, hydraulic oil, transmission fluid, or coolant shall be removed from service until the deficient condition has been corrected.

Construction equipment with missing or inoperable exhaust systems, including spark or flame arrestors, mufflers, and catalytic converters, shall be removed from service until the deficient

condition has been corrected.

Tampering with, removal, modification, or otherwise rendering inoperable any pollution control device on construction equipment shall not be allowed except as specifically authorized by the equipment manufacturer or appropriate authority and the Project Manager or Supervisor's concurrence

Only trained, qualified personnel shall be allowed to repair equipment. The project's Work Plan should address repairs to equipment by designating required actions in the event of an equipment failure.

An Authorization for Capital Expenditure or Lease (AFCEL) is to be completed for all major repair work (i.e., $1500.00 and over) performed on Tetra Tech-owned construction equipment in accordance with Accounting/Finance Procedure AF-8, Fixed Assets. (Note that on some construction equipment, the cost of a specific item, a replacement tire for example, may require the processing of an AFCEL due to the item cost.)

Costs for major repairs, as well as repairs for deficiencies, to Tetra Tech-owned construction equipment shall be charged back to the project releasing the equipment if the need for repairs is identified within 30 days of the equipment's release and removal from a project and there are indications that the repairs are needed as the result of lack of maintenance or failure of the releasing project to otherwise keep the equipment in good working order.

No repair shall be undertaken for damage covered by an insurance claim until the damage is reported to the Administration and Compliance Department and the insurer approves the repairs.

3.3.13 Documentation and Record Keeping

A file shall be established and maintained for each operator which contains documentation that the operator has the proper qualifications, licenses/certificates, and training to perform his/her job function. Records may include training identified in the HASP (e.g., OSHA, DOT, Waste Management training), vehicle operator licenses, results of site-administered proficiency testing, and any other special licenses/certificates required by state/local law or the client.

A file shall be established and maintained for each piece of construction equipment, and all records relating to that equipment shall be placed in the file, including the Receipt Inspection Report, annual inspections (for cranes), record of the date the equipment was first placed in

service, Daily Equipment Inspection records, maintenance records, repair records, record of the last date that the equipment was in service, demobilization inspection report, and the decontamination certificate, if applicable. For ease of retrieval, all records pertaining to pieces of equipment should be maintained in separate folders for each piece of equipment.

Additional copies of inspection reports and records may be required to be maintained in other project files, such as the procurement files and/or the Environmental Health and Safety files, based on the project's Documentation Plan.

The Equipment Supervisor should ensure that complete and accurate record of equipment utilization, including a list of idle equipment, is provided to the Quality Control Site Manager on a daily basis..

It may be useful to maintain equipment utilization information on a spreadsheet depending on the size of the project. Information such as equipment mobilization date, date of first use, utilization of equipment by rental period (for example, if rental rate is based on hourly usage and is billed on a monthly cycle, there should be an entry for the number of hours the equipment was used in each billing period), scheduled equipment release date, actual release date, and demobilization date. This information may be useful in verification of vendor invoices, in review of production rates, for preparation of requests for change orders or equitable adjustment, or for backup for use in support of (or defense against) claims.

Copies of all maintenance and repair records for Tetra Tech-owned construction equipment shall be forwarded to the Tetra Tech Equipment Manager at the regional equipment yard on a periodic basis. This period should be monthly, and in no circumstances should it exceed quarterly. An Equipment Service Form is available from the Equipment Manager. This form shall be used to report unscheduled and preventative maintenance on Tetra Tech-owned construction equipment.

The Equipment Manager produces a spreadsheet for Tetra Tech-owned construction equipment that is distributed to the projects on a monthly basis. The Equipment Supervisor shall ensure that reports of mileage or meter readings and routine maintenance for all Tetra Tech-owned construction equipment and vehicles assigned to the project are provided to the Equipment Manager for inclusion on the spreadsheet on a monthly basis. A Meter/Mileage Reading Update Form, available from the Equipment Manager, shall be used to report the required information.

The Equipment Supervisor should review the availability date included on the spreadsheet for Tetra Tech-owned equipment and vehicles assigned to the project and inform the Equipment

Manager of any required revisions to these dates.

The Equipment Supervisor shall complete an Equipment Transfer Report, available from the Equipment Manager, for all Tetra Tech-owned construction equipment and vehicles to be mobilized to, and demobilized from the project. Copies of the Equipment Transfer Reports shall be provided to the Equipment Manager at the regional equipment yard.

There shall be no equipment disposal action (junk or sale) for Tetra Tech-owned construction equipment or vehicles without prior notification and approval from the Tetra Tech President.

4.0 GUIDANCE

4.1 Additional Considerations

4.1.1 Control of Government Property

Activities involving the use of Government property are to be controlled by specific procedures negotiated with the Client in accordance with the contract's terms and conditions; such procedures shall be consulted where appropriate. Such activities may involve the handling or installation of Government property, whether furnished by the Government to Tetra Tech or acquired by Tetra Tech for use in the performance of work and for which the Government has retained title.

Government property may include construction tools and equipment purchased as a project cost, as well as permanent materials or equipment purchased for incorporation into the work. Project-specific procedures for control of Government property are to address issues relevant to the use, storage, inventory control, maintenance, and/or final disposition of the Government property.

4.1.2 Spill Control and Emergency Response Dedicated Tools and Equipment

The project's Emergency Response Plan, or Emergency Action Plan is to identify dedicated personal protective equipment and emergency response tools and equipment to be available for an emergency response to a spill or discharge of hazardous material.

Dedicated emergency response tools and equipment are to be segregated and identified for use in emergency response situations. The use of dedicated emergency response tools or equipment for any other activity is not to be permitted.

4.1.3 Inventory Control

An individual should be designated as the Material Control Supervisor and should be responsible for inventory control of all tools issued from the tool control area. A log should be maintained for all tools issued and should record, as a minimum, the identification by name and employee number of the individual signing out the tool, the date and time the tool was signed out, the intended use of the tool (by area or system), an indication of when the tool is to be returned, and the time and date when the tool is returned.
Inventory control of tools assigned to individuals or crews should be performed on a daily basis as the tools are returned to the gang box or storage area. The crew foreman should be responsible for inventory control of tools assigned to the foreman's crew.

The Site Supervisor should immediately be made aware of any missing tools and should take the appropriate action to investigate and/or replace the missing tools.

4.1.4 Disposition of Tools at Project Completion

The Project Manager should make a determination of the disposition of tools remaining at the end of the project. The project may not be reimbursed by the client for the purchase of tools on certain cost reimbursable and lump sum projects. On other projects, a dollar value for individual tools may establish whether or not the client provides any reimbursement. The terms and conditions of the contract should provide direction as to the required disposition of the tools. Tools for which the project has been reimbursed by the client are to be dispositioned in accordance with the client's preferences and the contract terms and conditions.

Tools purchased for the project as a project cost, and which are not to be turned over to the client, should be dispositioned by the Project Manager. Means of disposition may include, but not be limited to, declaring the tools surplus, sale of the tools, or providing the tools to another project. The Project Manager should consult with the appropriate Business Line Executive Vice Presidents, concerning disposition of project tools.

Tetra Tech owned tools (i.e., not purchased as a project cost) should be dispositioned by the Project Manager based on consultation with the appropriate Business Line Executive Vice Presidents. Means of disposition of Tetra Tech-owned tools may include, but not be limited to, declaring the tools surplus, sale of the tools, return of the tools to an equipment yard, or providing the tools to another project.

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4.1.5 Company-Owned Equipment

Tetra Tech utilizes regional equipment yard(s) for the temporary storage and maintenance of Tetra Tech-owned construction equipment and vehicles when not currently assigned to a project. Available Tetra Tech-owned equipment should be considered for support of a project's construction effort based on an analysis of the benefits to the project and/or Tetra Tech. When evaluating Tetra Tech owned equipment the requirements discussed in 4.1.6 below should be considered when making the equipment selection.

4.1.6 Rental/Lease Equipment

Agreements for rental/lease of construction equipment should be coordinated through an authorized procurement representative to ensure that appropriate terms and conditions are included in the agreement. The Scope of Work for the agreement should be developed and reviewed carefully, including review by the Site Supervisor or Equipment Supervisor for inclusion of sufficient detail in order to clearly define the scope of work.

The Equipment Supervisor, or requisitioner if there is no designated Equipment Supervisor, should review the terms and conditions of all rental/lease agreements to determine that the following topics are adequately addressed:

- Receipt and return of the rental or leased equipment and any required accessories;
- Inspection and documentation of receipt and release;
- Provision of documentation required to be submitted, such as Occupational Safety and Health Administration (OSHA) accredited inspection reports, NDE reports, test reports (i.e. load test for cranes), typically annual inspections, and wire rope certification.
- Provision of all safety equipment and accessories, as required, such as fire extinguishers, seat belts, Roll Over Protection Structures (ROPS), Falling Object Protection Structures (FOPS), access steps, handholds, platforms, and anti two-block devices and load moment indicator (cranes);
- Provision of documentation demonstrating operator certification;
- Provision of Certificate of Compliance when required, for instance by NAVFAC P-307 Management of Weight Handling Equipment, Appendix P - Contractor Crane Requirements.

- Provision and requirements of routine and non-routine maintenance and repairs, including payment for labor, parts, filters, lubricants, and fluids;
- Documentation requirements for the above maintenance and repairs;
- Disposal/recycling requirements for used parts, filters, lubricants, and fluids;
- Items such as point of delivery, costs of delivery and return, rental charges during idle time, notification requirements for demobilization, and point of return;
- Appropriate rental rate provisions for straight time and overtime;
- Responsibility for damage to equipment;
- Insurance;
- Indemnification (if included);
- Payment for replacement of parts subject to normal wear and tear, such as tires, tracks, cuTetra Teching edges, and teeth; and
- Documentation requirements required in support of invoices for basic rental rates and overtime rates, as well as labor, parts, filters, lubricants, and fluids.

Rental agreements should be structured to include normal wear and tear on the equipment in the basic rental rate. In all cases, there should be mutual agreement with the equipment vendor as to the condition of the equipment as it is delivered. This should include items such as the life expectancy of the parts subject to wear and tear, their condition on receipt (i.e., percentage of usable life remaining), and the expected condition on return of the equipment. There should be agreement on minor versus major repairs and on what constitutes normal wear and tear. Mutual agreement is essential to mitigate potential claims from vendors for excessive wear and tear.

4.1.7 Mobilization of Equipment

Mobilization of construction equipment may be a long lead time item and may require client or third party involvement or approvals to gain site access, depending on the required equipment. The Site Supervisor or Equipment Supervisor should determine the lead time required, including Contract submitted and advance notice/approval requirements, and plan for the mobilization of equipment to support the project's schedule.

- Planning for mobilization of equipment should include a thorough review of Contract requirements for utilization of each equipment and site access requirements.
- Documentation of certification, and OSHA compliant annual inspection, load testing, safety devices (e.g., anti two-block) installed, wire rope certification, and operator's certification for cranes (weight handling equipment) should be reviewed prior to initiating mobilization of cranes.

4.1.8 Equipment Maintenance

The Equipment Supervisor should be responsible for administration of a construction equipment maintenance program for the project. A spreadsheet of all Tetra Tech-owned equipment, titled the Status of All Project Equipment, is maintained by the Construction Department providing notification of the scheduled maintenance requirements for each piece of equipment. Either this spreadsheet, or a project specific spreadsheet, should be maintained and statused on a periodic basis. Specific maintenance requirements may also be contained in specific contract negotiated property procedures or in other Tetra Tech corporate procedures.

As construction equipment is received on site, it should be added to the spreadsheet for tracking of the required maintenance.

A review of the scheduled maintenance should be performed for all construction equipment to be used in the Exclusion Zone to determine the desirability of performing any upcoming scheduled maintenance prior to placing the equipment in service. It may be difficult and expensive to perform the maintenance under the conditions required in the Exclusion Zone, or to decontaminate the construction equipment in order to perform the maintenance under clean conditions. When the maintenance of equipment in the Exclusion Zone is anticipated, the Site Supervisor should ensure that qualified personnel are available with the appropriate medical clearances and certifications to work in the Exclusion Zone.

4.1.9 Construction Equipment Safe Operation Requirements

Standards for safe operation of equipment are contained in the documents identified herein, inclusive and in particular of the requirements for safe operation of lifting and rigging equipment and weight handling equipment. The Contract typically will specify certain documents/codes to be followed for the project.

- The United States Army Corps of Engineers (USACE) Safety and Health Requirements Manual, EM 385-1-1, Chapters 16, 17, and 18, provide guidance concerning the safe operation of construction equipment.
- Safe operation of earth drilling equipment is addressed in SWP 5-36 Drill Rigs.
- Safe operation of hand and power tools is addressed in OSHA standard 29CFR Part 1926 Subpart I.
- Safe operation of cranes, derricks, hoists, elevators and conveyors is addressed in OSHA standard 29CFR Part 1926 Subpart N.
- Safe operation of motor vehicles, mechanized equipment and marine operations is addressed in 29CFR Part 1926 Subpart O.
- Rollover protective structures and overhead protection is addressed in 29CFR Part 1926 Subpart W.
- The American Society of Mechanical Engineers (ASME) provides guidance in the B30 commiTetra Techee volumes – Safety Standard for Cableways, Cranes, Derricks, Hoists, Hooks, Jacks, and Slings.
- The United States Department of Energy (DOE) provides guidance for safe lifting operations in Technical Standard DOE-STD-1090 – Hoisting and Rigging.
- The United States Navy publication NAVFAC P-307 – Management of Weight Handling Equipment includes requirements for Contractor Cranes (see appendix P). Navy facilities issue Instructions specific to particular facilities such as 'NAVSHIPYDPUGET INSTRUCTION 11262.4A' which provides requirements for weight handling equipment at all Navy facilities within the Puget Sound.

Construction Equipment safety requirements shall be met before any task can be safely and properly performed, including

- Equipment will be used only in the manner in which it was designed.

- Vehicles and equipment shall be kept in the appropriate gear or drive range when in motion, specifically when ascending or descending a grade. Freewheeling or coasting is prohibited.
- Steps, handrails and grab irons shall be used and equipment shall be faced when mounting or dismounting equipment. When climbing onto or from equipment a 3-point contact shall be maintained. Steps, handrails and grab rails shall be kept maintained, clean and free from slip, trip and fall hazards. Allow extra time in winter or rainy conditions to clean ice, snow and mud from equipment.
- Operators shall wear seat belts before starting and while in operation if the equipment is supplied with seat belts.
- Eye protection is mandatory if the equipment does not have an enclosed cab.
- Passengers shall not ride on equipment unless the equipment is designed to accommodate passengers.
- Before dismounting, the operator shall secure the equipment from movement by lowering all ground-engaging attachments, if so equipped (i.e., setting the parking brake, placing the transmission in park, disabling the hydraulics and activating any other elements of the equipment per the operator's manual).
- Wheeled equipment, without ground-engaging attachments, shall be chocked immediately following dismount with chock blocks that are adequate for the wheel size and equipment weight.
- Blades, buckets and other materials shall be in contact with the ground before the operator dismounts the equipment.
- Equipment should not be left unattended while the engine is running. If conditions exist that make it necessary for equipment to be left running in an unattended state (i.e., cold weather and certain start-ups), do not allow the general public entrance to the area unless the area can be clearly delineated. If the area cannot be clearly delineated to preclude casual entrance by the general public, unattended equipment shall not be left running.

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- The work site around equipment shall be clear prior to moving equipment. The operator shall be attentive to people and any vehicles that may have entered the area during the walk-around inspection.
- All operations shall be in accordance with manufacturers Standard Operating Procedures (SOPs).
- All ground disturbance operations shall comply with the DCN 4-5 Trenching and Excavation Practices.
- Proper working distances shall be maintained when operating equipment that is near electrical lines, as defined in DCN 5-9 Safe Electrical Work Practices.
- Employees shall not get on or off a vehicle or piece of equipment while it is moving.

4.1.10. General Traffic Requirements

The traffic rules in this section shall be followed, at a minimum, when heavy equipment and haul trucks are operated on project sites. The PM or SSC shall implement new traffic rules as conditions or project changes dictate.

- All applicable local governing authority driving rules shall be followed when driving heavy equipment and haul trucks on public or project sites.
- Operators shall understand and adhere to the site traffic right-of-way rules and work zone configurations.
- Speed limits, dependent on the risk associated with the site, shall be posted for the location and shall always be observed. Violation of speed limits shall result in disciplinary actions, which shall be posted and discussed with the workforce. Appropriate signage shall adequately communicate haul roads and traffic hazards.
- Vehicles and equipment shall follow at a safe distance as determined by road conditions, the specific vehicle and loading. The site shall define a minimum following distance.

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- Passing shall be limited to areas of adequate clearance, visibility and where marked accordingly. Passing may be prohibited completely on some sites or areas.

- Lights should be used to direct equipment at night; work zone lighting shall be sufficient for the work being performed.

- Adequate equipment spotters and ground employees should be deployed in conjunction with the job zone and traffic control plan. Spotters shall be not in the path of equipment travel while equipment is backing into a dump or loading area. Spotters shall wear bright, reflective clothing and be competent in directing and signaling equipment. Spotters and operators shall have a clear understanding of signal protocol for the site. When applicable, equipment will be equipped with a working signal alarm while backing up.

- A communications plan shall be developed by the site to allow the workforce to have communications with operators and spotters. A direct communication technique such as radio communication is preferred. If noise may impede operators to hear radios, then visual alerts (e.g., warning lights) inside the cab that are visible to the operator shall be considered.

4.1.11 Road Construction and Maintenance

For the safest and most efficient worksite, these construction and maintenance rules shall be followed when applicable:

- Elevated haul roads and roads, where risk is high from activities such as building dikes, shall have side berms or barriers that are axle height or greater to accommodate for the largest type of equipment that normally occupies the road. Drainage shall be allowed.

- All curves shall have open sight lines and have as large a radius as practical.

- Haul road/traffic changes shall be communicated to all affected personnel.

- Roadways shall be constructed with a slight crown to facilitate drainage.

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- All roadways, including haul roads, shall be routinely maintained in a safe condition, including the elimination or control of dust, ice or similar hazards. Adequate dust control equipment shall be provided on the job site and shall be utilized to control the hazards.

4.1.12 Demobilization of Equipment

Construction equipment should be demobilized when no longer required for the work. The Executive Vice President of Construction should be provided with a status of Tetra Tech-owned construction equipment and scheduled release dates in order to coordinate availability of equipment with other projects.

The Project Manager or designee should request demobilization instructions from the Executive Vice President of Construction or designee to determine the location to receive Tetra Tech-owned equipment.

Construction equipment leaving the Exclusion Zone of a remediation construction project will be decontaminated in accordance with the requirements of DCN 3-9 Decontamination and the site specific HASP.

Individual state regulations may require cleaning of construction equipment leaving a site, not limited to remediation construction, in order to control the spread of microorganisms contained in the soil. Such requirements are to be identified in the project HASP plans.

Revision Date	Document Authorizer	Revision Details
2/16/2012	Chris McClain	Content & Format Revision

1.0 PURPOSE

This program provides the requirements for activities involving excavations in accordance with 29 CFR 1926, Subpart P - Excavations.

2.0 SCOPE

These requirements are applicable to all Tetra Tech operations.

3.0 MAINTENANCE

The VP, Corporate Health and Safety or designee is responsible for updating this procedure. Approval authority rests with Tetra Tech's Senior VP, Corporate Administration. Suggestions for revision shall be submitted to the Corporate Administration department.

4.0 DEFINITIONS

4.1 Benching

A method of protecting employees from cave-ins by excavating the sides of an excavation to form one or a series of horizontal levels or steps, usually with vertical or near-vertical surfaces between levels.

4.2 Competent Person

A competent person is one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

4.3 Excavation

Any man-made cut, cavity, trench, or depression in an earth surface, formed by earth removal.

4.4 Hazardous Atmosphere

An atmosphere which by reason of being explosive, flammable, poisonous, corrosive, oxidizing, irritating, oxygen deficient, toxic, or otherwise harmful, may cause death, illness, or injury.

4.5 Protective Systems

A method of protecting employees from cave-ins, from material that could fall or roll from an excavation face or into an excavation, or from the collapse of adjacent structures. Protective systems include support systems, sloping and benching systems, shield systems, and other systems that provide the necessary protection.

4.6 Sloping

A method of protecting employees from cave-ins by forming sides of an excavation that are inclined away from the excavation so as to prevent cave-ins. The angle of incline required to prevent a cave-in varies with differences in such factors as the soil type, environmental conditions of exposure, and application of surcharge loads.

4.7 Support System

A structure such as underpinning, bracing, or shoring, which provides support to an adjacent structure, underground installation, or the sides of an excavation.

4.8 Trench

A narrow excavation made below the surface of the ground. In general the depth is greater than the width, but the width of a trench measured at the bottom is not greater than 15 feet. If forms or other structures are installed or constructed in an excavation so as to reduce the dimension measured from the forms or structure to the side of the excavation to 15 feet or less, the excavation is also considered to be a trench.

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5.0 DISCUSSION

5.1 Responsibilities

5.1.1 Competent Person

The competent person(s) shall be responsible for:

- Day-to-day oversight of open excavations and trenches
- Conducting soil classifications
- Selection of protective systems
- Conducting daily inspections of open excavations and trenches; and
- Providing the PM and or Supervisor with all required documentation on a daily basis.

5.1.2 Line Management

The Project Manager (PM) shall be responsible for:

- Ensuring compliance with this procedure
- Providing the necessary resources for compliance with this procedure; and
- Designating competent personnel in consultation with the Site Safety Coordinator (SSC)

5.1.3 Site Safety Coordinator Personnel

The SSC shall be responsible for:

- Providing oversight on the implementation of the requirements contained in this procedure
- Conducting periodic reviews of open trenches and excavations
- Consulting with the project manager and competent person on excavation issues; and

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- Maintaining required records.

5.2 Designation of Competent Personnel

Prior to the start of any excavation work the project manager shall designate a competent person to fulfill the requirements of this procedure.

5.3 General Requirements

The following section provides general requirements governing activities in and around excavation and trenches, as well as the requirements for the selection and use of protective systems.

- Surfaces surrounding open trenches and excavations shall have all surface hazards removed.
- All utilities shall be located and cleared prior to initiating digging. Public or facility utility groups shall be utilized where possible for this purpose. In the absence of either, the SSC shall specify the procedures to be used to clear utilities in consultation with the project manager. When the excavation is open, utilities shall be supported and protected from damage. Clearance and support methods shall be documented on the daily inspection checklist.
- No person may enter a trench or work at the foot of the face of an excavation until a qualified, competent person has inspected the excavation and determined whether sloping or shoring is required to protect against cave-in or subsidence and the appropriate protection has subsequently been installed.
- Trenches and excavations must be assessed by a qualified, competent person, even in the absence of working personnel, whenever heavy equipment will be operating nearby in order to ensure that the trench or excavation will support the weight of the equipment without subsistence or causing the accidental overturning of machinery.
- Access to trenching areas must be controlled and limited to authorized personnel. Prior to entering a trench or excavation, workers must notify the project manager, SSC, and nearby equipment operators whose activities could affect the trench or excavation.
- Trenches and excavations must be inspected regularly (daily at a minimum) to ensure that changes in temperature, precipitation, shallow groundwater, overburden, nearby building

weight, vibration, or nearby equipment operation have not caused weakening of the sides, faces, and floors and to ensure that personnel protection is being maintained.

- Where structural ramps are used for egress they shall be installed in accordance with 29 CFR 1926.651(c)(1).
- Stairways, ladders, or ramps shall be provided as means of egress in all trenches 4 feet or more in depth. Travel distance shall be no more than 25 feet between means of exit.
- Ladders if used must be secured from shifting, and must extend at least 3 feet above the top of the trench or excavation.
- Where necessary to prevent falls, crosswalks or walkways will be constructed. Structural ramps, walkway, and cross walks must be designed by a qualified competent person.
- Employees exposed to vehicular traffic shall wear traffic vests.
- No employee shall be permitted under loads being lifted or under loads being unloaded from vehicles.
- When vehicles and machinery are operating adjacent to excavations warning systems such as stop logs or shall be utilized to prevent vehicles from entering the excavation or trench.
- Scaling or barricades shall be used to prevent rock and soils from falling on employees.
- Excavated and loose materials should be kept at least 3 feet from the edge of excavations, but at a minimum 2 feet from the edge of the excavation in accordance with OSHA requirements.
- Walkways or bridges with standard railing shall be provided at points employees are to cross over excavations or trenches.
- Barriers shall be provided to prevent personnel from inadvertently falling into an excavation.
- Comply with any regulatory or contract required permitting and notification processes. For example, in California, a Cal-OSHA excavation permit and notification is required. Clients may classify excavations and trenches as permitted confined spaces, in these cases, DCN 2-5 Confines Space Entry shall be followed. These requirements shall be outlined in the site specific Health and Safety Plan

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- When subsidence or tension cracks are apparent anywhere in an excavation, all work should be stopped until the problem is corrected.

- The competent person must inspect trenches or excavations after any precipitation event to ensure integrity has been maintained.

- If trenches or excavations are near walkways or roadways, guards or warning barriers must be placed to alert pedestrians and drivers of the presence of the trench or excavation.

- If possible, trenches or excavations should be covered or filled in when unattended. Otherwise, strong barriers must be placed around the trench or excavation and lighting must be provided at night if the trench or excavation is near a walkway or roadway.

- When a hazardous atmosphere could exist, the excavation must be tested for appropriate hazardous substances and oxygen level before personnel entry. Excavation where hazardous atmospheres exist must be treated as a confined space. Entry must follow procedures outlined in "Confined Spaced Entry Program," Document Control No. 2 5.

- Entry is not allowed into excavations where water has accumulated.

5.4 Hazardous Atmospheres

Where atmospheres containing less than 19.5 percent oxygen or other types of hazardous atmospheres may exist the following requirements shall be implemented.

- Atmospheric testing shall be done prior to employees entering excavations 4 feet or greater in depth.

- Testing methods shall be listed on the daily inspection checklist and results documented daily in field logs.

- Control measures such as ventilation and personal protective equipment (PPE) shall be used to control employee exposure to hazardous atmospheres below published exposure limits.

- Ventilation shall be used to control flammable and combustible vapors to below 10 percent of their lower explosive limit.

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- Testing shall be repeated as often as necessary to ensure safe levels of airborne contaminants.
- Emergency equipment shall be provided and attended when the potential for a hazardous atmosphere exists. This equipment shall include but not be limited to emergency breathing apparatus, harnesses, lifelines, and basket stretchers. Required equipment will be listed on the daily inspection checklist and reviewed daily.

5.5 Protection From Water Hazards

When water has collected or is collected in excavations and trenches the following requirements shall be applied.

- Employees shall not work in excavations in which water has, or is, accumulating without the use of additional protection such as special support systems or water removal.
- Water removal shall be monitored by a competent person.
- Barriers such as ditches and dikes shall be used to divert runoff from excavations and trenches.
- Trenches shall be re-inspected prior to re-entry after water accumulation due to heavy rainfall or seepage.

5.6 Stability of Adjacent Structures

When excavating or trenching near an adjacent structure the following practices shall be implemented.

- Support systems such as shoring, bracing, or underpinning shall be provided where the stability of buildings, walls, or other structures is endangered by excavation.
- Excavation bases or footings of foundations shall be prohibited unless support systems are used, the excavation is in stable rock, a professional engineer has determined the structure is sufficiently removed from the site as to not pose a hazard, or the PE determines that the excavation shall not pose a hazard to employees due to the structure.

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- Support systems shall be used when it is necessary to undermine sidewalks, pavements, and appurtenant structures.
- Surcharge load sources and adjacent encumbrances shall be listed with their evaluation date on the daily inspection checklist.

5.7 Daily Inspections

Inspections shall be performed daily on all excavations, adjacent areas, and protective systems before personnel enter the trench. The checklist provided in Attachment A or equivalent shall be used.

5.8 Soil Classification

To perform soil classification, the competent person shall use a thumb test, pocket penetrometer, or shear vane to determine the unconfined compressive strength of the soils being excavated. In soils with properties that change (i.e., one soil type mixed with another within a given area) several tests may be necessary. When different soil types are present the overall classification shall be that of the type with the lowest unconfined compressive strength. Classifications shall result in a soil rating of Stable Rock, Type A, Type B, or Type C in accordance with 29 CFR 1926.652, Appendix A. Soil classifications shall be listed on the daily inspection checklist. The soils analysis checklist provided in Attachment B or equivalent shall be used for soil classifications.

5.9 Sloping and Benching

All sloping and benching shall be done in accordance with 29 CFR 1926.652, Appendix B. Selection of the sloping method and evaluation of surface surcharge loads shall be made by a competent person familiar with the requirements contained therein. Sloping and benching methods and specifications shall be listed on the daily inspection checklist.

5.10 Protective Systems

Protective systems are required on all excavations over 5 feet in depth or in excavations less than 5 feet when examination of the ground by a competent person reveals conditions that may result in cave-ins.

Selection and installation of protective systems shall be done in accordance with 29 CFR 1926.652, Appendices C & D, or manufacturers data for shoring and shielding systems. Selection of a protective system shall be made based upon soil classification and job requirements by a competent person.

Protective systems and specifications shall be listed on the daily inspection checklist.

5.11 Training

Competent persons shall have an adequate combination of experience and training to classify soil types and select protective systems as outlined in 29 CFR 1926.652. Training and experience pertaining to qualification as a competent person shall be documented and include the following:

- General safety practices related to working in or near open excavations;
- Inspection requirements and techniques;
- Classification of soils in accordance with 29 CFR 1926.652, Appendix A; and
- Uses, limitations, and specifications of protective systems in accordance with 29 CFR 1926.652.

Training records shall be maintained in accordance with DCN 1-4 Recordkeeping and Reporting Requirements..

6.0 REFERENCES

29 CFR 1926, Subpart P, Excavations. Environmental, Health & Safety - Programs Procedure EHS 1-9, Recordkeeping OSHA (U.S. Department of Labor, Occupational Safety and Health Administration),

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DAILY EXCAVATION INSPECTION CHECKLIST To be completed by a "Competent Person"

Indicate for each item by circling: Y (Yes), N (No), - Address in Comments, Not Applicable (N/A.)

I. General Inspection of Job Site

A. Surface encumbrances removed or supported Y N N/A
B. Employees protected from loose rock or soil that could pose a hazard by falling or rolling into the excavation Y N N/A
C. Hard hats worn by all employees Y N N/A
D. Spoils, materials, and equipment set back at least 2 feet from the edge of the excavation Y N N/A
E. Barriers provided at all remotely located excavations, wells, pits, shafts, etc. Y N N/A
F. Walkways and bridges over excavations 4 feet or more in depth are equipped with standard guardrails Y N N/A
G. Warning vests or other highly visible clothing provided and worn by all employees exposed to public vehicular traffic Y N N/A
H. Warning system established and utilized when mobile equipment is operated near the edge of the excavation Y N N/A
I. Employees prohibited from working on the faces of sloped or benched excavations above other employees Y N N/A

II. Utilities

A. Utility companies contacted and/or utilities located Y N N/A
B. Exact location of utilities marked when approaching the utilities Y N N/A
C. Underground installations protected, supported or removed when excavation is open Y N N/A

III. Means of Access and Egress

A. Lateral travel to means of egress no greater than 25 feet in excavations 4 feet or more in depth Y N N/A
B. Ladders used in excavations secured and extended 3 feet above the edge of the trench Y N N/A
C. Structural ramps used by employees designed by a competent person Y N N/A
D. Structural ramps used for equipment designed by a registered professional engineer (RPE) Y N N/A
E. Ramps constructed of materials of uniform thickness, cleated together on the bottom, equipped with a no-slip surface Y N N/A
F. Employees protected from cave-ins when entering or exiting the excavation Y N N/A

IV. Wet Conditions

A. Precautions taken to protect employees from the accumulation of water Y N N/A

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B. Water removal equipment monitored by a competent person Y N N/A
C. Surface water or runoff diverted or controlled to prevent accumulation in the excavation Y N N/A
D. Inspections made after every rainstorm or other hazard increasing occurrence Y N N/A

V. Hazardous Atmospheres

A. Atmosphere within the excavation tested where there is a reasonable possibility of an oxygen deficiency, combustible or other harmful contaminant exposing employees to a hazard Y N N/A
B. Ventilation Y N N/A
C. Testing conducted often to ensure that the atmosphere remains safe Y N N/A
D. Emergency equipment, such as breathing apparatus, safety harness and line, and basket stretcher readily available where hazardous atmospheres could or do exist Y N N/A
E. Safety harness and life line used and individually attended when entering deep confined excavations Y N N/A

VI. Support Systems

A. Materials and/or equipment for support systems selected based on soil analysis, trench depth and expected loads Y N N/A
B. Materials and equipment used for protective systems inspected and in good condition Y N N/A
C. Materials and equipment not in good condition have been removed from service Y N N/A
D. Damaged materials and equipment used for protective systems inspected by a RPE after repairs and before being placed back into service Y N N/A
E. Protective systems installed without exposing employees to the hazards of cave-ins, collapses or from being struck by materials or equipment Y N N/A
F. Members of support system securely fastened to prevent failure Y N N/A
G. Support systems provided to insure stability of adjacent structures, buildings, roadways, sidewalks, walls, etc. Y N N/A
H. Excavations below the level of the base or footing approved by an RPE Y N N/A
I. Removal of support systems progresses from the bottom and members are released slowly as to note any indication of possible failure Y N N/A
J. Backfilling progresses with removal of support system Y N N/A
K. Excavation of material to a level no greater than 2 feet below the bottom of the support system and only if the system is designed to support the loads calculated for the full depth Y N N/A
L. Shield system placed to prevent lateral movement Y N N/A
M. Employees are prohibited from remaining in shield system during vertical movement Y N N/A

VII. Comments

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Site location

Date Time Competent Person

Soil Type(s)

Soil Classification(s)
Excavation depth
Excavation width

Type of protective system
used

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SOILS ANALYSIS CHECKLIST

This checklist must be completed when soil analysis is made to determine the soil type(s) present in the excavation. A separate analysis must be performed on each layer of soil in excavation walls. A separate analysis must also be performed if the excavation (trench) is stretched over a distance where soil type may change.

Site location:

Date:

Time:

Competent Person

Where was the sample taken from?

Excavation:

Depth:

Width:

Length:

VISUAL TEST

Particle type: Fine Grained (cohesive) Course grained (sand or gravel)

Water conditions: Wet Dry Surface water present Submerged

Previously disturbed soils? Yes No

Underground utilities? Yes No

Layered soils? Yes No

Layered soil dipping into excavation? Yes No

Excavation exposed to vibrations: Yes No

Crack-like openings or spallings observed? Yes No
Conditions that may create hazardous atmosphere? Yes No

If yes, identify condition and source:

Surface encumbrances: Yes No

Work to be performed near public vehicular traffic? Yes No

Possible confined space exposure? Yes No

MANUAL TEST

Plasticity: Cohesive Non-cohesive

Dry Strength: Granular (crumbles easily) Cohesive (broken with difficulty)

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NOTE: The following unconfined compressive strength tests should be performed on undisturbed soils.

THUMB TEST (used to estimate unconfined compressive strength of cohesive soil)
Test performed: Yes No

Type A (soil indented by thumb with very great effort)

Type B (soil indented by thumb with some effort)

Type C (soil easily penetrated several inches by thumb with little or no effort).If soil is submerged, seeping water, subjected to surface water, runoff, exposed to wetting.

PENETROMETER OR SHEARVANE (used to estimate unconfined compressive strength of cohesive soils)
Test performed: Yes No

Type A (soil with unconfined compressive strength of 1.5 tsf or greater)

Type B (soil with unconfined compressive strength of 0.5 tsf to 1.5 tsf)

Type C (soil with unconfined compressive strength of 1.5 tsf or less). If soil is submerged, seeping water, subjected to surface water, runoff, exposed to wetting.

WET SHAKING TEST (used to determined percentage of granular and cohesive materials). Compare results to soil textural classification chart to determine soil type. Test performed Yes No

Type A (clay, silty clay, sandy clay, clay loam, and in some cases silty clay, loam and sandy clay loam)
Type B [angular gravel (similar to crushed rock), silt, silt loam, sandy loam, and in some cases, silty clay loam and sandy clay loam
Type C(granular soil including gravel, sand and loamy sand)

% granular

% cohesive

% silt

NOTE: Type A – no soil is Type "A" if soil is fissured; subject to vibration; previously disturbed; layered dipping into the excavation on a slope of 4H:1V.

SOIL CLASSIFICATION

Type A

Type B

Type C

SELECTION OF PROTECTIVE SYSTEM

Sloping, Specify angle:

Timber Shoring

Aluminum Hydraulic Shoring

NOTE: Although OSHA will accept the above tests in most cases, some states will not. Check your state safety requirements for trenching regulations.

Revision Date	Document Authorizer Name	Revision Details
10/1/2011	Chris McClain	Update

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This safe work practice (SWP) provides contingency measures for spills and unintentional discharges from handling and transporting hazardous materials. Spill and discharge control practices should follow specific procedures to ensure the safety of responders and bystanders and to limit environmental impacts.

1.0 GENERAL PROCEDURES

Immediate action should be taken to control and contain any spill following the general guidelines below:

- Unnecessary personnel should be kept away from the spill or discharge.
- The hazardous area should be isolated.
- If the spill or discharge creates a hazardous situation or results in injury or an environmental release, the emergency procedures of the HASP should be implemented. Emergency response telephone numbers, designated contacts, and special reporting procedures are presented in the HASP.
- Personnel should stay on the upwind side of the spill or discharge.
- Entry into a confined space or low area where liquids or vapors may accumulate should be avoided.
- Sources of ignition should be eliminated if the spill or discharge involves combustible materials.
- Drains, manholes, waterways, sewers, and the like should be identified and covered or protected.
- The spill should be controlled or absorbed using appropriate media or devices.
- When the spill or discharge is fully contained and under control, spill or discharge material should be collected.
- Following cleanup, the spill area should be evaluated by collecting soil samples and screening the area with air monitoring instruments.

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2.0 SOLIDS

If the spill or discharge material is solid and nonreactive, the material should be scooped up and placed in a suitable and compatible container until the disposal method has been determined.

3.0 LIQUIDS

If liquid is discharged, the following general procedures apply:

- The point of discharge should be immediately identified and measures taken to eliminate further discharges by uprighting or patching containers, transferring contents, or other appropriate methods.
- Any discharged liquids or sludge should be removed or retrieved.
- Discharged materials should be cleaned up with absorbent materials or devices.
- Spent absorbent material should be placed into storage or disposal containers.

4.0 REPORTING

In some instances, a release may require reporting to government agencies. If a reportable quantity is released (this quantity is stated on the Material Safety Data Sheet) or human health or the environment is threatened, appropriate national, state, and local administering agency personnel should be notified. The timeframe for notification may vary from agency to agency. Notification may be required immediately or within 24 hours, depending on the type, location, and amount of released material. The appropriate agency to report spills to should be determined during HASP development.

All spills and chemical releases must be reported and investigated in accordance with DCN 2-2 Incident Reporting and Investigation Program. Details must be documented on the IR Form and IR – B.

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damages that result from unauthorized reuse of this SWP. Authorized users are responsible for obtaining proper training and qualification from their employer before performing operations described in this SWP.

Revision Date	Document Authorizer	Revision Details
10/1/2008	Chris McClain	Update from 1998 format

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This safe work practice (SWP) describes situations where heat stress is likely to occur and provides procedures for the prevention and treatment of heat-related injuries and illnesses. Wearing personal protective equipment (PPE), especially during warm weather, puts employees at considerable risk of developing heat-related illness. Health effects from heat stress may range from transient heat fatigue or rashes to serious illness or death.

Many factors contribute to heat stress, including PPE, ambient temperature and humidity, workload, and the physical condition of the employee, as well as predisposing medical conditions. However, the primary factors are elevated ambient temperatures in combination with fluid loss. Because heat stress is one of the more common health concerns that may be encountered during field activities, employees must be familiar with the signs, symptoms, and various treatment methods of each form of heat stress. Heat stroke is the most serious heat-related illness—it is a threat to life and has a 20 percent mortality rate. Direct exposure to sun, poor air circulation, poor physical condition, and advanced age directly affect the tendency to heat stroke. Table 1 lists the most serious heat conditions, their causes, signs and symptoms, and treatment.

Training is an important component of heat stress prevention. Employees are instructed to recognize and treat heat-related illnesses during 8-hour health and safety refresher and first aid training courses. When working in hot environments, specific steps should be taken to lessen the chances of heat-related illnesses. These include the following:

- Ensuring that all employees drink plenty of fluids (Gatorade® or its equivalent)
- Ensuring that frequent breaks are scheduled so overheating does not occur
- Revising work schedules, when necessary, to take advantage of the cooler parts of the day (such as working from 5:00 a.m. to 11:00 a.m. and 6:00 p.m. to nightfall).

When PPE must be worn (especially Levels A and B), suggested guidelines relating to ambient temperature and maximum wearing time per excursion are as shown in Table 2.

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TABLE 1
HEAT STRESS CONDITIONS

Condition	Causes	Signs and Symptoms	Treatment
Heat cramps	Fluid loss and electrolyte imbalance from dehydration	• Painful muscle cramps, especially in legs and abdomen • Faintness • Profuse perspiration	• Move affected worker to cool location • Provide sips of liquid such as Gatorade® • Stretch cramped muscles • Transport affected worker to hospital if condition worsens
Heat Exhaustion	Blood transport to skin to dissipate excessive body heat, resulting in blood pooling in the skin with inadequate return to the heart	• Weak pulse • Rapid and shallow breathing • General weakness • Pale, clammy skin • Profuse perspiration • Dizziness • Unconsciousness	• Move affected worker to cool area • Remove as much clothing as possible • Provide sips of cool liquid or Gatorade® (only if conscious) • Fan the person but do not overcool or chill • Treat for shock • Transport to hospital if condition worsens
Heat Stroke	Life threatening condition from profound disturbance of body's heat-regulating mechanism	• Dry, hot, and flushed skin • Constricted pupils • Early loss of consciousness • Rapid pulse • Deep breathing at first, and then shallow breathing • Muscle twitching leading to convulsions • Body temperature reaching 105 or 106 °F or higher	• Immediately transport victim to medical facility • Move victim to cool area • Remove as much clothing as possible • Reduce body heat promptly by dousing with water or wrapping in wet cloth • Place ice packs under arms, around neck, at ankles, and wherever blood vessels are close to skin surface • Protect patient during convulsions

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TABLE 2
SUGGESTED GUIDELINES WHEN WEARING PPE

Ambient Temperature	Maximum PPE Wearing Time per Excursion
Above 90 °F	15 minutes
85 to 90 °F	30 minutes
80 to 85 °F	60 minutes
70 to 80 °F	90 minutes
60 to 70 °F	120 minutes
50 to 60 °F	180 minutes

Source: National Institute for Occupational Safety and Health (NIOSH). 1985. Memorandum Regarding Recommended Personal Protective Equipment Wearing Times at Different Temperatures. From Austin Henschel. To Sheldon Rabinovitz. June 20.

To monitor the level of an employee's heat stress, the following should be measured:

- Heart Rate: Count the radial (wrist) pulse during a 30-second period as early as possible in the rest period; if heart rate exceeds 110 beats per minute at the beginning of the rest period, shorten the next work cycle by one-third and keep the rest period the same.

  If the heart rate still exceeds 110 beats per minute at the next period, shorten the following work cycle by one-third.

- Oral Temperature: Use a clinical thermometer (3 minutes under the tongue) to measure the oral temperature at the end of the work period. If oral temperature exceeds 99.6 °F (37.6 °C), shorten the next work cycle by one-third without changing the rest period. If oral temperature still exceeds 99.6 °F at the beginning of the next rest period, shorten the following work cycle by one-third. Do not permit a worker to wear impermeable PPE when his or her oral temperature exceeds 100.6 °F (38.1 °C).

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Revision Date	Document Authorizer		Revision Details
	Name	Approval Date	
10/1/2008	Chris McClain		Update from 1998 format
	Rick Lemmon		

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Biological hazards, or "biohazards," include plants, animals or their products, and parasitic or infectious agents that may present potential risks to worker health. This safe work practice (SWP) discusses procedures for working with biohazards, preventive guidelines, and first-aid procedures for the most common hazards field staff are likely to encounter. This SWP does not address biohazards such as those associated with medical waste. Procedures for working with this type of biohazard should be addressed in the site-specific health and safety plan (HASP), construction health and safety plan (C-HASP), job safety analyses (JSAs), activity hazard analyses (AHAs), or other health and safety project planning documents on a case-by-case basis.

During preparation for site work, the document preparer should consider which plants, animals, and other biological agents may be encountered; assess their potential risk to project personnel; and attach this SWP to the document if necessary. Office health and safety representatives should become familiar with biological hazards indigenous to the geographical area in which most of their office personnel work and assist in evaluating the risks to personnel on projects staffed from their offices. SWPs for insects, snakes, animals, plants, waterborne pathogens (giardia), and hantavirus are provided below.

1.0 INSECTS

SWPs for reducing the chance of insect bites or stings and for treating bites or stings are listed below.

- Workers should keep as much skin area covered as possible by wearing long-sleeved shirts, long pants, and a hat. Pant legs should be tucked into socks or boots and shirts into pants. In addition, workers should wear light colored clothing.
- A proven insect repellent should be used on bare skin and clothing.
- When possible, tall grasses and brush that could harbor ticks should be avoided.
- Several times during the day and at the end of the work day, each worker should perform a check for evidence of imbedded ticks or previous bites. Particular attention should be paid to the scalp, neck, ankles, back of the legs, and waist.

- When opening well covers, vaults, or other closed items, workers should watch for hornet or wasp nests and black widow or brown recluse spiders. Workers should never reach into spaces with unprotected arms.
- Workers should watch carefully for bees around open soft drinks or food.
- If a worker is stung by a bee, the stinger should be carefully removed, if present. The wound should be washed and a cold pack applied. Allergic reaction should be watched for and is evidenced by extreme swelling, redness, pain, or difficulty breathing.
- If a worker is stung or bit by a spider or scorpion, medical attention should be obtained immediately.

2.0 SNAKES

SWPs for encounters with snakes and for treating snakebites are listed below.

- Workers should avoid walking in areas known to harbor snakes. Workers should be cautious when picking up or moving items that have been on the ground.
- Workers should wear boots made of heavy material that protect the ankles and pants. Heavy work gloves should be worn for picking up items.
- If one snake is encountered, others may be present. Workers should leave the area by retracing their steps.
- If a worker is bitten, the wound should be washed and the injured area immobilized and kept lower than the heart, if possible. Ice or a tourniquet should not be applied to a snake bite. The wound should not be cut. If medical care is more than 30 minutes away from a work site, a snakebite kit should be available on site and workers should know how to use it.

3.0 ANIMALS

SWPs for encounters with animals and for treating associated wounds are listed below.

- If workers encounter a wild animal, the animal should be observed for unusual behavior such as a nocturnal animal out during the day, drooling, an appearance of partial paralysis, irritability, meanness, or a strangely quiet demeanor.

- Workers should never touch the body of a dead animal because certain diseases could be carried by fleas still on the body.

- Workers should avoid animal droppings (including bird droppings). Pathogens, some of which can become airborne, may still be present in the droppings.

- If a worker is bitten, he or she should get away from the animal to avoid further bites. Workers should not try to stop, hold, or catch the animal.

- If the wound is minor, it should be washed with soap and water. Any bleeding should then be controlled, and an antibiotic ointment and dressing should be applied. All animal bite wounds should be watched for signs of infection.

- If the wound is bleeding seriously, the bleeding should be controlled but the wound should not be cleaned. Medical assistance should be summoned immediately.

- If a rabid animal is suspected, immediate medical attention should be summoned. If possible, workers should try to remember what the rabid animal looked like and the area in which it was last seen. The animal should be reported by calling the local emergency number.

4.0 PLANTS

SWPs for plants are as follows:

- Workers should be aware of the types and appearances of poisonous plants in the work site area. Poison ivy, oak, and sumac are the most frequently encountered plants that can cause reaction from casual contact. If a worker is extremely sensitive to these plants, he or she should avoid the area entirely because airborne drift could be sufficient to cause a reaction. Other plants, such as fireweed, can cause painful, short-term irritation and should be avoided as well. Workers should avoid touching face and eye areas after contact with any suspicious plant.

- Workers should wear proper clothing if working in or near overgrown areas. Disposable outerwear should be used, if necessary, and workers should not touch the material with bare hands during removal if the outerwear may have contacted poisonous plants.

- If contact with a poisonous plant has occurred, the affected area should be immediately washed thoroughly with soap and water. If a rash or weeping sore has already begun to develop, a paste of baking soda and water should be applied to the area several times a day to reduce discomfort. Lotions such as Calamine or Caladryl should be applied to help soothe the area. If the condition gets worse and affects large areas of the body or the face, a doctor should be consulted.

- Bushy and wooded areas should be thoroughly checked for thorn-bearing trees, brush, and bramble. In some cases, impalement can cause severe pain or infection.

5.0 WATERBORNE PATHOGENS-GIARDIA

Giardia is a waterborne pathogen consisting of a protoplasmic parasite of the mammalian digestive tract. Giardia is present worldwide, with the highest occurrence in areas with poor sanitation. In the United States, most reported cases are in mountainous regions where drinking water is obtained from streams and is unfiltered or untreated.

Giardia is contracted by ingesting water contaminated with giardia cysts in the dormant state. Giardia parasites can only thrive in the digestive tracts of mammals. Dormant giardia organisms enter water through the feces of infected animals or humans. Giardia symptoms include severe diarrhea and upset stomach. Some people are asymptomatic but can transmit the disease to others. Medical treatment of giardia can be difficult and unpleasant; therefore, prevention is critical. Precautions for preventing exposure to giardia are listed below.

- Workers should assume that all fresh water streams are infected with the giardia organism and not drink any untreated water.

- Team members collecting sediment and water samples from streams should wash their hands thoroughly with soap and water after collecting the samples.

- Giardia parasites are relatively easy to destroy or filter. Water should be treated for drinking or cooking with iodine or another recommended giardia treatment before use.

6.0 HANTAVIRUS

Hantavirus pulmonary syndrome (HPS) is a potentially fatal infection caused by a rodent-borne hantavirus. HPS begins with a brief illness most commonly characterized by fever, muscle pain, headache, coughing, and nausea or vomiting. Other early symptoms include chills, diarrhea, shortness of breath, abdominal pain, and dizziness. In the first identified cases of HPS, this stage of the infection lasted 2 to 5 days before victims were hospitalized. Typically, by the time of hospitalization, victims were found to have tachycardia (a heart rate of greater than 100 beats per minute) and tachypnea (a breathing rate of greater than 20 breaths per minute). Fever was also common. In most cases, death occurred within 2 to 16 days of the onset of symptoms, and victims exhibited pulmonary edema and severe hypotension.

Currently, experts believe that HPS is spread by the deer mouse (*Peromyscus maniculatus*). Though the deer mouse has been found to be the primary host of hantavirus, several other rodent species have also tested positive for the virus. Pinon mice (*Peromyscus truei*), brush mice (*Peromyscus boylii*), and western chipmunks (*Tamia spp.*) are also likely to carry the virus. Also, cases of HPS have been reported in areas of the United States where these particular rodents are not indigenous.

Infected rodents shed the virus in their urine, feces, and saliva. Humans can be exposed to the virus through (1) inhalation of suspended rodent excreta or dust particles containing rodent excreta, (2) introduction of rodent excreta into the eyes or broken skin, and (3) ingestion of food or water contaminated by rodent excreta. HPS has a reported mortality rate of 55 percent. Transmission of hantavirus from infected individuals to healthy persons has not been documented.

Prevention of HPS infection is essential because no known antidote and no specific treatment exists for treating HPS. Therefore, employees should practice risk reduction and control measures. Guidelines for workers in locations that may have rodent infestations or habitats are listed below.

- The best approach for HPS control and prevention is through environmental hygiene practices that deter rodents from colonizing the work environment.

- Information about the symptoms of HPS and detailed guidance on preventive measures should be provided to all employees assigned to field activities.

- Medical attention should be sought immediately for workers who develop a febrile or respiratory illness within 45 days of the last potential exposure to rodents. Attending physicians should be advised of each worker's potential for occupational exposure to hantavirus. Physicians should contact local health authorities promptly if hantavirus-associated illness is suspected. A blood sample should be obtained from the affected worker and forwarded with the baseline serum sample through the state health department to the Centers for Disease Control and Prevention for hantavirus antibody testing.

- Respiratory protective equipment should be worn when handling rodents, when removing rodents from traps, and when working in areas with evidence of rodent droppings or hair. Respiratory protective equipment should include, at a minimum, a half-face air-purifying respirator (APR) or powered APR equipped with a high-efficiency particulate air (HEPA) filter (P100). Full-face regulators may be needed under some circumstances. Respiratory protective equipment should be used in accordance with Occupational Safety and Health Administration regulations.

- Dermal protection should be worn when handling rodents or traps containing rodents, or if contact with contaminated surfaces could occur. Dermal protection should include rubber or plastic gloves that should be washed and disinfected before removal.

- A trap contaminated with rodent urine or feces or in which a rodent was captured should be disinfected with a commercial disinfectant or a 0.4 percent bleach solution. A dead rodent should be disposed of by placing the carcass in a plastic bag containing enough general-purpose household disinfectant to thoroughly wet the carcass. The bag should be sealed and disposed of by burning or by burying it in a 2- to 3-foot-deep hole. Local and state health departments can also provide appropriate disposal methods.

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10/1/2008	Chris McClain	Update from 1998 format

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	TETRA TECH, INC. SAFE LIFTING and CARRYING PRACTICES	Revision Date: 10/1/2008 Document Control Number: 5-19 Page 1 of 2

To prevent injuries and adverse health effects, the following general safe work practices (SWP) are to be followed when lifting and carrying while in an office or field environment. These SWPs establish a pattern of general precautions and measures for reducing risks associated with back injury and trauma associated with improper lifting and carrying of heavy objects. This list is not inclusive and may be amended as necessary.

- First, inspect the area where the load will be lifted, transported, and then deposited. Remove any obstacles that could present a tripping or other hazard.
- Perform a "test lift" by slightly pushing or moving the object to gauge your ability to safely lift/move/deposit the item without injuring yourself. IF YOU ARE NOT CONFIDENT THAT YOU CAN MOVE THE OBJECT WITHOUT INJYURING YOURSELF - THEN EITHER GET A MECHANICAL LIFTING AID OR GET HELP. DO NOT ATTEMPT TO MOVE THE OBJECT YOURSELF.
- Get as close to the object as you can, and bend at the knees (not at the back).
- Assure that can get a firm grasp on the object.
- Keeping the load as close to you body as possible, lift with your legs, and avoid turning or twisting while lifting, carrying, or depositing the load.
- Carry the object in a manner that it does not obstruct your vision and so that you can maintain a clear line of sight of your path of travel and the area where you will set it down.
- Set the object down using the same techniques as you did in lifting it (don't turn or twist, keep it close to your body, use your legs - not your back).

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By far, the most common cause of skin cancer is overexposure to the sun. Ninety percent of all skin cancers occur on parts of the body that not usually covered by clothing. People who sunburn easily, and those with fair skin and red or blond hair are more prone to develop skin cancer. The amount of time spent in the sun also affects a person's risk of skin cancer. Premature aging of the skin also occurs with prolonged sun exposure. Tetra Tech encourages personnel to avoid prolonged exposure to the sun, and recommends the following:

- Sunburn can occur during any time of the year. To avoid sunburn, wear hats with wide brims.
- Use sunscreen with a Sun Protective Factor (SPF) rating of 15 or higher.
- To prevent skin cancer:
  - Cover up with a wide brimmed hat and a bandanna for your neck. Wear long-sleeved shirts and pants which the sun cannot penetrate.
  - Use sunscreens to help prevent skin cancer as well as premature aging of your skin. Use a Sun Protective Factor (SPF) rating of 15 or higher.
  - Apply sunscreen at least an hour before going into the sun and again after swimming or perspiring a lot.
  - Do not use indoor sun lamps, tanning salons/parlors, or tanning pills.
- You can still get burned on a cloudy day. Try to stay out of the direct sun at midday, because sun rays are their strongest between 10 a.m. and 3 p.m. Beware of high altitudes - where there is less atmosphere to filter out the ultraviolet rays. Skiers should remember that snow reflects the sun's rays, too.
- Know your skin. Whatever your skin type, do a monthly self-examination of your skin to note any moles, blemishes or birthmarks. Check them once a month and if you notice any changes in size, shape or color, or if a sore does not heal, see your physician without delay.

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10/1/2008	Chris McClain		NEW
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1.0 PURPOSE

This program provides requirements for identification, location, and avoidance of underground utilities, appurtenances, and structures during intrusive activities. The program also addresses actions to be taken in response to encountering or contacting underground utilities.

2.0 SCOPE

These requirements are applicable to all Tetra Tech operations. The procedures address the requirements and recommendations for identifying and locating, working around, and encountering or contacting underground utilities.

3.0 MAINTENANCE

The Vice President, Corporate Health and Safety or designee is responsible for updating this procedure. Approval authority rests with Tetra Tech's Senior Vice President, Corporate Administration. Suggestions for revision shall be submitted to Corporate Administration department.

4.0 DEFINITIONS

4.1 Aggressive Methods

The use of mechanized equipment such as excavators, backhoes, drill rigs, directional drilling, road saws, etc. Non-Aggressive methods involve the use of manual or non-mechanized methods such as hand-digging with shovels and air/hydro/vacuum methods.

4.2 Buffer Zone

As defined in this procedure, the area around a utility where only non-aggressive excavation methods may be utilized, unless specific conditions are met.

The definition cited above, and the excavation requirements and restrictions associated with it, will vary depending on the particular state regulations. Tetra Tech requires the imposition of a four-foot

Buffer Zone on all sides of the utility as measured from the outside edges of the utility, both horizontally and vertically. Since most jurisdictions recognize Buffer Zones which vary somewhere in the range of 18 to 36 inches, this distance must be verified by consulting the applicable state regulations before excavating so that adjustments to surface markings can be made to achieve the required four-foot buffer zone.

Referred to as the "Tolerance Zone", "Safety Zone", or "Approximate Location of Underground Utilities" in some jurisdictions.

Information relative to excavation within the buffer zone is contained in Section 5.2.2.4.

4.3 Competent Person

A Competent Person has the ability to recognize hazards associated with underground utilities and the authority to stop or direct operations to ensure the safety of personnel and conformance with this procedure. The Competent Person has an understanding of this procedure, and the "One-Call" system requirements for the jurisdiction where excavation is occurring. The Competent Person must be capable of notifying One-Call agencies and maintaining and tracking One-Call Locate Numbers. Additionally, they must have knowledge of methods and work practices for utility identification, avoidance, and protection.

4.4 De-Energize

As applicable to a utility, to physically eliminate and/or prevent the presence, transmission, flow, or release of energy or materials which may cause harm to personnel or property.

4.5 Excavation

An operation for the purpose of movement or removal of earth, rock, or the materials in the ground, including but not limited to; digging, blasting, auguring, backfilling, test boring, drilling, pile driving, directional drilling, grading, plowing-in, hammering, pulling-in, jacking-in, trenching, tunneling, structural demolition, milling, scraping, tree and root removal (grubbing), fence or sign post installation. Tetra Tech requires that the designated One-Call agency for the applicable jurisdiction be contacted any time an intrusive activity is planned.

4.6 Jurisdiction

The authority having legal jurisdiction relative to regulations and requirements for notification of excavation activities and associated identification and marking. In the United States, the states have jurisdiction, and most consider the regulations applicable when excavation is to be performed in any location, including any public or private way, any company right-of-way or easement, or any public or privately owned land or way.

4.7 Locate

To indicate the existence of a utility by establishing a mark through the use of flags, pins, stakes, paint, or some other customary manner, that approximately determines the location of a line or facility.

4.8 Locate Request

A communication between an entity performing intrusive activities and a utility marking agency (One-Call, etc.).

4.9 Observer

The person assigned to visually monitor and, as needed, signal the operator during mechanized intrusive activity when the activity is occurring within four feet of the outside edge of the buffer zone. This person remains in close communication with the equipment operator(s) and will stop the activity if needed.

4.10 One-Call Agency

An entity that administers a system through which a person can notify owners/operators of underground lines or utilities of the intent to perform intrusive activities in proposed public areas.

4.11 Positive Response

Communication with the entity performing intrusive activities, prior to the activity, to ensure that all contacted (typically via the One-Call agency) owner/operators have located and marked the underground utilities.

4.12 Potholing

The practice of exposing an underground facility by safe, non-aggressive excavation methods in order to ascertain the precise horizontal and vertical position and orientation of underground lines or utilities.

4.13 Underground Utility

An underground or submerged conductor, pipe, or structure used in providing electric or communications service (including but not limited to, traffic control loops and similar underground or submerged devices), or an underground or submerged pipe used in carrying, providing, or gathering gas, oil or oil product, sewage, storm drainage, water or other liquid service (including, but not limited to, irrigation systems), and appurtenances thereto. As used in this procedure, utility includes all underground appurtenances and structures.

The following are examples of the types of underground utilities that may be present in a given location:

- Natural gas pipelines
- High voltage electric cables
- Water pipelines
- Fiber optic telecommunications lines
- Steam pipelines
- Gasoline, oil, or other fuels
- Sewer pipelines
- Hazardous Materials
- Underground Storage Tanks (USTs)
- Abandoned underground structures containing hazardous materials, hazardous wastes, and radioactive materials

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Note: Electrical and pressurized mechanical underground utilities that are not energized shall be considered as applicable to the requirements of this procedure until they are disconnected and removed or protected by a lockout/tagout system approved by Tetra Tech (see Section 5.2.2.6)

4.14 Underground Utility Owner

Any person, utility, municipality, authority, political subdivision or other person or entity who owns, operates, or controls the operation of an underground line/facility.

4.15 White Lining

The practice whereby the entity which intends to perform intrusive activities pre-marks the site with an outline of the area where intrusive activities will occur. This involves the use of white paint, flags, stakes, or a combination thereof to mark the extent of where work is to be performed. The marking may vary depending on what intrusive activities are to be conducted. For example, for general excavation, an area outline of the excavation shall be marked, while for drilling, the individual boreholes shall be marked. Studies have shown that pre-marking is a practice that does prevent utility contact incidents.

5.0 DISCUSSION

5.1 Responsibilities

5.1.1 Competent Person

The Competent Person shall be responsible for:

- Obtaining a copy of, and understanding the applicable regulations for the state of jurisdiction where the excavation activities are to be performed.
- Contacting the appropriate One-Call agency or private locating service, as applicable.
- Recording One-Call locate numbers.
- If necessary, renewing One-Call locate numbers before expiration.
- Ensuring that white-lining of the area to be excavated is performed.

- Ensuring that a "positive response" has been received from every utility owner/operator identified by the One-Call agency and that they have located their underground utilities and have appropriately marked any potential conflicts with the areas of planned intrusive activities.
- Completion of the Ground Disturbance Permit (Excavation/Utility Locates) or equivalent.
- Reviewing applicable AHAs or other client specific requirements with all project members before work begins.
- Conducting training on communication protocols to be used by the excavation observer and equipment operator.
- Ensuring Implementation of appropriate work practices during intrusive activities (including maintaining the prescribed buffer zone for use of aggressive methods).
- Conducting daily inspections of the excavation area to make sure that all markings are intact.
- Maintaining required records.
- Providing the Project Manager or Site Supervisor with all required documentation on a daily basis.

5.1.2 Observer

Whenever intrusive operations with mechanized equipment are being conducted within four feet of the outside edge of the buffer zone, horizontally and vertically, an observer must be assigned to monitor the activities. The observer is responsible for:

- Observing the operation to ensure that the operator stops operations if utilities are observed.
- Reviewing hand signals and other forms of communication with the operator.
- Properly signaling the operator.

- Stopping the operation immediately if the observer's attention must be diverted even momentarily.
- Stopping the operation immediately if a hand signal or other directive is not followed. Operations will not resume until the observer and operator mutually agree that the reason(s) for not complying with the directive(s) are/is identified and fully corrected.
- Maintaining required records, such as logbook entries, or other, as requested by line management.

5.1.3 Line Management

The Project Manager (PM) shall be responsible for:

- Ensuring compliance with this procedure.
- Providing the necessary resources for compliance with this procedure.
- Designating Competent Personnel in consultation with the Site Safety Coordinator prior to the start of work.

5.1.4 Site Safety Coordinator

The Site Safety Coordinator (SSC) shall be responsible for:

- Providing oversight on the implementation of the requirements contained in this procedure.
- Consulting with the PM and Competent Person on underground utility issues.

5.2 Procedure

The following sections provide the requirements and recommendations of this procedure, which are intended to prevent injury to personnel, damage to infrastructure, and associated indirect effects associated with encountering or contacting underground utilities during the execution of intrusive work. Underground utilities present multiple potential hazards that must be recognized before and during work which occurs near them, therefore, this procedure is divided into sections addressing underground utility identification and location, working around or near underground utilities, and actions to be taken in the event that underground utilities are encountered or

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contacted. Hazards that may be presented by underground utilities include explosion and fire, electrocution, toxic exposures, pathogens, and drowning.

5.2.1 Identifying and Locating Underground Utilities

The possibility of the existence of underground utilities must be evaluated as early as possible in the planning phase for any project which involves intrusive activities. The Project Safety Checklist or equivalent should be used for documentation of the identification of this potential hazard and the procedures to be followed to address them. The following sections describe various methods for identifying and locating utilities on a site. Plans should be verified during the readiness review. The Ground Disturbance Permit (Excavations/Utility Locate) or equivalent must be completed before any activities meeting the definition of excavation are conducted. This document is intended to be used as a guide during the process of locating and marking utilities in the area and in the overall process of underground utilities management during the course of the project.

All underground utilities on a site involving excavation, must be located and identified before intrusive activities commence, by one or more of the following entities:

- The Utility Owner
- A Private or Public Utility Locating Service
- An Approved Tetra Tech Competent Person

These options are described in greater detail in the following Sub-Sections:

5.2.1.1 Pre-Planning and the Site Specific Health and Safety Plan

The Site-Specific Health and Safety Plan developed for the project must:

- Identify the location and types of underground utilities that are believed to be present on the site.
- Reference this procedure and describe how it will be implemented on the project.
- Contain an Activity Hazard Analysis in which the hazards associated with underground utilities are identified, as well as the measures used to control them.

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- Contain, as an appendix, a copy of the applicable regulations from the state of jurisdiction where excavation activities are to be performed. These can usually be obtained via the Internet.
- Contain clear and concise procedures to be followed in the event that contact with underground utilities occurs.
- Address underground utilities and potential associated scenarios in the emergency response section.

5.2.1.2 "One-Call" Locating and Marking Services

Every state has utility marking service programs having various names such as "One-Call", "Dig-Safe", "Call-Before-You-Dig", "Dig-Safely", and many others. These services will identify the types and locations of any utility that may exist in an area to be excavated, as long as the property is in the public domain.

The appropriate One-Call service for the jurisdiction where the project is located must be contacted prior to beginning excavation work. The One-Call agency should be given as detailed a description of the property as possible; address, cross street, utility pole numbers, physical description, etc.

Notification to the One-Call service shall allow sufficient lead time for the agency to mark the utilities before excavation begins. The lead times vary, but range from two to ten days, depending on the state of jurisdiction.

A complete listing of One-Call agencies and telephone numbers for all states is available in the "Call-Before-You-Dig Call Center Directory", which can be accessed online.

Once notified, the One-Call agency will provide the contractor with a unique "locate number" or "reference number". This reference number must be kept in the project files by the Competent Person or designee. Additionally, the reference numbers have expiration dates, which may vary depending on the particular One-Call agency. The valid period of the locate number and required renew notification date shall be requested from the One-Call agency.

On a project with multiple contractors, each contractor must request a separate locate number. Under no circumstances will any other contractor or entity be allowed to work under our locate number. Subcontractors to Tetra Tech may excavate under the locate number secured by Tetra

Tech, provided that they are excavating within the area which was previously white-lined by Tetra Tech and subsequently marked. However, the One-Call agency must be contacted and notified of this arrangement so that the subcontractor can be recorded as working under the existing locate number. If a Tetra Tech subcontractor will be excavating in an area not white-lined by Tetra Tech, then the Tetra Tech subcontractor must request a new locate.

The area where work is to be performed shall be white-lined by Tetra Tech personnel before the locating service goes to the site.

It is good practice to arrange a pre-excavation meeting at the project site with the personnel performing the utility location and marking. This meeting will facilitate communications, coordinate the marking with actual excavation, and assure identification of high-priority utilities.

The One-Call agency should provide the identities of the utility owners that will be notified of the locate request. This information shall be recorded on the Ground Disturbance Permit maintained in the project files. The contact person and phone number for each utility owner shall also be recorded.

The utility owners should provide a “positive response” relative to the locate request, which can consist of two types of action by the utility owner. The facility owner or operator is required to 1) mark it’s underground utilities with stakes, paint, or flags, or 2) notify the excavator that the utility owner/operator has no underground utilities in the area of the excavation.

The positive responses shall be recorded on the Ground Disturbance Permit and cross-checked with the list of utility owners that the One-Call agency stated that they would notify. If it is discovered that a utility owner has not provided a positive response, then the One-Call agency must be notified.

Excavation shall not be conducted until positive responses have been received from all utility owners identified by the One-Call agency as having underground utilities on the property.

Before beginning excavation, the excavator must verify that the location marked was correct, and the distinct, color-coded markings of all utility owners are present.

Examine the site to check for any visible signs of underground utilities that have not been located and marked such as pedestals, risers, meters, warning signs, manholes, pull boxes, valve boxes,

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patched asphalt or concrete pavement, areas of subsidence, fresh sod or grass, lack of grass or vegetation, and new trench lines.

The markings placed by the utility owners must be documented by Tetra Tech using a still, digital, or video camera. The photo-documentation shall be maintained with the project files indefinitely.

The markings placed by the utility owners or marking services shall follow the American Public Works Association Uniform Color Code as described in ANSI Standard Z 535.1. This code appears below.

American Public Works Association Uniform Color Code

Red - Electric Power Lines, Cables, Conduit

Orange - Communications, Telephone, Cable TV

Yellow - Gas, Oil, Steam, Petroleum or Gaseous Materials

Green - Sewers and Drains

Blue - Potable Water Systems

Purple - Reclaimed Water, Irrigation, Slurry Lines

Pink - Temporary Survey Markings

White - Proposed Excavation

5.2.1.3 Private Utility Locating and Marking Services

As discussed, One-Call agencies arrange for the identification and marking of underground utilities only on public property, up to the point of contact with private property. In the event that excavation activities are to be conducted on non-public properties, the presence, location, depth, and orientation of all underground utilities within the white-lined area shall be ascertained through records review, including any site plot plans, utility layout plans, and as-built drawings available from the property owner, as well as through interviews with knowledgeable personnel associated with the property. Additionally, the information gathered from these sources shall be verified by physical detection methods (non-aggressive), performance of a geophysical survey, or by procuring

the services of a private utility locating and marking service. If any detection methods are to be self-performed, the requirements of 5.2.1.4 must be followed.

The above requirements are also intended to address the potential presence of unknown or undocumented underground utilities, therefore, the area to be excavated must also be evaluated by the PM to determine if the potential for unknown or undocumented underground utilities exist. If the determination is made that the presence of these unknown or undocumented underground utilities is unlikely, then a variance should be requested to eliminate the requirement to identify them.

Variance to this requirement above must be approved by the PM and SSC.

5.2.1.4 Self-Performance of Utility Locating and Marking

The techniques and instruments used to locate and characterize underground utilities can be extremely complicated and difficult to use effectively. Additionally, interpretation of the data generated by this instrumentation can be difficult. The utility marking services described in 5.2.1.1 and 5.2.1.2 are staffed by well-trained, experienced professionals who perform locating activities on a regular basis. For these reasons, it is most desirable that these professional services are used for utility location and marking on projects.

In some instances, such as long-term projects where excavation is a primary task, and the presence of underground utilities is extensive, it may be prudent to self-perform locating and marking activities.

If locating and marking is to be self-performed, all personnel using instrumentation will be trained on the use of the equipment that will be used, and the interpretation of the data.

There are a variety of locating methods which may be utilized for self-performance of utility locating as categorized below:

- Magnetic field-based locators or path tracers
- Buried electronic marker systems (EMS)
- Ground penetration radar-based buried –structure detectors
- Acoustics-based plastic pipe locators

- Active probes or beacons for non-metallic pipes
- Magnetic polyethylene pipe

Before self-performing any underground utility locating on a project, approval must be obtained from the Operating Unit Health and Safety Manager.

5.2.2 Working Near or Around Underground Utilities

After the site has been properly evaluated for the presence of underground utilities, intrusive activities may begin. Since there is no perfect way of eliminating the hazards presented by underground utilities, an effort must be made to perform the tasks following the direction and guidance as described by the following best practices that should be implemented during the execution of the project.

5.2.2.1 Work Site Review

Before beginning intrusive activities, a meeting shall be held between all members of the project team. This shall consist of a review of the marked utility locations with the equipment operators, observers, laborers, etc.

5.2.2.2 Preservation of Marks

During excavation, efforts must be made to preserve the markings placed by the utility owners until they are no longer required. If any markings are obliterated, the One-Call agency must be contacted for re-marking. No intrusive activities are to take place if markings are not visible.

5.2.2.3 Excavation Observer

Whenever intrusive operations are being conducted within four feet of the edge of the buffer zone, an observer must be assigned to monitor the activities. The observer will be designated each day, and a review of hand signals and other forms of communication between the observer and operator will be conducted. The directives of the observer will be followed precisely and immediately by those operating equipment.

5.2.2.4 Excavation Within The Buffer Zone

Performing intrusive activities within the buffer zone requires careful adherence to proper guidelines and procedures to minimize the risk of contact with underground utilities.

The purpose of the buffer zone is to designate and define an area where careful, prudent, and reasonable excavation practices are to be used to prevent contact with underground utilities. However, there may be occasions where it is necessary to perform aggressive excavation methods in this designated area.

The boundaries of the buffer zone as defined in Section 4.2 will be observed at all times during intrusive activities. Aggressive excavation methods (excavators, backhoes, drill rigs) must be restricted to areas outside of the 4-foot buffer zone unless a special exemption to this requirement is obtained.

Consider whether the objective of the project can be completed without performing intrusive activities in the buffer zone at all. This will greatly reduce the risks presented by performing work in close proximity to underground utilities. If after consideration, the determination is made that intrusive activities in the buffer zone are necessary, then a formal exemption request shall be made to the PESM according to the guidelines below.

A request to utilize aggressive excavation methods in the buffer zone may be made if:

There is no other appropriate and reasonable alternative to using aggressive methods in the buffer zone; and

- The utility has been de-energized (and purged if necessary), verified as de-energized, and locked-out (per Section 5.2.2.6); or
- the depth and orientation of the utility has been adequately and visually determined through the use of non-aggressive methods such as air/hydro/vacuum excavation, potholing, probing, hand-digging, or a combination thereof; and
- for utilities containing electrical energy, the depth of the existing water table is below the location of the utility; and
- application for the exemption has been submitted to the SSC; and
- the exemption has been granted and approved in writing by the SSC.

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The following conditions will apply to this request:

- Aggressive methods may be used in the buffer zone only to the extent allowed by the applicable state or other jurisdictional regulations.
- Appropriate physical protection measures for exposed utilities as described in Section 5.2.2.5 shall be implemented to eliminate the potential for equipment contact with utilities.
- The extent of the project excavation area to be covered by the exemption request must be specified.
- When evaluating the use of aggressive excavation methods in the buffer zone, the SSC will consider the type of utility involved and the associated risk potential.

Based on this evaluation, the SSC may impose further conditions and requirements, which will be detailed in the HASP.

Even if the above exemption conditions are met, the SSC has authority to deny the request, the reasons for which will be provided.

Unless exempted according to the above provisions of this procedure, only non-aggressive methods may be used within the buffer zone. Non-aggressive, or non-mechanized equipment is used in order to prevent mechanical contact with underground utilities which could result in damage to the utility and create the potential for personal injury and property damage. Following are examples of non-aggressive excavation methods:

- Hand-digging
- Non-conductive hand tools must be used when digging within the buffer zone surrounding underground electrical utilities.
- If conductive hand tools must be used near electrical lines, then the SSC shall be consulted to determine additional requirements relative to safe electrical practices, procedures, and equipment.
- Hydro-excavation (water pressure).
- Air excavation (air pressure).

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- Vacuum extraction (soil excavation/removal).
- Air excavation/vacuum extraction combination.
- Aggressive methods may be used for the removal of pavement over a utility, if allowed by the state regulations.

5.2.2.5 Protection of Underground Utilities

It is very important that consideration be given to the protection of underground utilities when performing adjacent intrusive activities. This is necessary not only to prevent physical damage and associated indirect effects, but also to prevent the potential for injury to employees and the public.

When using aggressive excavation methods within the buffer zone around exposed underground utilities, physical protection may be appropriate. Basically, this involves creation of a physical barrier between the mechanized operation and the utility. The following are some possible types of physical protective measures:

- Heavy timbers, similar to swamp mats.
- Sheets of plywood.
- Blasting mats.
- Once exposed, underground utilities no longer have the support provided by surrounding soil and may need to be physically supported to prevent shifting, bending, separation, or collapse, which could result in damage to the utility, and possibly personnel. Following are suggested support methods:
- Timber shoring underneath the utility.
- Timbers or girders over the top of the excavation fitted with hangers that support the utility.
- Design by a PE for complicated or large applications.
- Utilities must also be protected from objects that may fall into the excavation such as rocks and equipment. This can be accomplished by following these guidelines:

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- Cast spoils as far away from the excavation as possible. Excavated and loose materials shall be kept two feet from the edge of excavations, as required by OSHA.
- Relocate large rocks, cobbles, and boulders away from the excavation and sloped spoils piles.
- When vehicles and machinery are operating adjacent to excavations, warning systems such as soil berms, stop logs or barricades shall be utilized to prevent vehicles from entering the excavation or trench.
- Scaling or barricades shall be used to prevent rock and soils from falling into the excavation.
- Barriers shall be provided to prevent personnel from inadvertently falling into an excavation.

5.2.2.6 De-Energizing Utilities

Utilities can carry many types of potential energy, including electricity, flowing liquids, liquids under pressure, gasses under pressure, etc. A release, such as may happen if a utility conveyance is compromised, could result in personal injury, property damage, and other indirect effects. If the white lines of the proposed excavation area overlaps or extends into the buffer zone of a known underground utility, then if at all possible, that utility shall be de-energized to physically prevent the transmission, flow, or release of energy. Conversely, if the buffer zone of the known utility lies outside of the white-lined, proposed excavation area, then de-energization is not required.

The owner of the utility shall be contacted to determine the feasibility and methodology of de-energizing the utility. Plenty of lead-time should be provided for this since it may take utility companies weeks to de-energize some utilities.

Depending on the utility and the material being conveyed, isolation points which may be suitable for de-energizing include but are not limited to the following:

- Electrical circuit breakers
- Slide gate

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- Disconnect switches
- Piping flanges
- Other similar devices

When utilities are de-energized, it must be verified by demonstration. This can be accomplished by testing equipment, switching on a machine or lighting, opening a valve, etc. For any current-carrying electrical equipment, such as cables, electrical panels, etc., successful de-energization must be certified through the use of appropriate electrical testing equipment.

Whenever a utility is de-energized, a means of ensuring that the energy isolation device and equipment cannot be operated until the device is removed must be provided. Typically, this is achieved by utilizing a lockout device, accompanied by a written tag that physically controls the configuration of the energy isolation point. Lockout devices include but are not limited to the following:

- Locks
- Chains
- Valve covers
- Circuit breaker hasps
- Blind flanges
- Slip blinds, and
- Multiple lock hasps

When de-energizing and locking out of utilities is practiced, the provisions of DCN 2-16 Control of Hazardous Energy Lockout/Tagout, shall be followed, as applicable.

In the event that a utility is de-energized, but there is no means of adequately providing a physical locking-out of the utility, then a spotter must be posted at the point of isolation to ensure that the utility is not re-energized. The spotter must be supplied with a communication device such as a site radio.

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5.2.2.7 Damage Discovery

During excavation, utility damage may be discovered which is pre-existing or otherwise not related to a known contact. Disclosure to the utility owner is very important because the possibility of utility failure or endangerment of the surrounding population increases when damage has occurred. The utility may not immediately fail as a result of damage, but the utility owner or operator must be afforded the opportunity to inspect the utility and make a damage assessment and effect repairs if necessary. The following guidance applies:

- Observe and photograph the utility from a safe distance and determine in there is damage. Damage would be all breaks, leaks, nicks, dents, gouges, grooves, or other damages to utility lines, conduits, coatings, or cathodic protection systems.
- The One-Call agency or private location service must be contacted immediately.

5.2.3 Encountering or Contacting Underground Utilities

In the event that encountering or contacting an underground utility occurs, it is imperative that the appropriate actions are taken to minimize damage to the utility, prevent personal injury, and minimize indirect effects.

5.2.3.1 Encountering Underground Utilities

It is possible that underground utilities will be encountered in locations that have previously been "cleared" of having underground utilities by the locating service, or are found outside of the area which has been marked as having underground utilities. In either case, if this occurs, the following applies:

- Intrusive activities must be curtailed
- The One-Call agency or private location service must be contacted immediately
- The PM and PESM must be notified
- No further intrusive activities may be conducted until:
- The One-Call agency/private location service and/or the subject utility owner visit the site;

- Identification of the utility owner and the type of material/energy being conveyed by the utility has been made; and
- The orientation and depth of the subject utility has been determined and suitably marked.
- A Tetra Tech Incident Report and Investigation form must be completed per DCN 2-2 Incident Reporting and Investigation Program. The report should be accompanied by photographs clearly showing the marking(s), and the actual location, with a distance gauge to document how far off the mark the utility was encountered.

5.2.3.2 Contacting Underground Utilities

If excavation or other equipment being used for intrusive activities makes contact with an underground utility, the following guidelines apply:

- Intrusive activities must be stopped immediately.
- Observe the utility from a safe distance and determine if there is damage. Damage would be all breaks, leaks, nicks, dents, gouges, grooves, scratched coatings, cathodic protection compromise, material leakage, obvious electrical energy.
- Move all personnel to the evacuation meeting point as described in the SSHP.

EXCEPTION: If an electrical line has been contacted and it is your belief that equipment (such as an excavator) is electrically energized, do not approach the equipment. Order the operator to remain in the equipment until emergency personnel can de-energize the source (unless the equipment is on fire, at which time the operator should jump off of the vehicle and shuffle along the ground to a safe area). Shuffling is required because current flows outward through the soil in a ripple pattern called a power gradient, creating a pattern of high and low potential, Shuffling decreases the chance that these gradients could be bridged, causing current to flow through the body, resulting in electrocution.

- Secure the area to prevent the public from entering.
- Contact emergency responders as specified in the SSHP.
- The One-Call agency or if known, the utility owner must be contacted immediately.

- The PM and SSC must be notified.
- No further intrusive activities may be conducted until:
- The utility owner inspects the scene and after repairs, verifies that all danger has passed.
- The orientation and depth of the subject utility has been determined and suitably marked.
- Permission from the emergency responders to resume work has been given.

A Tetra Tech Incident Report and Investigation form must be completed per DCN 2-2. The report should be accompanied by photographs clearly showing the marking(s), and the actual location, with a distance gauge to document how far off the mark the utility was encountered.

State and Local regulations must be reviewed to determine if reporting to any additional agencies is required.

5.3 Training

Competent Persons shall have adequate experience and/or training to carry out the requirements of this procedure.

6.0 SOURCES OF INFORMATION

6.1 Organizations

- Common Ground Alliance
- Center for Subsurface Strategic Action (CSSA)
- DigSafely
- National Utility Contractors Association (NUCA)
- National Utility Locating Contractors Association (NULCA)
- Underground Focus Magazine

- NUCA State Listing of One-Call centers
- Utility Safety Magazine

6.2 Vendors and Commercial Sites

- RadioDetection, Inc. (Detection Instruments)
- Heath Consultants (Detection Instruments)
- Ben Meadows Company (Detection Instruments)
- So-Deep, Inc. (Complete Utilities Services)
- Concept Engineering Group, Inc. (Air Excavation Equipment)
- Rycom Instruments, Inc. (Detection Instruments)
- Schonstedt Instrument Company (Detection Instruments)
- Forestry Suppliers, Inc. (Fiberglass Probe – "Fiberglass Tile Probe", Part #77543, Approx. $20.00, Telephone 800-647-5368)

7.0 REFERENCES

Common Ground Study of One-Call Systems and Damage Prevention Best Practices, August, 1999, Sponsored by US DOT.

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1.0 PURPOSE

Tt employees involved in remediation of spills or hazardous waste releases may be required to handle containers of hazardous waste. Services performed at hazardous and non-hazardous waste sites may also necessitate handling materials such as gasoline and oil for equipment operation, and chemicals for preservation of samples brought onto a site. Tt facilities may also maintain chemicals on-site in the construction materials engineering (CME) and analytical laboratories. These scenarios present the primary potential for spills or container leaks.

This safe work practice (SWP) addresses general guidance for spill prevention and cleanup. Specific guidance for spill response can also be found in site-specific health and safety plans developed for hazardous waste sites, work plans for non-hazardous waste sites, the chemical hygiene plan, and the facility emergency response plan. Spill and discharge control practices should follow specific procedures to ensure the safety of responders and bystanders and to limit environmental impacts.

2.0 SPILL PREVENTION

The best spill response approach is to prevent spills from occurring. In order to achieve this, the following practices should be employed at Tt facilities and client job sites.

- Make sure that all containers are appropriately labeled and that material safety data sheets (MSDS) are available. Before handling operating and analysis materials or hazardous waste, appropriate precautions should be in place to prevent spills and exposure to individuals.

- Store chemicals in appropriate locations. Make sure that incompatible chemicals are not stored in the same area. Refer to Appendix A for a general listing of incompatible chemicals.

- When transporting chemicals, ensure that the containers are properly closed, secured, and labeled. Do not carry more than one container at one time. If this is required, place containers within totes.

- Only keep the necessary quantity of each chemical on hand. For ease of use, keep chemicals in working containers that are appropriately sized for handling.

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- Ensure that chemicals that are no longer needed and expended chemical containers are disposed of according to regulations pertaining to the specific material.

3.0 GENERAL SPILL RESPONSE PROTOCOLS

In the event that a spill does occur, the following general steps should be followed:

- The first concern should be for human health and safety. Tend to injuries immediately, evacuate the area if necessary, and alert appropriate response personnel.
- If the material is flammable or combustible, an attempt should be made to remove all sources of heat or ignition. However, this does NOT mean unplugging machinery; doing so may cause sparks.
- Consult the MSDS before spill cleanup activities to determine the proper PPE and cleanup equipment to be utilized.
- If the material is still spilling or leaking, attempt to stop additional spillage and contain the area to prevent spread of the contamination.
- Cleanup should be conducted according to the proper techniques described in the MSDS, site-specific health and safety plan, and/or emergency response plan.
- Cleanup should only be attempted by properly trained personnel wearing appropriate PPE.
- All waste should be disposed of according to applicable regulations.
- IF THE SPILL IS TOO LARGE – CALL IN APPROPRIATE RESPONSE PERSONNEL. DO NOT ATTEMPT TO MANAGE THE SPILL YOURSELF.

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4.0 DETAILED SPILL RESPONSE PROTOCOLS

This section provides more detailed steps to follow in the event of a spill or leak.

4.1 Immediate Actions

In the event of a spill, employees should immediately:

- Check for injured personnel.
- Clear the affected area.
- Contain the spill and isolate it, if it is safe to do so.
- Contact the facility manager, project manager (PM) or site safety coordinator (SSC).

Immediate action should be taken to control and contain any spill following the general guidelines below:

- Unnecessary personnel should be kept away from the spill or discharge.
- The hazardous area should be isolated.
- If the spill or discharge creates a hazardous situation or results in injury or an environmental release, the emergency procedures of the HASP should be implemented. Emergency response telephone numbers, designated contacts, and special reporting procedures are presented in the HASP.
- Personnel should stay on the upwind side of the spill or discharge.
- Entry into a confined space or low area where liquids or vapors may accumulate should be avoided.

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- Sources of ignition should be eliminated if the spill or discharge involves combustible materials.

- Drains, manholes, waterways, sewers, and the like should be identified and covered or protected.

- The spill should be controlled or absorbed using appropriate media or devices.

- When the spill or discharge is fully contained and under control, spill or discharge material should be collected.

- Following cleanup, the spill area should be evaluated by collecting soil samples and screening the area with air monitoring instruments.

4.2 Decontamination of Personnel

If an individual is contaminated while handling or transporting hazardous materials, emergency response personnel must be notified and a spill team activated. The individual must also be decontaminated and receive medical attention. If decontamination procedures would cause further injury, decontamination should not be performed. Instead, use a blanket or other material to contain the contamination during transport, and inform emergency response personnel that the victim has not been decontaminated.

4.3 Risk Assessment

The risk assessment is based upon the hazards posed by the chemicals, the quantity of materials involved, and the location of the spill. A spill response leader should be designated if the spill warrants activation of a spill team (i.e., when a person is injured or contaminated, or a spill is beyond the control of the individual or site personnel). He/she is responsible for all aspects of the response until relieved by a qualified replacement. The spill response leader should determine the level of risk by answering the following questions:

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4.3.1 What chemical is involved?

This may be determined by interviewing the person(s) who reported the spill and reviewing associated MSDS. Use knowledge of the work area and visual inspection to make a preliminary identification. This will be verified by direct inspection by the entry team.

4.3.2 How much has spilled?

Information gained when answering the question above should determine the quantity involved. For a continuing leak, attempt to estimate the leak rate. If the quantity cannot be determined, you must assume release of the complete contents of the container.

4.3.3 Where is the incident located?

Take into account the relative area as well as the physical location. For example, determine where the spill is located relative to drains, water bodies, and other potential receptors.

4.4 Development of Spill Cleanup Plan

The spill response leader should develop a spill cleanup plan that includes the following elements:

- Ensure that safety is the number one priority and that all safety issues are addressed prior to beginning spill cleanup.
- Ensure that communication links between the spill response leader, members of the spill response team and emergency response personnel are in place.
- Determine if the risk level associated with the spill allows for internal personnel to conduct the cleanup or if emergency response personnel should be summoned.
- Determine the number of workers needed to safely and effectively perform the cleanup.

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- Identify spill response materials and ensure that materials are adequate for the anticipated spills.

- Assign cleanup duties and responsibilities to the spill response team members.

- Inform the appropriate facility manager, project manager, and client contacts.

- Determine the required PPE to be worn by entry and backup spill team members and ensure that it is worn during the activities. Use the site health and safety plan contingency section or the facility emergency response plan to assist in this activity. Typical protective equipment may be Level C or D. In the event that the spill warrants a higher level of protection, Tt personnel should summon emergency response personnel.

- If the spill or discharge material is solid and nonreactive, the material should be scooped up and placed in a suitable and compatible container until the disposal method has been determined.

- If liquid is discharged, the following general procedures apply:

  - The point of discharge should be immediately identified and measures taken to eliminate further discharges by uprighting or patching containers, transferring contents, or other appropriate methods.

  - Any discharged liquids or sludge should be removed or retrieved.

  - Discharged materials should be cleaned up with absorbent materials or devices.

  - Spent absorbent material should be placed into storage or disposal containers.

- Determine proper equipment and spill control media to be used based on the chemical of concern. Typical equipment needed to accomplish spill cleanup may include:

- Seal/plug material
- Absorption socks and booms
- Broom
- Shovel
- Open head 55-gallon drum with liner
- 85-gallon salvage drum

- Control the area so that unnecessary personnel do not enter and situations that may escalate the hazards in the area are eliminated. Ideally, the exclusion zone should be physically barricaded off. At a minimum, barricade tape can be placed.

- An exclusion zone, contamination reduction zone, and a support zone may be needed. Only authorized personnel will be allowed in these areas. Wind direction, plant and surrounding populations, and the properties of the spilled material must be considered in establishing the initial controlled zone. Exclusion zones should be barricaded (or at least taped off with barricade tape) to prevent general public access. The zone can be expanded or contracted as more information is gathered about the spill.

- Determine if the situation requires monitoring of explosive atmosphere, oxygen deficiency, or toxic levels of chemicals. This will also help determine the level of PPE required and conditions that would require the area to be evacuated and emergency response personnel summoned.

4.5 Implementation Spill Cleanup Plan

After the spill response leader has developed a plan to containerize and remove all material contaminated by the spill, the assigned members of the spill team will complete the following steps.

4.5.1 Cleanup, containerize, and decontaminate the area

- Attempt to control the source of the leak if the full contents of a drum or container have not spilled. Perhaps the simplest procedure is to position the drum or container so that the leak is above the liquid level. Alternatively, a drum patch or plug can be applied to the leak. The leaking chemical may also be controlled using absorbent spill berms positioned around the drum or container.
- Contain free-flowing liquids by diking or absorbing.
- Place all spill residues and cleanup equipment in an appropriate container.
- If solvent is used to decontaminate equipment, floors, or walkways, appropriate fire protection should be used.
- Decontaminate and salvage as much equipment as possible.
- Use only a final water wash where it is safe and appropriate to do so.

4.5.2 Analyze the affected area for proper decontamination safety

- Use monitoring and detection equipment, if needed.
- Check equipment for problems.
- Examine walkways, floors, and stairs for obstructions or hazards (i.e. slip/fall exposure from liquid residue).
- Use any resources needed (safety, industrial hygiene, environmental, etc.) to ensure that the area has been decontaminated and is safe to re-enter.

4.5.3 Secure all response equipment

- Restock spill supplies.

- Repair damaged equipment.

4.5.4 Release site resumption of operations

- Notify operating personnel.
- Document spill or release in on-site or facility log.

As soon as the area is safe for reoccupancy, the spill response leader, in conjunction with the site or facility manager, must initiate actions to allow the facility to resume normal operations.

- Use established procedures to announce an "All Clear."
- Properly mark spill residue containers for hazardous waste management.
- Clean and prepare all emergency response materials for immediate use storage.
- Complete all spill response reports as required.

5.0 FINAL TERMINATION OF THE INCIDENT

The project manager (PM) and site safety coordinator (SSC) should conduct a formal review and debriefing of the responders at the conclusion of the project. Corrective actions may need to be implemented if a cause for the spill was determined and can be prevented from happening again.

Final termination of the incident will be complete when the appropriate personnel review all reports and any corrective actions are completed.

6.0 REPORTING

In some instances, a release may require reporting to government agencies. If a reportable quantity is released (this quantity is stated on the Material Safety Data Sheet) or human health or the environment is threatened, appropriate national, state, and local administering agency personnel should be notified. The timeframe for notification may vary from agency to agency.

Notification may be required immediately or within 24 hours, depending on the type, location, and amount of released material. The appropriate agency to report spills to should be determined during HASP development.

All spills and chemical releases must be reported and investigated in accordance with Tt Program 2.1 Incident Reporting and Investigation. Details must be documented on the Forms IR and IR–B and entered into the Tetra Tech TOTAL system for appropriate incident review and tracking.

INCOMPATIBLE CHEMICALS

When certain hazardous chemicals are stored or mixed together, violent reactions may occur because the chemicals are incompatible (i.e., unsuitable for mixing). Classes of incompatible chemicals should be segregated according to hazard class during storage. Use the following general guidelines for hazard class storage.

- Flammable/combustible liquids and organic acids
- Flammable solids
- Mineral acids
- Caustics
- Oxidizers
- Perchloric acid
- Compressed gases

Separate hazardous chemicals in storage as follows:

- Oxidizing acids are segregated from organic acids, and flammable and combustible materials.

- Acids are separated from inorganic bases.
- Acids are separated from active metals such as sodium, potassium, and magnesium.
- Acids are separated from chemicals that could generate toxic gases upon contact, such as iron sulfide and sodium cyanide.
- Water-reactive chemicals such as calcium oxide are stored in a cool, dry place away from any potential water source.
- Oxidizers are physically segregated from flammable and combustible chemicals or materials.
- Oxidizers are physically segregated from reducing agents such as zinc, alkaline metals, and formic acid.
- Large bottles of corrosives are stored on a low shelf or in specially designed (i.e., UL listed) cabinets. Single-glass bottles of acids and corrosives can also be placed within buckets or other means for both safe handling and as a means of secondary containment in the event of breakage.

Carefully read the label before storing any chemical substance. Use the materials safety data sheets (MSDS) to find special storage information and information on incompatibilities. If you have questions regarding proper storage of chemicals or if a container is not clearly labeled, contact a qualified individual for additional information.

Before mixing, storing, or transporting any chemicals, refer to the following partial list of incompatible chemicals, the chemicals' MSDS, or other reliable reference for further information or to verify compatibility.

List of Incompatible Chemicals

Chemical	Incompatible Chemical(s)
Acetic Acid	Aldehyde, bases, carbonates, hydroxides, metals, oxidizers, peroxides,

Chemical	Incompatible Chemical(s)
	phosphates, xylene
Acetylene	Halogens (chlorine, fluorine, etc.), mercury, potassium, oxidizers, silver
Acetone	Acids, amines, oxidizers, plastics
Alkali and alkaline earth metals	Acids, chromium, ethylene, halogens, hydrogen, mercury, nitrogen, oxidizers, plastics, sodium chloride, sulfur
Ammonia	Acids, aldehydes, amides, halogens, heavy metals, oxidizers, plastics, sulfur
Ammonium nitrate	Acids, alkalis, chloride salts, combustible materials, metals, organic materials, phosphorous, reducing agents, urea
Aniline	Acids, aluminum, dibenzoyl peroxide, oxidizers, plastics
Azides	Acids, heavy metals, oxidizers
Bromine	Acetaldehyde, alcohols, alkalis, amines, combustible materials, ethylene, fluorine, hydrogen, ketones (acetone, carbonyls, etc.), metals, sulfur
Calcium oxide	Acids, ethanol, fluorine, organic materials
Carbon (activated)	Alkali metals, calcium hypochlorite, halogens, oxidizers
Carbon tetrachloride	Benzoyl peroxide, ethylene, fluorine, metals, oxygen, plastics, silanes
Chlorates	Powdered metals, sulfur, finely divided organic or combustible materials
Chromic acid	Acetone, alcohols, alkalis, ammonia, bases
Chromium trioxide	Benzene, combustible materials, hydrocarbons, metals, organic materials, phosphorous, plastics
Chlorine	Alcohols, ammonia, benzene, combustible materials, flammable compounds (hydrazine), hydrocarbons (acetylene, ethylene, etc.), hydrogen peroxide, iodine, metals, nitrogen, oxygen, sodium hydroxide
Chlorine dioxide	Hydrogen, mercury, organic materials, phosphorous, potassium hydroxide, sulfur
Copper	Calcium, hydrocarbons, oxidizers
Hydroperoxide	Reducing agents
Cyanides	Acids, alkaloids, aluminum, iodine, oxidizers, strong bases
Flammable liquids	Ammonium nitrate, chromic acid, hydrogen peroxide, nitric acid, sodium peroxide, halogens
Fluorine	Alcohols, aldehydes, ammonia, combustible materials, halocarbons, halogens, hydrocarbons, ketones, metals, organic acids
Hydrocarbons (e.g. butane, propane benzene, turpentine, etc.)	Acids, bases, oxidizers, plastics
Hydrofluoric acid	Metals, organic materials, plastics, silica (glass), (anhydrous) sodium
Hydrogen peroxide	Acetylaldehyde, acetic acid, acetone, alcohol's carboxylic acid,

Chemical	Incompatible Chemical(s)
	combustible materials, metals, nitric acid, organic compounds, phosphorous, sulfuric acid, sodium, aniline
Hydrogen sulfide	Acetylaldehyde, metals, oxidizers, sodium
Hypochlorites	Acids, activated carbon
Iodine	Acetylaldehyde, acetylene, ammonia, metals, sodium
Mercury	Acetylene, aluminum, amines, ammonia, calcium, fulminic acid, lithium, oxidizers, sodium
Nitrates	Acids, nitrites, metals, sulfur, sulfuric acid
Nitric acid	Acetic acid, acetonitrile, alcohol's, amines, (concentrated) ammonia, aniline, bases, benzene, cumene, formic acid, ketones, metals, organic materials, plastics, sodium, toluene
Oxalic acid	Oxidizers, silver, sodium chlorite
Oxygen	Acetaldehyde, secondary alcohol's, alkalis and alkalines, ammonia, carbon monoxide, combustible materials, ethers, flammable materials, hydrocarbons, metals, phosphorous, polymers
Perchloric acid	Acetic acid, alcohols, aniline, combustible materials, dehydrating agents, ethylbenzene, hydriotic acid, hydrochloric acid, iodides, ketones, organic material, oxidizers, pyridine
Peroxides, organic	Acids (organic or mineral)
Phosphorous (white)	Oxygen (pure and in air), alkalis
Potassium	Acetylene, acids, alcohols, halogens, hydrazine, mercury, oxidizers, selenium, sulfur
Potassium chlorate	Acids, ammonia, combustible materials, fluorine, hydrocarbons, metals, organic materials, sugars
Potassium perchlorate (also see chlorates)	Alcohols, combustible materials, fluorine, hydrazine, metals, organic matter, reducing agents, sulfuric acid
Potassium permanganate	Benzaldehyde, ethylene glycol, glycerol, sulfuric acid
Silver	acetylene, ammonia, oxidizers, ozonides, peroxyformic acid
Sodium	Acids, hydrazine, metals, oxidizers, water
Sodium nitrate	Acetic anhydride, acids, metals, organic matter, peroxyformic acid, reducing agents
Sodium peroxide	Acetic acid, benzene, hydrogen sulfide metals, oxidizers, peroxyformic acid, phosphorous, reducers, sugars, water
Sulfides	Acids
Sulfuric acid	Potassium chlorates, potassium perchlorate, potassium permanganate

Revision Date	Document Authorizer Name	Revision Details
01/31/2013	Chris McClain	New

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1.0 INTRODUCTION

Hand tools are used routinely in many Tetra Tech Operations. In order to prevent accidents associated with their use, our employees must be aware of the dangers associated with the different types of tools and the safety precautions necessary to prevent accidents. The following safe work practices must be followed when using hand tools.

2.0 GENERAL SAFETY RULES

All tools, regardless of ownership, shall be of an approved type and maintained in good and safe condition. Tools not meeting the requirements detailed in this safe work practice are prohibited. Tools are subject to inspection at any time. The supervisor has the authority and responsibility to condemn unserviceable tools, regardless of ownership.

- Defective tools shall be tagged to prevent their use and shall be removed from the job site.
- Employees shall always use the proper tool for the job performed.
- Hammers with metal handles, screwdrivers, knives with metal continuing through the handle and metallic measuring tapes shall not be used on or near energized electrical circuits or equipment.
- Tools shall not be thrown from place to place or from person to person; tools that must be raised or lowered from one elevation to another shall be placed in tool buckets or firmly attached to hand lines.
- Tools shall never be placed unsecured on elevated places.
- Employees using hand and power tools and exposed to the hazard of falling, flying, abrasive, and splashing objects, or exposed to harmful dust, fumes, mists vapors, or gases shall be provided with the designated PPE necessary to project them from the hazard. The designated PPE should be determined on a case by case basis.

3.0 HAND TOOLS

- All impact tools such as chisels, punches, drift pins, etc., that become mushroomed or cracked shall be dressed, repaired, or replaced before further use.
- Chisels, drills, punches, ground rods, and pipes shall be held with suitable holders or tongs (not with the hands) while being struck by another employee.
- Shims shall not be used to make a wrench fit.
- Wrenches with sprung or damaged jaws shall not be used.
- Pipe shall not be used to extend a wrench handle for added leverage unless the wrench was designed for such use.
- Tools shall be used only for the purposes for which they have been approved.
- Tools with sharp edges shall be stored and handled so that they will not cause injury or damage. They shall not be carried in pockets.

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- Wooden handles that are loose, cracked, or splintered shall be replaced. The handle shall not be taped or lashed with wire.
- All cutting tools such as saws, wood chisels, drawknives, or axes shall be kept in suitable guards or in special compartments.
- Tools shall not be left lying around where they may cause a person to trip or stumble.
- When working on or above open grating, a canvas or other suitable covering shall be used to cover the grating to prevent tools or parts from dropping to a lower level where others are present or the danger area shall be barricaded or guarded.
- The insulation on hand tools shall not be depended upon to protect users from shock.

4.0 PORTABLE ELECTRIC TOOLS

- The non-current carrying metal parts of portable electric tools such as drills, saws, and grinders shall be effectively grounded when connected to a power source unless the tool is an approved double-insulated type and the tool is connected to the power supply by means of an isolating transformer or other isolated power supply, such as a 24-volt DC system.
- All powered tools shall be examined prior to use to ensure general serviceability and the presence of all applicable safety devices. The electric cord and electric components shall be given an especially thorough examination.
- Powered tools shall be used only within their capability and shall be operated in accordance with the instructions of the manufacturer.
- All tools shall be kept in good repair and shall be disconnected from the power source while repairs are being made.
- Electrical tools shall not be used where there is a hazard of flammable vapors, gases, or dusts.
- All power tools and cord sets shall be protected by ground fault circuit interrupters (GFCI).
- When using any power source, ensure that GFCI is functional. Otherwise, external GFCI must be used.

5.0 PNEUMATIC TOOLS

- Compressed air and compressed air tools shall be used with caution.
- Pneumatic tools shall never be pointed at another person.
- Pneumatic power tools shall be secured to the hose or whip by some positive means to prevent the tool from becoming accidentally disconnected.
- Safety clips or retainers shall be securely installed and maintained on pneumatic impact (percussion) tools to prevent attachments from being accidentally expelled.
- Compressed air shall not be used for cleaning purposes except when reduced to less than 30 psi and then only with effective chip guarding and personal protective equipment.

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- Compressed air shall not be used to blow dust or dirt from clothing.
- The manufacturer's safe operating pressure for hoses, pipes, valves, filters, and other fittings shall not be exceeded.
- The use of hoses for hoisting or lowering tools shall not be permitted.
- All hoses exceeding ½ inch inside diameter shall have a safety device at the source of supply or branch fine to reduce pressure in case of hose failure or disengagement of a connection.
- Before making adjustments or changing air tools, unless equipped with quick change connectors, the air shall be shut off at the air supply valve ahead of the hose. The hose shall be bled at the tool before breaking the connection.
- Eye, foot and hearing protection devices shall be worn during pneumatic tool use.
- Pneumatic tools shall be operated only by competent persons who have been trained in their use.
- A pneumatic tool used where it may contact exposed live electrical parts shall have a nonconductive hose and an accumulator to collect moisture.
- Employees shall not use any part of their bodies to locate or attempt to stop an air leak.

6.0 POWDER ACTUATED TOOLS

A powder actuated tool must always be treated the same as a loaded firearm. ALWAYS ASSUME THE TOOL IS LOADED. These tools come in both low and high velocity models, and both should have built-in safeguards; however, extreme caution must be used when working with this tool. Powder actuated tools can be used only by employees who have been trained in their operation. The user must have a current operator's card.

The following checklist, which may not be complete for all scenarios, is required at a minimum before each use of a powder actuated tool. (Project Managers are responsible for identifying other site specific requirements.)

- Check the safety for proper operation and make sure the bore is clear.
- Select the proper cartridge for the job to be done; never use a higher charge than is necessary.
- Make sure that the drive part of the tool will not penetrate the mounting surface and fly out the other side. The work area must be backed up by a plank or beam.
- Do not use this tool on hard steel, cast iron, rock, or other extremely hard materials.
- Make sure no one else is in the immediate area; concrete chips, metal spalls or rebounding studs could injure bystanders. Insure protective shield is in place to confine flying fragments or particles when the tool is fired.
- Make sure the tool is at the correct angle to the work surface, and maintain pressure against the surface.
- Always wear proper eye and hearing protection.

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- Do not use in an explosive or flammable atmosphere.
- Never point the tool at anyone.
- Do not load until ready for use and never leave a loaded tool unattended.
- If the tool develops a defect during use, it should be tagged and removed from service until it is properly repaired.

7.0 GUARDS

Hazardous moving parts - belts, gears, shafts, pulleys or other reciprocating, rotating or moving parts of equipment must be guarded if such parts are exposed. Guards must be provided as necessary to protect the operator and others from point of operation hazards, in-running nip point hazards, rotating parts, flying chips, and sparks etc. All guards shall meet the requirements set forth by ANSI.

SAFETY GUARDS SHALL NEVER BE REMOVED OR TAMPERED WITH

Revision Date	Document Authorizer Name	Revision Details
1/31/2013	Chris McClain	Update

APPENDIX C
SAFETY DATA SHEETS AND CHEMICAL INVENTORY

Chemical Inventory Listing:

- Liquinox
- Alconox
- Hydrochloric acid (Preservative)
- Isobutylene calibration gas
- Fire extinguisher
- Diesel Fuel
- Gasoline
- Automotive grease
- Chemical Oxidant (RemOX-S ISCO Reagent)

Safety Data Sheet

Effective date: 11 May 2020 **Revision** : 11 May 2020

Trade Name: Liquinox®

1 Identification of the substance/mixture and of the supplier

1.1 GHS Product identifier

Trade Name: Liquinox®
Product number: 1201, 1201-1, 1205, 1215, 1230, 1232, 1232-1, 1255

1.2 Application of the substance / the mixture: Cleaning material/Detergent

1.2.1 Recommended dilution ratio: 1 - 2% in water

1.3 Details of the supplier of the Safety Data Sheet

Manufacturer:

Alconox Inc.
30 Glenn St
White Plains, NY 10603
(914) 948-4040

Supplier:

Emergency telephone number:
ChemTel Inc
North America: 1-888-255-3924
International: +1 813-248-0573

2 Hazards identification

2.1 Classification of the substance or mixture:

In compliance with EC regulation No. 1272, 29CFR1910/1200 and GHS requirements.

Hazard-determining components of labeling:
Alcohol ethoxylate
Sodium alkylbenzene sulfonate
Sodium xylenesulphonate
Lauramine oxide

2.2 Label elements:

Eye damage, category 1.
Skin irritation, category 2.

Product at recommended dilution:

Eye irritation, category 2B

Hazard pictograms:

Signal word: Danger

Hazard statements:
H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statements:
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

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P302+P352 If on skin: Wash with soap and water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P501 Dispose of contents and container as instructed in Section 13.

Hazardous Elements at Use Dilution:

Hazard pictograms:

Signal word: Warning

Hazard statements:
H320 Causes eye irritation

Precautionary statements:
P302+P352 If on skin: Wash with soap and water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P501 Dispose of contents and container as instructed in Section 13

Additional information: None.

Hazard description
Hazards Not Otherwise Classified (HNOC): May cause surfaces to become slippery. Use caution in areas of foot traffic if on floors.

Information concerning particular hazards for humans and environment:
The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Classification system:
The classification is according to EC regulation No. 1272, 29CFR1910/1200 and GHS, and extended by company and literature data. The classification is in accordance with the latest editions of international substances lists and is supplemented by information from technical literature and by information provided by the company.

3 Composition/information on ingredients

3.1 Chemical characterization: None

3.2 Description: None

3.3 Hazardous components (percentages by weight)

Identification	Chemical Name	Classification	Wt. %
CAS number: 68081-81-2 or 68411-30-3	Sodium Alkylbenzene Sulfonate	Acute Tox. 4; H303 Skin Irrit. 2 ; H315 Eye Dam. 1; H318	10-25
CAS number: 1300-72-7	Sodium Xylenesulphonate	Eye Irrit. 2;H319	2.5-10
CAS number: 84133-50-6	Alcohol Ethoxylate	Skin Irrit. 2 ; H315 Eye Dam. 1; H318	2.5-10
CAS number: 1643-20-5	Lauramine oxide	Skin Irrit. 2 ; H315 Eye Dam. 1; H318	1-2

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At use dilution:

CAS number: 68081-81-2 or 68411-30-3	Sodium Alkylbenzene Sulfonate	Eye Irr. 2B; H319	0.1-0.25

3.4 Additional Information: None.

4 First aid measures

4.1 Description of first aid measures

General information: None.

After inhalation:
Maintain an unobstructed airway.
Loosen clothing as necessary and position individual in a comfortable position.

After skin contact:
Wash affected area with soap and water.
Seek medical attention if symptoms develop or persist.

After eye contact:
Rinse/flush exposed eye(s) gently using water for 15-20 minutes.
Remove contact lens(es) if able to do so during rinsing.
Seek medical attention if irritation persists or if concerned.

After swallowing:
Rinse mouth thoroughly.
Seek medical attention if irritation, discomfort, or vomiting persists.

4.2 Most important symptoms and effects, both acute and delayed

None

4.3 Indication of any immediate medical attention and special treatment needed:

No additional information.

First aid measure at recommended dilution:

General information: None.

After inhalation:
Maintain an unobstructed airway.
Loosen clothing as necessary and position individual in a comfortable position.

After skin contact:
Wash affected area with soap and water.

After eye contact:
Rinse/flush exposed eye(s) gently using water for 15-20 minutes.
Remove contact lens(es) if able to do so during rinsing.

After swallowing:
Rinse mouth thoroughly. Seek medical attention if irritation, discomfort, or vomiting develops.

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Trade Name: Liquinox®

5 Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition.

For safety reasons unsuitable extinguishing agents: None

5.2 Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

5.3 Advice for firefighters

Protective equipment:

Wear protective eye wear, gloves and clothing.
Refer to Section 8.

5.4 Additional information:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols.
Avoid contact with skin, eyes and clothing.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.
Ensure air handling systems are operational.

6.2 Environmental precautions:

Should not be released into the environment.
Prevent from reaching drains, sewer or waterway.

6.3 Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing.

6.4 Reference to other sections: None

7 Handling and storage

7.1 Precautions for safe handling:

Avoid breathing mist or vapor.
Do not eat, drink, smoke or use personal products when handling chemical substances.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, well-ventilated area.

7.3 Specific end use(s):

No additional information.

8 Exposure controls/personal protection

8.1 Control parameters :

25322-68-3, Poly(ethylene oxide), AIHA TWA 10 mg/m3 (<0.15% present in concentrate)

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Trade Name: Liquinox®

8.2 Exposure controls

Appropriate engineering controls:
Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Respiratory protection:
Not needed under normal conditions.

Protection of skin:
Select glove material impermeable and resistant to the substance.

Eye protection:
Safety goggles or glasses, or appropriate eye protection.

General hygienic measures:
Wash hands before breaks and at the end ofwork.
Avoid contact with skin, eyes and clothing.

Exposure Control and Personal Protective Equipment at recommended dilution:

Under normal use and operational conditions, no special personal protective equipment or engineering controls will be necessary. Handle with care.

9 Physical and chemical properties

Appearance (physical state, color):	Pale yellow liquid	**Explosion limit lower**: **Explosion limit upper**:	Not determined or not available. Not determined or not available.
Odor:	Not determined or not available.	**Vapor pressure at 20°C**:	Not determined or not available.
Odor threshold:	Not determined or not available.	**Vapor density**:	Not determined or not available.
pH-value:	8.5 (as is)	**Relative density**:	Not determined or not available.
Melting/Freezing point:	Not determined or not available.	**Solubilities**:	Not determined or not available.
Boiling point/Boiling range:	Not determined or not available.	**Partition coefficient (n-octanol/water)**:	Not determined or not available.
Flash point (closed cup):	Not determined or not available.	**Auto/Self-ignition temperature**:	Not determined or not available.
Evaporation rate:	Not determined or not available.	**Decomposition temperature**:	Not determined or not available.
Flammability (solid, gaseous):	Not flammable	**Viscosity**:	a. Kinematic: Not determined or not available. b. Dynamic: Not determined or not available.
Density at 20°C:	1.08 g/mL		

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Trade Name: Liquinox®

10 Stability and reactivity

10.1 Reactivity: Not determined or not available.
10.2 Chemical stability: Not determined or not available.
10.3 Possibility hazardous reactions: Not determined or not available.
10.4 Conditions to avoid: Not determined or not available.
10.5 Incompatible materials: Not determined or not available.
10.6 Hazardous decomposition products: Not determined or not available.

11 Toxicological information

11.1 Information on toxicological effects:

Acute Toxicity:

Oral:

: LD50 >5000 mg per kg (Rat, Oral) - product.

Chronic Toxicity: No additional information.

Skin corrosion/irritation (raw materials):

Alcohol Ethoxylate: May cause mild to moderate skin irritation.

Sodium Alkylbenzene Sulfonate: Causes skin irritation.

Lauramine oxide: Causes skin irritation.

Serious eye damage/irritation (raw materials):

Sodium Alkylbenzene Sulfonate: Causes serious eye damage.

Alcohol Ethoxylate: Causes moderate to severe eye irritation and conjunctivitis.

Sodium xylenesulphonate: irritating to eyes.

Lauramine oxide: Causes serious eye damage.

Product information at recommended dilution:

Eye irritation may occur upon direct contact with eyes. No specific hazards for skin contact, inhalation, or chronic exposure are expected within normal use parameters.

Respiratory or skin sensitization: No additional information.

Carcinogenicity: No additional information.

IARC (International Agency for Research on Cancer): None of the ingredients are listed.

NTP (National Toxicology Program): None of the ingredients are listed.

Germ cell mutagenicity: No additional information.

Reproductive toxicity: No additional information.

STOT-single and repeated exposure: No additional information.

Additional toxicological information: No additional information.

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12 Ecological information

12.1 Toxicity:

Sodium Alkylbenzene Sulfonate: Fish, LC50 1.67 mg/l, 96 hours.
Sodium Alkylbenzene Sulfonate: Aquatic invertebrates, EC50 Daphnia 2.9 mg/l, 48 hours. Sodium Alkylbenzene Sulfonate: Aquatic Plants, EC50 Algae 29 mg/l, 96 hours.
Lauramine oxide: Fish, LC50 24.3 mg/l, 96h [Killifish (Cyprinodontidae)]
Lauramine oxide: Aquatic invertebrates, (LC50): 3.6 mg/l 96 hours [Daphnia (Daphnia)].
Lauramine oxide: Aquatic plants, EC50 Algae 0.31 mg/l 72 hours [Algae]
Alcohol Ethoxylate: Aquatic invertebrates, (LC50): 4.01 mg/l 48 hours [Daphnia (daphnia)].

12.2 Persistence and degradability: No additional information.

12.3 Bioaccumulative potential: No additional information.

12.4 Mobility in soil: No additional information.

General notes: No additional information.

12.5 Results of PBT and vPvB assessment:

PBT: No additional information.

vPvB: No additional information.

12.6 Other adverse effects: No additional information.

13 Disposal considerations

13.1 Waste treatment methods (consult local, regional and national authorities for proper disposal)

Relevant Information:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities. (US 40CFR262.11).

14 Transport information

14.1 UN Number: None
ADR, ADN, DOT, IMDG, IATA

14.2 UN Proper shipping name: None
ADR, ADN, DOT, IMDG, IATA

14.3 Transport hazard classes:
ADR, ADN, DOT, IMDG, IATA

Class: None
Label: None
LTD. QTY: None

US DOT
Limited Quantity Exception: None

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Bulk: **RQ (if applicable):** None **Proper shipping Name:** None **Hazard Class:** None **Packing Group:** None **Marine Pollutant (if applicable):** No additional information. **Comments:** None	**Non Bulk:** **RQ (if applicable):** None **Proper shipping Name:** None **Hazard Class:** None **Packing Group:** None **Marine Pollutant (if applicable):** No additional information. **Comments:** None
14.4 Packing group: ADR, ADN, DOT, IMDG, IATA	None
14.5 Environmental hazards:	None
14.6 Special precautions foruser:	None
Danger code (Kemler):	None
EMS number:	None
Segregation groups:	None
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not applicable.	
14.8 Transport/Additional information:	
Transport category:	None
Tunnel restriction code:	None
UN "Model Regulation":	None

15 Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture.

North American

SARA

Section 313 (specific toxic chemical listings): None of the ingredients are listed.
Section 302 (extremely hazardous substances): None of the ingredients are listed.

CERCLA (Comprehensive Environmental Response, Clean up and Liability Act)

Reportable Spill Quantity: None of the ingredients are listed.

TSCA (Toxic Substances Control Act):

Inventory: All ingredients are listed as active.
Rules and Orders: Not applicable.

Proposition 65 (California):

Chemicals known to cause cancer: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for females: None of the ingredients are listed.

Chemicals known to cause reproductive toxicity for males: None of the ingredients are listed.

Chemicals known to cause developmental toxicity: None of the ingredients are listed.

Canadian

Canadian Domestic Substances List (DSL):
All ingredients are listed.

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Asia Pacific

Australia

Australian Inventory of Chemical Substances (AICS): All ingredients are listed.

China

Inventory of Existing Chemical Substances in China (IECSC): All ingredients are listed.

Japan

Inventory of Existing and New Chemical Substances (ENCS): All ingredients are listed.

Korea

Existing Chemicals List (ECL): All ingredients are listed.

New Zealand

New Zealand Inventory of Chemicals (NZOIC): All ingredients are listed.

Philippines

Philippine Inventory of Chemicals and Chemical Substances (PICCS): All ingredients are listed.

Taiwan

Taiwan Chemical Substance Inventory (TSCI): All ingredients are listed.

EU

REACH Article 57 (SVHC): None of the ingredients are listed.

Germany MAK: Not classified.

16 Other information

Abbreviations and Acronyms: None

Summary of Phrases

Hazard statements:

H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary statements:

P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 If on skin: Wash with soap and water.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P332+P313 If skin irritation occurs: Get medical advice/attention.
P501 Dispose of contents and container as instructed in Section 13.

Manufacturer Statement:

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

NFPA: 1-0-0
HMIS: 1-0-0

At recommended dilution:

NFPA: 1-0-0
HMIS: 1-0-0

GASCO

MATERIAL SAFETY DATA SHEET - CALIBRATION CHECK GAS

PRODUCT NAME: ISOBUTYLENE (1 PPM – 0.9%) IN AIR

MSDS NO: 248 **Version:3** **Date: August, 2010**

1. Chemical Product and Company Identification

Gasco Affiliates, LLC
320 Scarlett Blvd.
Oldsmar, FL 34677

TELEPHONE NUMBER: (800) 910-0051 **24-HOUR EMERGENCY NUMBER: 1-800-424-9300**
FAX NUMBER: (866) 755-8920
E-MAIL: info@gascogas.com

PRODUCT NAME: ISOBUTYLENE (1 PPM – 0.9%) IN AIR
CHEMICAL NAME: Isobutylene in air
COMMON NAMES/ SYNONYMS: None
TDG (Canada) CLASSIFICATION: 2.2
WHIMIS CLASSIFICATION: A

2. COMPOSITION/ INFORMATION ON INGREDIENTS

INGREDIENT	%VOLUME	PEL-OSHA	TLV-ACGIH	LD_{50} or LC_{50} Route/Species
Isobutylene FORMULA: C_4H_8	0.0001-0.9	N/A	N/A	N/A
Air FORMULA: Mixture	99.0 to 99.9999	N/A	N/A	N/A

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Release of this product may produce oxygen-deficient atmospheres (especially in confined spaces or other poorly ventilated environments); individuals in such atmospheres may be asphyxiated. Isobutylene may cause drowsiness and other central nervous system effects in high concentrations; however, due to the low concentration of this gas mixture, this is unlikely to occur.

ROUTE OF ENTRY:

Skin Contact	Skin Absorption	Eye Contact	Inhalation	Ingestion
No	No	No	Yes	No

HEALTH EFFECTS:

Exposure Limits	Irritant	Sensitization	Reproductive Hazard	Mutagen
Yes	No	No	No	No

Carcinogenicity: --NTP: No IARC: No OSHA: No

EYE EFFECTS:
N/A.

SKIN EFFECTS:
N/A.

PRODUCT NAME: ISOBUTYLENE (1 PPM – 0.9%) IN AIR

INGESTION EFFECTS:
Ingestion unlikely. Gas at room temperature.

INHALATION EFFECTS:
Due to the small size of this cylinder, no unusual health effects from over-exposure are anticipated under normal routine use.

NFPA HAZARD CODES		HMIS HAZARD CODES		RATING SYSTEM
Health:	1	Health:	1	0= No Hazard
Flammability:	0	Flammability:	0	1= Slight Hazard
Reactivity:	0	Reactivity:	0	2= Moderate Hazard
				3= Serious Hazard
				4= Severe Hazard

4. FIRST AID MEASURES

EYES:
N/A

SKIN:
N/A

INGESTION:
Not required

INHALATION:
PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASED OF OVEREXPOSURE. RESCUE PERSONNEL SHOULD BE EQUIPPED THE SELF-CONTAINED BREATHING APPARATUS. Victims should be assisted to an uncontaminated area and inhale fresh air. Quick removal from the contaminated area is most important. If breathing has stopped administer artificial resuscitation and supplemental oxygen. Further treatment should be symptomatic and supportive.

5. FIRE-FIGHTING MEASURES

These containers hold gas under pressure, with no liquid phase. If involved in a major fire, they should be sprayed with water to avoid pressure increases, otherwise pressures will rise and ultimately they may distort or burst to release the contents. The gases will not add significantly to the fire, but containers or fragments may be projected considerable distances - thereby hampering fire fighting efforts.

6. ACCIDENTAL RELEASE MEASURES

In terms of weight, these containers hold very little contents, such that any accidental release by puncturing etc. will be of no practical concern.

7. HANDLING AND STORAGE

Suck back of water into the container must be prevented. Do not allow backfeed into the container. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Use only in well-ventilated areas. Do not heat cylinder by any means to increase rate of product from the cylinder. Do not allow the temperature where cylinders are stored to exceed 130°F (54°C).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Use adequate ventilation for extended use of gas.

PRODUCT NAME: ISOBUTYLENE (1 PPM – 0.9%) IN AIR

9. PHYSICAL AND CHEMICAL PROPERTIES

PARAMETER:	VALUE:
Physical state	: Gas
Evaporation point	: N/A
pH	: N/A
Odor and appearance	: Colorless, odorless gas

10. STABILITY AND REACTIVITY

Stable under normal conditions. Expected shelf life 48 months.

11. TOXICOLOGICAL INFORMATION

No toxicological damage caused by this product.

12. ECOLOGICAL INFORMATION

No ecological damage caused by this product.

13. DISPOSAL INFORMATION

Do not discharge into any place where its accumulation could be dangerous. Used containers are acceptable for disposal in the normal waste stream as long as the cylinder is empty and valve removed or cylinder wall is punctured; but GASCO encourages the consumer to return cylinders.

14. TRANSPORT INFORMATION

	United States DOT	Canada TDG
PROPER SHIPPING NAME:	Compressed Gas N.O.S. (Isobutylene in Air)	Compressed Gas N.O.S. (Isobutylene in Air)
HAZARD CLASS:	2.2	2.2
IDENTIFICATION NUMBER:	UN1956	UN1956
SHIPPING LABEL:	NONFLAMMABLE GAS	NONFLAMMABLE GAS

15. REGULATORY INFORMATION

Isobutylene is listed under the accident prevention provisions of section 112(r) of the Clean Air Act (CAA) with a threshold quantity (TQ) of 10,000 pounds.

16. OTHER INFORMATION

This MSDS has been prepared in accordance with the Chemicals (Hazard Information and Packaging for Supply (Amendment) Regulation 1996. The information is based on the best knowledge of GASCO, and its advisors and is given in good faith, but we cannot guarantee its accuracy, reliability or completeness and therefore disclaim any liability for loss or damage arising out of use of this data. Since conditions of use are outside the control of the Company and its advisors we disclaim any liability for loss or damage when the product is used for other purposes than it is intended.

MSDS/S010/248/ August, 2010

MATERIAL SAFETY DATA SHEET

Section 1. Chemical product and company identification

Product Name:	ABC Dry Chemical Fire Extinguishant
Synonym:	Multi-purpose Dry Chemical (CH550, F15, F18)
Manufacturer:	AMEREX CORPORATION
Internet Address:	www.amerex-fire.com
Address:	7595 Gadsden Highway P.O. Box 81 Trussville, AL 35173-0081
Telephone:	(205) 655-3271
Emergency Contacts:	Chemtrec 1(800) 424-9300 or (703) 527–3887
Revised:	February, 2012

Section 2. Hazard identification and emergency overview

Emergency overview: Light yellow, fine solid powder, odorless.

Adverse health effects and symptoms: Irritating to the respiratory system, eyes and skin. Symptoms may include coughing, shortness of breath, and irritation of the lungs, eyes, and skin. Ingestion, although unlikely, may cause cramps, nausea and diarrhea.

Exposure guidelines:

Ingredients	OSHA PEL****	ACGIH TLV	DFG MAK *
Mono-ammonium phosphate	PNOC** Total dust, 15 mg/m^3 Respirable fraction, 5 mg/m^3	PNOC Total dust, 10 mg/m^3 Respirable fraction, 3 mg/m^3	PNOC Total dust, 4 mg/m^3 Respirable fraction, 1.5 mg/m^3
Ammonium sulphate	PNOC Total dust, 15 mg/m^3 Respirable fraction, 5 mg/m^3	PNOC Total dust, 10 mg/m^3 Respirable fraction, 3 mg/m^3	PNOC Total dust, 4 mg/m^3 Respirable fraction, 1.5 mg/m^3
Mica	6 mg/m^3	3 mg/m3	NR
Fullers Earth	PNOC Total dust, 15 mg/m^3 Respirable fraction, 5 mg/m^3	PNOC Total dust, 10 mg/m^3 Respirable fraction, 3 mg/m^3	PNOC Total dust, 4 mg/m^3 Respirable fraction, 1.5 mg/m^3

Silicone oil	NR***	NR	NR
Calcium carbonate	PNOC Total dust, 15 mg/m^3 Respirable fraction, 5 mg/m^3	PNOC Total dust, 10 mg/m^3 Respirable fraction, 3 mg/m^3	-------
Amorphous silica	143 mg/m^3 or $\frac{80\ mg/m^3}{\%\ SiO_2}$	10 mg/m^3	4 mg/m^3
Yellow 14 pigment	NR	NR	NR

*German regulatory limits **PNOC = Particulates not otherwise classified (ACGIH) also known as Particulates not otherwise regulated (OSHA) *** NR = Not Regulated. All values are 8 hour time weighted average concentrations. **** Total dust PEL for Washington state= 10mg/ m^3 for PNOC

Hazard symbols: WHMIS (Canadian workplace hazardous materials identification system

D2B Product may irritate eyes, skin, or mucous membranes

Section 3. Composition/information on ingredients

Name/Compound	Weight %	CAS #
Mono-ammonium phosphate and Ammonium sulphate	>94	7722-76-1 7783-20-2
Fullers Earth magnesium aluminum silicate-	<3	8031-18-3
Mica potassium aluminum silicate	1-2	12001-26-2
Silicone oil methyl hydrogen polysiloxane	<1	63148-57-2
Calcium carbonate	<1	1317-65-3
Amorphous silica precipitated synthetic zeolite	<1	112926-00-8
Yellow 14 pigment – di-azo dye	<1	5468-75-7

Section 4. First Aid Measures

Eye Exposure: Irrigate eyes with water and repeat until pain free. Seek medical attention if irritation develops or if vision changes occur.

Skin Exposure: In case of contact, wash with plenty of soap and water. Seek medical attention if irritation develops.

Inhalation: If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if irritation persists.

Ingestion: If victim is conscious and alert, give 2-3 glasses of water to drink and do not induce vomiting. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

Medical conditions possibly aggravated by exposure: Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema, or bronchitis. Skin contact may aggravate existing skin disease. Chronic overexposure may cause pneumoconiosis (~~-~~dusty lung" disease).

Section 5. Fire fighting measures

Extinguishing media: non combustible and non flammable – product is an extinguishing agent.

Unusual fire/explosion hazards: in a fire this material may decompose, releasing oxides of sulfur and carbon (see Section 10).

Insensitive to mechanical impact or static discharge.

HMIS Hazard Ranking:
health = 1, flammability = 0, reactivity = 0, personal protective equipment: ½ mask APR w/HEPA cartridges (see Section 8).

Section 6. Accidental release measures

Clean up released material using vacuum or wet sweep and shovel to minimize generation of dust. Wear appropriate respiratory protection. Bag and drum for disposal. If product is used and/or contaminated, use PPE and containment appropriate to the nature of the mixture. Prevent material from entering waterways.

Section 7. Handling and storage

Avoid skin, eye, or respiratory exposure. Use appropriate PPE when handling or maintaining equipment, and wash thoroughly after handling (see Section 8). Keep product in original container or extinguisher. Contents may be under pressure – inspect for extinguisher rust periodically to insure container integrity. Do not mix with other extinguishing agents.

Section 8. Exposure controls/ personal protection

During the application of this product against fires, exhaust gases and the products of incomplete combustion (PICs) are the principal respiratory hazards. In the manufacture of extinguishers, automated systems and point source ventilation controls sufficiently minimize respiratory exposure. Employers and employees must use their collective judgment in determining occupational settings where the use of a dust mask or air purifying respirator is prudent. The need for respiratory protection is not likely for short-term use in well ventilated areas.

Respiratory protection: use N95 dust mask or air-purifying respirator (APR) with high efficiency particulate air (HEPA) filters.

Eye protection: wear chemical goggles.

Skin protection: use nitrile, latex, or similar gloves and coveralls. Good personal hygiene practices essential, such as avoiding food, tobacco products, or other hand-to-mouth contact when handling. Wash thoroughly after handling.

Section 9. Physical and chemical properties

Appearance: yellow powder, finely divided odorless solid.
Specific gravity: ~ .88 in aerated condition
Solubility: product is coated-not immediately soluble in water
Non –flammable
Flash point: none
Vapor pressure: < 1 mm Hg
pH: approximately 4-5
Boiling point: not applicable
No explosive or oxidizing properties

Section 10. Stability and reactivity

Stability: stable

Incompatibles: strong alkalis (bases), magnesium, strong oxidizers such as calcium hypochlorite (pool chlorine) and isocyanuric acids.

Decomposition products: heat of fire may release carbon monoxide, carbon dioxide, and sulfur dioxide. Oxides of phosphorous and ammonia reported.

Possibility of hazardous reactions: Slight. See incompatibilities above.

Section 11. Toxicological information

Acute toxicity: Mono ammonium phosphate LD_{50} (rat): > 1000mg/kg body weight
Ammonium sulfate LD_{50} (rat): 2840 mg/kg body weight
Target organs in man: respiratory system, eyes, skin. This product is an irritant to epithelial tissue, and may aggravate dermatitis. No information was found indicating the product causes sensitization.

Chronic toxicity: Pneumoconiosis, or ~~-~~dusty lung" disease, may result from chronic exposure to any dust.

Reproductive toxicity: This product's ingredients are not known to have reproductive or teratogenic effects.

Section 12. Ecological information

Ecotoxicity: negative effects unknown. Provides nutrient nitrogen and phosphorus to plant life.

Persistence/ Degradability: degrades rapidly in humid/wet environment.

Bioaccummulation: extent unknown.

Mobility in soil: slow evaporation rate; water soluble, may leach to groundwater.

Section 13. Disposal considerations

This product is not a RCRA characteristically hazardous or listed hazardous waste. Dispose of according to state or local laws, which may be more restrictive than federal laws or regulations. Used product may be altered or contaminated, creating different disposal considerations.

Section 14. Transportation information

This product is not a hazardous material under U.S. Department of Transportation (DOT) 49 CFR 172, and is not regulated by the DOT or Transport Canada –Transportation of Dangerous Goods" regulations.

When shipped in a stored pressure type fire extinguisher, and pressurized with a non-flammable, non-toxic inert expellant gas, the fire extinguisher is considered a hazardous material by the US Department of Transportation and Transport Canada. The proper shipping name shall be FIRE EXTINGUISHER and the UN designation is UN 1044. The DOT hazard class/ division is 2.2. Non-Flammable Gas. Packing Group –N/A.

Section 15. Regulatory information

International Inventory Status:

All ingredients are on the following inventories

Country(ies)	Agency	Status
United States of America	TSCA	Yes
Canada	DSL	Yes
Europe	EINECS/ELINCS	Yes
Australia	AICS	Yes
Japan	MITI	Yes
South Korea	KECL	Yes

European Risk and Safety phrases:

EU Classification:	Harmful.	
R Phrases:	22	Harmful if swallowed.
	36/37/38	Irritating to eyes, respiratory system, and skin.
S Phrases:	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	36	Wear suitable protective clothing.

Components:

Mono ammonium phosphate:

EU Classification:	Harmful.	
R Phrases:	22	Harmful if swallowed.
	36/37/38	Irritating to eyes, respiratory system, and skin.
S Phrases:	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	36	Wear suitable protective clothing.

Ammonium sulfate:

EU Classification:	Irritant	
R Phrases:	22	Harmful if swallowed.
	36/37/38	Irritating to eyes, respiratory system, and skin.
S Phrases:	26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	36	Wear suitable protective clothing.

U.S. federal regulatory information:

None of the chemicals in this product are under SARA reporting requirements or have SARA threshold planning quantities (TPQs) or CERCLA reportable quantities (RQs), or are regulated under TSCA 8(d).

State regulatory information:

Chemicals in this product are covered under specific State regulations, as denoted below:

Alaska - Designated Toxic and Hazardous Substances: None
California – Permissible Exposure Limits for Chemical Contaminants: None
Florida – Substance List: Mica Dust, Ammonium Sulfate
Illinois – Toxic Substance List: None
Kansas – Section 302/303 List: None

Massachusetts – Substance List: Mica Dust, Ammonium Sulfate
Minnesota – List of Hazardous Substances: None
Missouri – Employer Information/Toxic Substance List: None
New Jersey – Right to Know Hazardous Substance List: None
North Dakota – List of Hazardous Chemicals, Reportable Quantities: None
Pennsylvania – Hazardous Substance List: None
Rhode Island – Hazardous Substance List: Mica Dust, Ammonium Sulfate
Texas – Hazardous Substance List: No
West Virginia – Hazardous Substance List: None
Wisconsin – Toxic and Hazardous Substances: None

California Proposition 65: No component is listed on the California Proposition 65 list.

Section 16

When shipped in a stored pressure type fire extinguisher, and pressurized with a non-flammable, non-toxic inert expellant gas, the fire extinguisher is considered a hazardous material by the US Department of Transportation and Transport Canada. The proper shipping name shall be FIRE EXTINGUISHER and the UN designation is UN 1044. The DOT hazard class/ division is 2.2 Non-Flammable Gas. Packing Group—N/A

Section 17. Other information

This MSDS conforms to requirements under U.S., U.K., Canadian, Australian, and EU regulations or standards, and conforms to the proposed 2003 ANSI Z400.1 format.

The information herein is given in good faith but no warranty, expressed or implied, is made. Updated by Lindsay R. Hill, CIH.

Material Safety Data Sheet

Hydrochloric Acid

Section 1. Product and Company Identification

Product name : Hydrochloric Acid

Product code : HX0607

Synonym : Muriatic Acid

Material uses : Other non-specified industry: Analytical reagent.

Manufacturer : EMD Chemicals Inc.
P.O. Box 70
480 Democrat Road
Gibbstown, NJ 08027
856-423-6300 Technical Service
Monday - Friday: 8:00 - 5:00 PM

Validation date : **4/5/2006.**

Print date :

In case of emergency : 800-424-9300 CHEMTREC (USA)
613-996-6666 CANUTEC (Canada)
24 Hours/Day: 7 Days/Week

Section 2. Hazards Identification

Physical state : Liquid. (Colorless.)

Odor : Pungent.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview : DANGER!
POISON!
MAY BE FATAL IF INHALED OR SWALLOWED.
CAUSES SEVERE EYE AND SKIN BURNS.
CAUSES SEVERE RESPIRATORY TRACT IRRITATION.
CAUSES DAMAGE TO THE FOLLOWING ORGANS: LUNGS, RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA.
Do not ingest. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Keep container closed. Use only with adequate ventilation. Wash thoroughly after handling.

Routes of entry : Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eyes : Severely corrosive to the eyes.

Skin : Severely corrosive to the skin.

Inhalation : Very toxic by inhalation. Severely irritating to the respiratory system.

Ingestion : Very toxic if swallowed. May cause burns to mouth, throat and stomach.

Potential chronic health effects :

Carcinogenic effects : No known significant effects or critical hazards.

Mutagenic effects : No known significant effects or critical hazards.

Teratogenicity / Reproductive toxicity : No known significant effects or critical hazards.

Medical conditions aggravated by over-exposure : Repeated skin exposure can produce local skin destruction or dermatitis. Repeated or prolonged exposure to the substance can produce lung damage. Repeated or prolonged contact with spray or mist may produce chronic eye irritation and severe skin irritation. Repeated or prolonged exposure to the substance can produce target organs damage.

See toxicological information (section 11)

Section 3. Composition/Information on Ingredients

United States

Name	CAS number	% by Weight

The 100% indicates this product is a concentrated acid. Assay (HCl) value is approximately 36-38%.

Section 4. First Aid Measures

Eye contact : Get medical attention immediately. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician.

Skin contact : Get medical attention immediately. Flush contaminated skin with plenty of water. Continue to rinse for at least 10 minutes. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing or wear gloves. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Inhalation : Get medical attention immediately. Move exposed person to fresh air. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Ingestion : Get medical attention immediately. Wash out mouth with water. Remove dentures if any. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing or wear gloves.

Section 5. Fire Fighting Measures

Flammability of the product : No specific hazard.

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : Not available.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Special remarks on fire hazards : Flammable hydrogen gas may be produced on prolonged contact with metals such as aluminum, tin, lead and zinc.

Section 6. Accidental Release Measures

Personal precautions : Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Methods for cleaning up : If emergency personnel are unavailable, contain spilled material. For small spills, add absorbent (soil may be used in the absence of other suitable materials), scoop up material and place in a sealable, liquid-proof container for disposal. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal.

Section 7. Handling and Storage

Handling : Do not ingest. Do not get in eyes or on skin or clothing. Keep container closed. Use

only with adequate ventilation. Do not breathe vapor or mist. Wash thoroughly after handling.

Storage : Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Product name	Exposure limits
United States	
Hydrochloric Acid	**ACGIH TLV (United States, 2003).** CEIL: 2 ppm **NIOSH REL (United States, 12/2001).** CEIL: 7 mg/m^3 Form: All forms CEIL: 5 ppm Form: All forms **OSHA PEL (United States, 8/1997).** CEIL: 7 mg/m^3 Form: All forms CEIL: 5 ppm Form: All forms **OSHA PEL 1989 (United States, 3/1989).** CEIL: 7 mg/m^3 Form: All forms CEIL: 5 ppm Form: All forms **ACGIH TLV (United States, 1/2005). Notes: Refers to Appendix A -- Carcinogens. ACGIH 2003 Adoption** CEIL: 2 ppm Form: All forms

Consult local authorities for acceptable exposure limits.

Engineering measures : Use only with adequate ventilation. If user operations generate dust, fumes, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Personal protection

Eyes : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
Recommended: face shield , splash goggles

Skin : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Body: Recommended: chemical-resistant protective suit

Respiratory : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Recommended: PVC

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Section 9. Physical and Chemical Properties

Physical state : Liquid. (Colorless.)

Color : Colorless.

Odor : Pungent.

Molecular weight : 36.46 g/mole

Molecular formula : Cl-H

Boiling/condensation point : 110°C (230°F)

Melting/freezing point : -74°C (-101.2°F)

Critical temperature : 51.5°C (124.7°F)

Relative density : 1.2 (Water = 1)

Vapor pressure : 21.3 kPa (160 mm Hg) (at 20°C)

Vapor density : >1 (Air = 1)

Evaporation rate : >1

Solubility : Soluble in water

Section 10. Stability and Reactivity

Stability and reactivity : The product is stable.

Incompatibility with various substances : Reactive or incompatible with the following materials: metals and alkalis.

Hazardous decomposition products : These products are halogenated compounds, hydrogen chloride.

Hazardous polymerization : Will not occur.

Conditions of reactivity : Flammable hydrogen gas may be produced on prolonged contact with metals such as aluminum, tin, lead and zinc.
Explosive in the presence of the following materials or conditions: metals.

Section 11. Toxicological Information

Toxicity data

United States

Product/ingredient name	Test	Result	Route	Species
Hydrochloric Acid	LD50 LC50	900 mg/kg 1108 ppm (1 hour/hours)	Oral Inhalation	Rabbit Mouse

Chronic effects on humans : **CARCINOGENIC EFFECTS**: A4 (Not classifiable for humans or animals.) by ACGIH, 3 (Not classifiable for humans.) by IARC.
Causes damage to the following organs: lungs, upper respiratory tract, skin, eye, lens or cornea.

Other toxic effects on humans : Extremely hazardous in case of skin contact (corrosive), of eye contact (corrosive), of ingestion, of inhalation (lung irritant).
Hazardous in case of inhalation (lung corrosive).

Specific effects

Carcinogenic effects : No known significant effects or critical hazards.

Mutagenic effects : No known significant effects or critical hazards.

Teratogenicity / Reproductive toxicity : No known significant effects or critical hazards.

Sensitization

Ingestion : May cause burns to mouth, throat and stomach.

Inhalation : Severely irritating to the respiratory system.

Eyes : Severely corrosive to the eyes.

Skin : Severely corrosive to the skin.

Section 12. Ecological Information

Environmental precautions : No known significant effects or critical hazards.

Products of degradation : These products are halogenated compounds.

Toxicity of the products of biodegradation : The products of degradation are as toxic as the product itself.

Section 13. Disposal Considerations

Waste disposal : The generation of waste should be avoided or minimized wherever possible. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport Information

Regulatory information	UN number	Proper shipping name	Class	PG*	Label	Additional information
DOT Classification	UN1789	HYDROCHLORIC ACID	8	II		Reportable quantity 5000 lbs. (2268 kg)

PG* : Packing group

Section 15. Regulatory Information

United States

HCS Classification : Highly toxic material
Corrosive material
Target organ effects

U.S. Federal regulations : TSCA 8(b) inventory: Listed

SARA 302/304/311/312 extremely hazardous substances: Hydrochloric Acid
SARA 302/304 emergency planning and notification: Hydrochloric Acid
SARA 302/304/311/312 hazardous chemicals: Hydrochloric Acid
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Hydrochloric Acid : Sudden release of pressure, Immediate (acute) health hazard, Delayed (chronic) health hazard
Clean Water Act (CWA) 307: No products were found.
Clean Water Act (CWA) 311: Hydrochloric Acid
Clean Air Act (CAA) 112 accidental release prevention: Hydrochloric Acid
Clean Air Act (CAA) 112 regulated flammable substances: No products were found.
Clean Air Act (CAA) 112 regulated toxic substances: Hydrochloric Acid

SARA 313

Product name	CAS number	Concentration
Form R - Reporting requirements :		
Hydrochloric Acid	7647-01-0	100
Supplier notification :		
Hydrochloric Acid	7647-01-0	100

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations : Pennsylvania RTK: Hydrochloric Acid : (environmental hazard, generic environmental hazard)
Massachusetts RTK: Hydrochloric Acid
New Jersey: Hydrochloric Acid

Canada

WHMIS (Canada) : Class D-1A: Material causing immediate and serious toxic effects (Very toxic).
Class E: Corrosive material

CEPA DSL/CEPA NDSL : CEPA DSL: Hydrochloric Acid

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

EU regulations

Hazard symbol/symbols :

Risk phrases : R34- Causes burns.
R37- Irritating to respiratory system.

Safety phrases : S1/2- Keep locked up and out of the reach of children.
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

International regulations

International lists : Australia (NICNAS): Hydrochloric Acid

China: Hydrochloric Acid

Germany water class: Hydrochloric Acid

Japan (METI): Hydrochloric Acid

Korea (TCCL): Hydrochloric Acid

Philippines (RA6969): Hydrochloric Acid

Section 16. Other Information

Label requirements : DANGER!
POISON!
MAY BE FATAL IF INHALED OR SWALLOWED.
CAUSES SEVERE EYE AND SKIN BURNS.
CAUSES SEVERE RESPIRATORY TRACT IRRITATION.
CAUSES DAMAGE TO THE FOLLOWING ORGANS: LUNGS, RESPIRATORY TRACT, SKIN, EYE, LENS OR CORNEA.

National Fire Protection Association (U.S.A.) :

	0	**Flammability**
Health	3	0 **Instability**
		Special

Other special considerations : Section 3 lists this product as 100% which indicates that it is a concentrated acid.

Notice to reader

The statements contained herein are based upon technical data that EMD Chemicals Inc. believes to be reliable, are offered for information purposes only and as a guide to the appropriate precautionary and emergency handling of the material by a properly trained person having the necessary technical skills. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use, storage and disposal of these materials and the safety and health of employees and customers and the protection of the environment. EMD CHEMICALS INC. MAKES NO REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE, WITH RESPECT TO THE INFORMATION HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS.

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Material name	**UNLEADED GASOLINE**
Version #	03
Issue date	07-28-2011
Revision date	11-13-2012
Supersedes date	09-28-2012
MSDS Number	002
Product use	Motor fuels.
Synonym(s)	Regular/Premium/Midgrade - Unleaded Gasoline, RFG - Reformulated Unleaded Gasoline, Conventional Unleaded Gasoline, Oxygenated Unleaded Gasoline, Non-Oxygenated Unleaded Gasoline, CARB (California Air Resource Board) Unleaded Gasoline, RBOB - Reformulated Blendstock for Oxygenate Blending, CBOB - Conventional Blendstock for Oxygenate Blending, Petrol, Motor Fuel. See section 16 for complete information.
Manufacturer/Supplier	Valero Marketing & Supply Company and Affiliates P.O. Box 696000 San Antonio, TX 78269-6000
General Assistance	210-345-4593
Emergency	24 Hour Emergency 866-565-5220 1-800-424-9300 (CHEMTREC USA)

2. Hazards Identification

Physical state	Liquid.
Appearance	Light straw to red clear liquid with characteristic strong odor of gasoline.
Emergency overview	DANGER! Extremely flammable liquid and vapor - vapor may cause flash fire. Will be easily ignited by heat, spark or flames. Heat may cause the containers to explode. Harmful if inhaled, absorbed through skin, or swallowed. Aspiration may cause lung damage. Irritating to eyes, respiratory system and skin. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. Contains benzene. Cancer hazard - can cause cancer. Mutagen. May cause heritable genetic damage. May cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Static accumulating flammable materials can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite material and vapor may cause flash fire (or explosion).
OSHA regulatory status	This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication).
Potential health effects	
Routes of exposure	Inhalation. Ingestion. Skin contact. Eye contact.
Eyes	Contact may irritate or burn eyes. Eye contact may result in corneal injury.
Skin	Harmful if absorbed through skin. Irritating to skin. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.
Inhalation	Harmful if inhaled. Irritating to respiratory system. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea. May cause breathing disorders and lung damage. May cause cancer by inhalation. Prolonged inhalation may be harmful.
Ingestion	Harmful if swallowed. Ingestion may result in vomiting; aspiration (breathing) of vomitus into lungs must be avoided as even small quantities may result in aspiration pneumonitis. Irritating to mouth, throat, and stomach.
Target organs	Blood. Eyes. Liver. Respiratory system. Skin. Kidneys. Central nervous system.

Chronic effects Cancer hazard. Contains material which may have reproductive toxicity, teratogenetic or mutagenic effects. Liver injury may occur. Kidney injury may occur. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue, mental confusion and blurred vision) and/or damage. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis.

Signs and symptoms Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. Unconsciousness. Corneal damage. Narcosis. Cyanosis (blue tissue condition, nails, lips, and/or skin). Decrease in motor functions. Behavioral changes. Edema. Liver enlargement. Jaundice. Conjunctivitis. Proteinuria. Defatting of the skin. Rash.

Potential environmental effects Toxic to aquatic organisms. Harmful to aquatic life with long lasting effects.

3. Composition / Information on Ingredients

Components	CAS #	Percent
Gasoline	86290-81-5	0-100
Toluene	108-88-3	0-30
Hexane (Other Isomers)	96-14-0	5-25
Xylene (o, m, p isomers)	1330-20-7	0-25
Octane (All isomers)	111-65-9	0-18.5
Ethanol	64-17-5	0-10
1,2,4, Trimethylbenzene	95-63-6	0-6
n-Heptane	142-82-5	1-5
Pentane	109-66-0	1-5
Cumene	98-82-8	0-5
Ethylbenzene	100-41-4	0-5
Benzene	71-43-2	0-4.9
n-Hexane	110-54-3	0-3
Cyclohexane	110-82-7	0-3

4. First Aid Measures

First aid procedures

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention.

Skin contact Remove contaminated clothing and shoes. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops or persists. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes. If high pressure injection under the skin occurs, always seek medical attention.

Inhalation Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.

Ingestion Rinse mouth thoroughly. Do not induce vomiting without advice from poison control center. Do not give mouth-to-mouth resuscitation. If vomiting occurs, keep head low so that stomach content does not get into the lungs. Get medical attention immediately.

Notes to physician In case of shortness of breath, give oxygen. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General advice If exposed or concerned: get medical attention/advice. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before re-use.

5. Fire Fighting Measures

Flammable properties Flammable by OSHA criteria. Containers may explode when heated.

Extinguishing media

Suitable extinguishing media Water spray. Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Protection of firefighters

Specific hazards arising from the chemical	Vapor may cause flash fire. Vapors can flow along surfaces to distant ignition source and flash back. Sensitive to static discharge.
Protective equipment and precautions for firefighters	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
Fire fighting equipment/instructions	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask. Withdraw immediately in case of rising sound from venting safety devices or any discoloration of tanks due to fire. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Move containers from fire area if you can do it without risk. In the event of fire, cool tanks with water spray. Cool containers exposed to flames with water until well after the fire is out. For massive fire, use unmanned hose holders or monitor nozzles; if this is impossible, withdraw from area and let fire burn. Vapors may form explosive air mixtures even at room temperature. Prevent buildup of vapors or gases to explosive concentrations. Some of these materials, if spilled, may evaporate leaving a flammable residue. Water runoff can cause environmental damage. Use compatible foam to minimize vapor generation as needed.
Specific methods	In the event of fire and/or explosion do not breathe fumes. Use water spray to cool unopened containers.
Hazardous combustion products	Carbon monoxide. Carbon Dioxide. Sulfur oxides. Nitrogen oxides (NOx). Hydrocarbons.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Local authorities should be advised if significant spills cannot be contained. Keep upwind. Keep out of low areas. Ventilate closed spaces before entering. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. See Section 8 of the MSDS for Personal Protective Equipment.
Environmental precautions	Gasoline may contain oxygenated blend products (Ethanol, etc.) that are soluble in water and therefore precautions should be taken to protect surface and groundwater sources from contamination. If facility or operation has an "oil or hazardous substance contingency plan", activate its procedures. Stay upwind and away from spill. Wear appropriate protective equipment including respiratory protection as conditions warrant. Do not enter or stay in area unless monitoring indicates that it is safe to do so. Isolate hazard area and restrict entry to emergency crew. Extremely flammable. Review Firefighting Measures, Section 5, before proceeding with clean up. Keep all sources of ignition (flames, smoking, flares, etc.) and hot surfaces away from release. Contain spill in smallest possible area. Recover as much product as possible (e.g. by vacuuming). Stop leak if it can be done without risk. Use water spray to disperse vapors. Use compatible foam to minimize vapor generation as needed. Spilled material may be absorbed by an appropriate absorbent, and then handled in accordance with environmental regulations. Prevent spilled material from entering sewers, storm drains, other unauthorized treatment or drainage systems and natural waterways. Contact fire authorities and appropriate federal, state and local agencies. If spill of any amount is made into or upon navigable waters, the contiguous zone, or adjoining shorelines, contact the National Response Center at 1-800-424-8802. For highway or railways spills, contact Chemtrec at 1-800-424-9300.
Methods for containment	Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if you can do so without risk. This material is a water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Dike the spilled material, where this is possible. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Use non-sparking tools and explosion-proof equipment. Small Spills: Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. This material and its container must be disposed of as hazardous waste. Large Spills: Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Prevent product from entering drains. Do not allow material to contaminate ground water system. Should not be released into the environment.
Other information	Clean up in accordance with all applicable regulations.

7. Handling and Storage

Handling

Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity.
Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. Avoid prolonged exposure. Use only with adequate ventilation. Wash thoroughly after handling. The product is extremely flammable, and explosive vapor/air mixtures may be formed even at normal room temperatures. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. When using, do not eat, drink or smoke. Avoid release to the environment.

Storage

Flammable liquid storage. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. The pressure in sealed containers can increase under the influence of heat. Keep container tightly closed in a cool, well-ventilated place. Keep away from food, drink and animal feedingstuffs. Keep out of the reach of children.

8. Exposure Controls / Personal Protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
1,2,4, Trimethylbenzene (CAS 95-63-6)	TWA	25 ppm
Benzene (CAS 71-43-2)	STEL	2.5 ppm
	TWA	0.5 ppm
Cumene (CAS 98-82-8)	TWA	50 ppm
Cyclohexane (CAS 110-82-7)	TWA	100 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
Gasoline (CAS 86290-81-5)	STEL	500 ppm
	TWA	300 ppm
Hexane (Other Isomers) (CAS 96-14-0)	STEL	1000 ppm
	TWA	500 ppm
n-Heptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm
n-Hexane (CAS 110-54-3)	TWA	50 ppm
Octane (All isomers) (CAS 111-65-9)	TWA	300 ppm
Pentane (CAS 109-66-0)	TWA	600 ppm
Toluene (CAS 108-88-3)	TWA	20 ppm
Xylene (o, m, p isomers) (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Benzene (CAS 71-43-2)	STEL	5 ppm
	TWA	1 ppm

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Cumene (CAS 98-82-8)	PEL	245 mg/m3
		50 ppm
Cyclohexane (CAS 110-82-7)	PEL	1050 mg/m3
		300 ppm
Ethanol (CAS 64-17-5)	PEL	1900 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
		1000 ppm
Ethylbenzene (CAS 100-41-4)	PEL	435 mg/m3
		100 ppm
n-Heptane (CAS 142-82-5)	PEL	2000 mg/m3
		500 ppm
n-Hexane (CAS 110-54-3)	PEL	1800 mg/m3
		500 ppm
Octane (All isomers) (CAS 111-65-9)	PEL	2350 mg/m3
		500 ppm
Pentane (CAS 109-66-0)	PEL	2950 mg/m3
		1000 ppm
Xylene (o, m, p isomers) (CAS 1330-20-7)	PEL	435 mg/m3
		100 ppm

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Benzene (CAS 71-43-2)	Ceiling	25 ppm
	TWA	10 ppm
Toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
1,2,4, Trimethylbenzene (CAS 95-63-6)	TWA	123 mg/m3
		25 ppm
Benzene (CAS 71-43-2)	STEL	8 mg/m3
		2.5 ppm
	TWA	1.6 mg/m3
		0.5 ppm
Cumene (CAS 98-82-8)	TWA	246 mg/m3
		50 ppm
Cyclohexane (CAS 110-82-7)	TWA	344 mg/m3
		100 ppm
Ethanol (CAS 64-17-5)	TWA	1880 mg/m3
		1000 ppm
Ethylbenzene (CAS 100-41-4)	STEL	543 mg/m3
		125 ppm
	TWA	434 mg/m3
		100 ppm
Gasoline (CAS 86290-81-5)	STEL	500 ppm
	TWA	300 ppm
Hexane (Other Isomers) (CAS 96-14-0)	STEL	3500 mg/m3
		1000 ppm
	TWA	1760 mg/m3
		500 ppm
n-Heptane (CAS 142-82-5)	STEL	2050 mg/m3
		500 ppm
	TWA	1640 mg/m3
		400 ppm
n-Hexane (CAS 110-54-3)	TWA	176 mg/m3
		50 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Octane (All isomers) (CAS 111-65-9)	TWA	1400 mg/m3
		300 ppm
Pentane (CAS 109-66-0)	TWA	1770 mg/m3
		600 ppm
Toluene (CAS 108-88-3)	TWA	188 mg/m3
		50 ppm
Xylene (o, m, p isomers) (CAS 1330-20-7)	STEL	651 mg/m3
		150 ppm
	TWA	434 mg/m3
		100 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
1,2,4, Trimethylbenzene (CAS 95-63-6)	TWA	25 ppm
Benzene (CAS 71-43-2)	STEL	2.5 ppm
	TWA	0.5 ppm
Cumene (CAS 98-82-8)	STEL	75 ppm
	TWA	25 ppm
Cyclohexane (CAS 110-82-7)	TWA	100 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethylbenzene (CAS 100-41-4)	TWA	20 ppm
Gasoline (CAS 86290-81-5)	STEL	500 ppm
	TWA	300 ppm
Hexane (Other Isomers) (CAS 96-14-0)	TWA	200 ppm
n-Heptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm
n-Hexane (CAS 110-54-3)	TWA	20 ppm
Octane (All isomers) (CAS 111-65-9)	TWA	300 ppm
Pentane (CAS 109-66-0)	TWA	600 ppm
Toluene (CAS 108-88-3)	TWA	20 ppm
Xylene (o, m, p isomers) (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
1,2,4, Trimethylbenzene (CAS 95-63-6)	TWA	25 ppm
Benzene (CAS 71-43-2)	STEL	2.5 ppm
	TWA	0.5 ppm
Cumene (CAS 98-82-8)	TWA	50 ppm
Cyclohexane (CAS 110-82-7)	TWA	100 ppm
Ethanol (CAS 64-17-5)	STEL	1000 ppm
Ethylbenzene (CAS 100-41-4)	STEL	125 ppm
	TWA	100 ppm
Gasoline (CAS 86290-81-5)	STEL	500 ppm
	TWA	300 ppm
Hexane (Other Isomers) (CAS 96-14-0)	STEL	1000 ppm
	TWA	500 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
n-Heptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm
n-Hexane (CAS 110-54-3)	TWA	50 ppm
Octane (All isomers) (CAS 111-65-9)	TWA	300 ppm
Pentane (CAS 109-66-0)	STEL	2210 mg/m3
		750 ppm
	TWA	1770 mg/m3
		600 ppm
Toluene (CAS 108-88-3)	TWA	20 ppm
Xylene (o, m, p isomers) (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
1,2,4, Trimethylbenzene (CAS 95-63-6)	TWA	123 mg/m3
		25 ppm
Benzene (CAS 71-43-2)	STEL	15.5 mg/m3
		5 ppm
	TWA	3 mg/m3
		1 ppm
Cumene (CAS 98-82-8)	TWA	246 mg/m3
		50 ppm
Cyclohexane (CAS 110-82-7)	TWA	1030 mg/m3
		300 ppm
Ethanol (CAS 64-17-5)	TWA	1880 mg/m3
		1000 ppm
Ethylbenzene (CAS 100-41-4)	STEL	543 mg/m3
		125 ppm
	TWA	434 mg/m3
		100 ppm
Hexane (Other Isomers) (CAS 96-14-0)	STEL	3500 mg/m3
		1000 ppm
	TWA	1760 mg/m3
		500 ppm
n-Heptane (CAS 142-82-5)	STEL	2050 mg/m3
		500 ppm
	TWA	1640 mg/m3
		400 ppm
n-Hexane (CAS 110-54-3)	TWA	176 mg/m3
		50 ppm
Octane (All isomers) (CAS 111-65-9)	STEL	1750 mg/m3
		375 ppm
	TWA	1400 mg/m3
		300 ppm
Pentane (CAS 109-66-0)	TWA	350 mg/m3
		120 ppm
Toluene (CAS 108-88-3)	TWA	188 mg/m3
		50 ppm
Xylene (o, m, p isomers) (CAS 1330-20-7)	STEL	651 mg/m3
		150 ppm
	TWA	434 mg/m3

Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)

Components	Type	Value
		100 ppm

Mexico. Occupational Exposure Limit Values

Components	Type	Value
1,2,4, Trimethylbenzene (CAS 95-63-6)	STEL	170 mg/m3
		35 ppm
	TWA	125 mg/m3
		25 ppm
Benzene (CAS 71-43-2)	STEL	16 mg/m3
		5 ppm
	TWA	3.2 mg/m3
		1 ppm
Cumene (CAS 98-82-8)	STEL	365 mg/m3
		75 ppm
	TWA	245 mg/m3
		50 ppm
Cyclohexane (CAS 110-82-7)	STEL	1300 mg/m3
		375 ppm
	TWA	1050 mg/m3
		300 ppm
Ethanol (CAS 64-17-5)	TWA	1900 mg/m3
		1000 ppm
Ethylbenzene (CAS 100-41-4)	STEL	545 mg/m3
		125 ppm
	TWA	435 mg/m3
		100 ppm
Hexane (Other Isomers) (CAS 96-14-0)	STEL	3500 mg/m3
		1000 ppm
	TWA	1760 mg/m3
		500 ppm
n-Heptane (CAS 142-82-5)	STEL	2000 mg/m3
		500 ppm
	TWA	1600 mg/m3
		400 ppm
n-Hexane (CAS 110-54-3)	TWA	176 mg/m3
		50 ppm
Octane (All isomers) (CAS 111-65-9)	STEL	1800 mg/m3
		375 ppm
	TWA	1450 mg/m3
		300 ppm
Pentane (CAS 109-66-0)	STEL	2250 mg/m3
		760 ppm
	TWA	1800 mg/m3
		600 ppm
Toluene (CAS 108-88-3)	TWA	188 mg/m3
		50 ppm
Xylene (o, m, p isomers) (CAS 1330-20-7)	STEL	655 mg/m3
		150 ppm
	TWA	435 mg/m3
		100 ppm

Engineering controls	Provide adequate general and local exhaust ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Use explosion-proof equipment.
Personal protective equipment	
Eye / face protection	Wear safety glasses. If splash potential exists, wear full face shield or chemical goggles.
Skin protection	Wear chemical-resistant, impervious gloves. Full body suit and boots are recommended when handling large volumes or in emergency situations. Flame retardant protective clothing is recommended.
Respiratory protection	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workplace exposure limits for product or components are exceeded, NIOSH approved equipment should be worn. Proper respirator selection should be determined by adequately trained personnel, based on the contaminants, the degree of potential exposure and published respiratory protection factors. This equipment should be available for nonroutine and emergency use.
General hygiene considerations	Consult supervisor for special handling instructions. Avoid contact with eyes. Avoid contact with skin. Keep away from food and drink. Wash hands before breaks and immediately after handling the product. Provide eyewash station and safety shower. Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance	Light straw to red clear liquid with characteristic strong odor of gasoline.
Physical state	Liquid.
Form	Liquid.
Color	Light straw to red clear.
Odor	Characteristic Gasoline Odor (Strong).
Odor threshold	Not available.
pH	Not available.
Vapor pressure	60.8 - 101.3 kPa (20°C)
Vapor density	3 - 4 (Air=1)
Boiling point	80.1 - 440.1 °F (26.7 - 226.7 °C)
Melting point/Freezing point	44 °F (6.67 °C) May start to solidify at this temperature. This is based on data for the following ingredient: Cyclohexane. Weighted average: -91.9 deg C (-133.4 deg F)
Solubility (water)	Very slightly soluble.
Specific gravity	0.66 - 0.75 (Water=1) (60°F)
Flash point	-40 °F (-40 °C) (closed cup)
Flammability limits in air, upper, % by volume	7.1 %
Flammability limits in air, lower, % by volume	1.3 %
Auto-ignition temperature	> 500 °F (> 260 °C)
VOC	100 %
Evaporation rate	10 - 11 BuAc
Other data	
Flash point class	Flammable IA

10. Chemical Stability & Reactivity Information

Chemical stability	Stable under normal temperature conditions and recommended use.
Conditions to avoid	Heat, flames and sparks. Ignition sources. Contact with incompatible materials. Do not pressurize, cut, weld, braze, solder, drill, grind or expose empty containers to heat, flame, sparks, static electricity, or other sources of ignition; they may explode and cause injury or death.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Sulfur oxides. Nitrogen oxides (NOx). Hydrocarbons.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
1,2,4, Trimethylbenzene (CAS 95-63-6)		
Acute		
Dermal		
LD50	Rabbit	> 3160 mg/kg
Inhalation		
LC50	Rat	> 2000 mg/l, 48 Hours
Oral		
LD50	Rat	6 g/kg
Benzene (CAS 71-43-2)		
Acute		
Oral		
LD50	Rat	3306 mg/kg
Cumene (CAS 98-82-8)		
Acute		
Inhalation		
LC50	Mouse	2000 mg/l, 7 Hours
	Rat	8000 mg/l, 4 Hours
Oral		
LD50	Rat	1400 mg/kg
		2.91 g/kg
Cyclohexane (CAS 110-82-7)		
Acute		
Oral		
LD50	Rat	12705 mg/kg
Ethanol (CAS 64-17-5)		
Acute		
Inhalation		
LC50	Rat	30000 mg/m3
Oral		
LD50	Rat	11.5 g/kg
Ethylbenzene (CAS 100-41-4)		
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg
Oral		
LD50	Rat	5.46 g/kg
n-Heptane (CAS 142-82-5)		
Acute		
Inhalation		
LC50	Rat	103 mg/l, 4 Hours
Octane (All isomers) (CAS 111-65-9)		
Acute		
Inhalation		
LC50	Rat	118 mg/l, 4 Hours
Pentane (CAS 109-66-0)		
Acute		
Inhalation		
LC50	Rat	364 mg/l, 4 Hours

Components	Species	Test Results
Toluene (CAS 108-88-3)		
Acute		
Dermal		
LD50	Rabbit	14.1 ml/kg
Inhalation		
LC50	Rat	49000 mg/m³, 4 Hours
Oral		
LD50	Rat	636 mg/kg
Xylene (o, m, p isomers) (CAS 1330-20-7)		
Acute		
Oral		
LD50	Rat	4300 mg/kg

Sensitization This substance may have a potential for sensitization which may provoke an allergic reaction among sensitive individuals.

Acute effects Harmful if inhaled, absorbed through skin, or swallowed. Harmful: may cause lung damage if swallowed. Irritating to eyes, respiratory system and skin. In high concentrations, vapors and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea.

Local effects

US. ACGIH Threshold Limit Values

Benzene (CAS 71-43-2)	Can be absorbed through the skin.
n-Hexane (CAS 110-54-3)	Can be absorbed through the skin.

Chronic effects Repeated exposure of laboratory animals to high concentrations of gasoline vapors has caused kidney damage and cancer in rats and cancer in mice. Gasoline was evaluated for genetic activity in assays using microbial cells, cultured mammalian cells and rat bone marrow cells. The results were all negative so gasoline was considered nonmutagenic under these conditions. Overexposure to this product or its components has been suggested as a cause of liver abnormalities in laboratory animals and humans. Lifetime studies by the American Petroleum Institute have shown that kidney damage and kidney cancer can occur in male rats after prolonged inhalation exposures at elevated concentrations of total gasoline. Kidneys of mice and female rats were unaffected. The U.S. EPA Risk Assessment Forum has concluded that the male rat kidney tumor results are not relevant for humans. Total gasoline exposure also produced liver tumors in female mice only. The implication of these data for humans has not been determined.

Subchronic effects Subchronic inhalation of benzene by rats produced decreased white blood cell counts, decreased bone marrow cell activity, increased red blood cell activity and cataracts. Blood disorders may occur after prolonged inhalation, prolonged skin contact and/or ingestion. Liver and kidney damage may occur after prolonged and repeated exposure.

Carcinogenicity

ACGIH Carcinogens

Benzene (CAS 71-43-2)	A1 Confirmed human carcinogen.
Ethanol (CAS 64-17-5)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Ethylbenzene (CAS 100-41-4)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Gasoline (CAS 86290-81-5)	A3 Confirmed animal carcinogen with unknown relevance to humans.
Toluene (CAS 108-88-3)	A4 Not classifiable as a human carcinogen.
Xylene (o, m, p isomers) (CAS 1330-20-7)	A4 Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

Benzene (CAS 71-43-2)	1 Carcinogenic to humans.
Cumene (CAS 98-82-8)	2B Possibly carcinogenic to humans.
Ethylbenzene (CAS 100-41-4)	2B Possibly carcinogenic to humans.
Gasoline (CAS 86290-81-5)	2B Possibly carcinogenic to humans.
Toluene (CAS 108-88-3)	3 Not classifiable as to carcinogenicity to humans.
Xylene (o, m, p isomers) (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.

US NTP Report on Carcinogens: Known carcinogen

Benzene (CAS 71-43-2)	Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Benzene (CAS 71-43-2) Cancer hazard.

Epidemiology Contains benzene. Human epidemiology studies indicate that prolonged and/or repeated overexposure to benzene may cause damage to the blood-producing system and serious blood disorders, including leukemia. Animal tests suggest that prolonged and/or repeated overexposure to benzene may damage the embryo/fetus. The relevance of these animal studies to humans has not been fully established. Studies have shown a risk of spontaneous abortions in women exposed to high concentrations of organic solvents during pregnancy.

Mutagenicity In in-vitro experiments, neither benzene, toluene nor xylene changed the number of sister-chromatid exchanges (SCEs) or the number of chromosomal aberrations in human lymphocytes. However, toluene and xylene caused a significant cell growth inhibition which was not observed with benzene in the same concentrations. In in-vivo experiments, toluene changed the number of sister-chromatid exchanges (SCEs) in human lymphocytes. Toluene may cause heritable genetic damage.

Neurological effects Chronic exposure to high concentrations of various hydrocarbon blends may lead to polyneuropathy (peripheral nerve damage), characterized by progressive weakness and numbness in the extremities, loss of deep tendon reflexes and reduction of motor nerve conduction velocity. Numerous cases of polyneuritis have been reported following prolonged exposures to a petroleum fraction containing various isomers of heptane as major ingredients. May cause central nervous system disorder (e.g., narcosis involving a loss of coordination, weakness, fatigue) and/or damage.

Reproductive effects Benzene, xylene and toluene have demonstrated animal effects of reproductive toxicity. Animal studies of benzene have shown testicular effects, alterations in reproductive cycles, chromosomal aberrations and embryo/fetotoxicity. Ethanol has demonstrated human effects of reproductive toxicity. May damage fertility or the unborn child. Can cause adverse reproductive effects - such as birth defects, miscarriages, or infertility. Avoid exposure to women during early pregnancy. Avoid contact during pregnancy/while nursing.

Teratogenicity Abusive inhalation of toluene ("glue sniffing") has been reported to be associated with birth defects in the offspring of abusers. Rats exposed to benzene and xylene vapor during pregnancy showed embryo/fetotoxic effects. Ethanol has demonstrated human effects of teratogenicity.

Further information Symptoms may be delayed.

12. Ecological Information

Ecotoxicological data

Components		Species	Test Results
1,2,4, Trimethylbenzene (CAS 95-63-6)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	7.19 - 8.28 mg/l, 96 hours
Benzene (CAS 71-43-2)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	8.76 - 15.6 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	5.3 mg/l, 96 hours
Cumene (CAS 98-82-8)			
Aquatic			
Crustacea	EC50	Brine shrimp (Artemia sp.)	3.55 - 11.29 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	2.7 mg/l, 96 hours
Cyclohexane (CAS 110-82-7)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	3.961 - 5.181 mg/l, 96 hours
Ethanol (CAS 64-17-5)			
Aquatic			
Algae	EC50	Freshwater algae	275 mg/l, 72 Hours
		Marine water algae	1970 mg/l
Fish	LC50	Fathead minnow (Pimephales promelas)	> 100 mg/l, 96 hours
		Freshwater fish	11200 mg/l, 96 Hours

Components		Species	Test Results
Invertebrate	EC50	Freshwater invertebrate	5012 mg/l, 48 Hours
		Marine water invertebrate	857 mg/l, 48 Hours
Ethylbenzene (CAS 100-41-4)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	1 - 4 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4 mg/l, 96 hours
n-Hexane (CAS 110-54-3)			
Aquatic			
Fish	LC50	Fathead minnow (Pimephales promelas)	2.101 - 2.981 mg/l, 96 hours
Toluene (CAS 108-88-3)			
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	5.46 - 9.83 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	5.5 mg/l, 96 hours
Xylene (o, m, p isomers) (CAS 1330-20-7)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8 mg/l, 96 Hours

Ecotoxicity Contains a substance which causes risk of hazardous effects to the environment.

Environmental effects The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

Aquatic toxicity Toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Persistence and degradability Not available.

Bioaccumulation / Accumulation Not available.

Partition coefficient

Ethanol	-0.31
Benzene	2.13
Toluene	2.73
Ethylbenzene	3.15
Xylene (o, m, p isomers)	3.2
Pentane	3.39
Cyclohexane	3.44
Hexane (Other Isomers)	3.6
Cumene	3.66
n-Hexane	3.9
n-Heptane	4.66
Octane (All isomers)	5.18

13. Disposal Considerations

Waste codes D001: Waste Flammable material with a flash point <140 °F
D018: Waste Benzene

Disposal instructions Dispose in accordance with all applicable regulations. Dispose of this material and its container to hazardous or special waste collection point. Incinerate the material under controlled conditions in an approved incinerator. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.

14. Transport Information

DOT

Basic shipping requirements:

UN number UN1203

Proper shipping name Gasoline

Hazard class	3
Packing group	II
Additional information:	
Special provisions	139, B33, B101, T8
Packaging exceptions	150
Packaging non bulk	202
Packaging bulk	242

IATA

UN number	UN1203
UN proper shipping name	Gasoline
Transport hazard class(es)	3
Packing group	II
ERG code	3H

IMDG

UN number	UN1203
UN proper shipping name	Gasoline
Transport hazard class(es)	3
Packing group	II
EmS	F-E, S-E

TDG

Proper shipping name	GASOLINE; MOTOR SPIRIT; or PETROL, MARINE POLLUTANT
Hazard class	3
UN number	UN1203
Packing group	II
Marine pollutant	Yes
Special provisions	17

15. Regulatory Information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Benzene (CAS 71-43-2)
Cumene (CAS 98-82-8)
Ethylbenzene (CAS 100-41-4)
n-Hexane (CAS 110-54-3)
Toluene (CAS 108-88-3)
Xylene (o, m, p isomers) (CAS 1330-20-7)

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

1,2,4, Trimethylbenzene (CAS 95-63-6)	1.0 %
Benzene (CAS 71-43-2)	0.1 %
Cumene (CAS 98-82-8)	1.0 %
Cyclohexane (CAS 110-82-7)	1.0 %
Ethylbenzene (CAS 100-41-4)	0.1 %
n-Hexane (CAS 110-54-3)	1.0 %
Toluene (CAS 108-88-3)	1.0 %
Xylene (o, m, p isomers) (CAS 1330-20-7)	1.0 %

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

1,2,4, Trimethylbenzene (CAS 95-63-6)	Listed.
Benzene (CAS 71-43-2)	Listed.
Cumene (CAS 98-82-8)	Listed.
Cyclohexane (CAS 110-82-7)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
n-Hexane (CAS 110-54-3)	Listed.
Toluene (CAS 108-88-3)	Listed.
Xylene (o, m, p isomers) (CAS 1330-20-7)	Listed.

CERCLA (Superfund) reportable quantity (lbs) (40 CFR 302.4)

Gasoline: 100
Toluene: 1000
Hexane (Other Isomers): 100
Xylene (o, m, p isomers): 100
Octane (All isomers): 100
Pentane: 100
Cumene: 5000
Ethylbenzene: 1000
Benzene: 10
n-Hexane: 5000
Cyclohexane: 1000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - Yes
Pressure Hazard - No
Reactivity Hazard - No

Section 302 extremely hazardous substance (40 CFR 355, Appendix A)
No

Section 311/312 (40 CFR 370)
No

Drug Enforcement Administration (DEA) (21 CFR 1308.11-15)
Not controlled

Canadian regulations
This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS status
Controlled

WHMIS classification
B2 - Flammable Liquids
D1A - Immediate/Serious-VERY TOXIC
D2A - Other Toxic Effects-VERY TOXIC
D2B - Other Toxic Effects-TOXIC

WHMIS labeling

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s)

State regulations
WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

US - California Hazardous Substances (Director's): Listed substance

1,2,4, Trimethylbenzene (CAS 95-63-6) Listed.
Benzene (CAS 71-43-2) Listed.

Cumene (CAS 98-82-8)	Listed.
Cyclohexane (CAS 110-82-7)	Listed.
Ethanol (CAS 64-17-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Hexane (Other Isomers) (CAS 96-14-0)	Listed.
n-Heptane (CAS 142-82-5)	Listed.
n-Hexane (CAS 110-54-3)	Listed.
Octane (All isomers) (CAS 111-65-9)	Listed.
Pentane (CAS 109-66-0)	Listed.
Toluene (CAS 108-88-3)	Listed.
Xylene (o, m, p isomers) (CAS 1330-20-7)	Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Benzene (CAS 71-43-2)	Listed.
Cumene (CAS 98-82-8)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Toluene (CAS 108-88-3)	Listed.

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

Benzene (CAS 71-43-2)	Listed: February 27, 1987 Carcinogenic.
Cumene (CAS 98-82-8)	Listed: April 6, 2010 Carcinogenic.
Ethylbenzene (CAS 100-41-4)	Listed: June 11, 2004 Carcinogenic.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

Benzene (CAS 71-43-2)	Listed: December 26, 1997 Developmental toxin.
Toluene (CAS 108-88-3)	Listed: January 1, 1991 Developmental toxin.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

Toluene (CAS 108-88-3)	Listed: August 7, 2009 Female reproductive toxin.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

Benzene (CAS 71-43-2)	Listed: December 26, 1997 Male reproductive toxin.

US - New Jersey RTK - Substances: Listed substance

1,2,4, Trimethylbenzene (CAS 95-63-6)	Listed.
Benzene (CAS 71-43-2)	Listed.
Cumene (CAS 98-82-8)	Listed.
Cyclohexane (CAS 110-82-7)	Listed.
Ethanol (CAS 64-17-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
n-Heptane (CAS 142-82-5)	Listed.
n-Hexane (CAS 110-54-3)	Listed.
Octane (All isomers) (CAS 111-65-9)	Listed.
Pentane (CAS 109-66-0)	Listed.
Toluene (CAS 108-88-3)	Listed.
Xylene (o, m, p isomers) (CAS 1330-20-7)	Listed.

US - Pennsylvania RTK - Hazardous Substances: Special hazard

Benzene (CAS 71-43-2)	Special hazard.

US. Massachusetts RTK - Substance List

1,2,4, Trimethylbenzene (CAS 95-63-6)	Listed.
Benzene (CAS 71-43-2)	Listed.
Cumene (CAS 98-82-8)	Listed.
Cyclohexane (CAS 110-82-7)	Listed.
Ethanol (CAS 64-17-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Hexane (Other Isomers) (CAS 96-14-0)	Listed.
n-Heptane (CAS 142-82-5)	Listed.
n-Hexane (CAS 110-54-3)	Listed.
Octane (All isomers) (CAS 111-65-9)	Listed.
Pentane (CAS 109-66-0)	Listed.
Toluene (CAS 108-88-3)	Listed.
Xylene (o, m, p isomers) (CAS 1330-20-7)	Listed.

US. New Jersey Worker and Community Right-to-Know Act

1,2,4, Trimethylbenzene (CAS 95-63-6)	500 LBS
Benzene (CAS 71-43-2)	500 LBS
Cumene (CAS 98-82-8)	500 LBS
Cyclohexane (CAS 110-82-7)	500 LBS
Ethylbenzene (CAS 100-41-4)	500 LBS
n-Hexane (CAS 110-54-3)	500 LBS

Pentane (CAS 109-66-0)	500 LBS
Toluene (CAS 108-88-3)	500 LBS
Xylene (o, m, p isomers) (CAS 1330-20-7)	500 LBS

US. Pennsylvania RTK - Hazardous Substances

1,2,4, Trimethylbenzene (CAS 95-63-6)	Listed.
Benzene (CAS 71-43-2)	Listed.
Cumene (CAS 98-82-8)	Listed.
Cyclohexane (CAS 110-82-7)	Listed.
Ethanol (CAS 64-17-5)	Listed.
Ethylbenzene (CAS 100-41-4)	Listed.
Gasoline (CAS 86290-81-5)	Listed.
Hexane (Other Isomers) (CAS 96-14-0)	Listed.
n-Heptane (CAS 142-82-5)	Listed.
n-Hexane (CAS 110-54-3)	Listed.
Octane (All isomers) (CAS 111-65-9)	Listed.
Pentane (CAS 109-66-0)	Listed.
Toluene (CAS 108-88-3)	Listed.
Xylene (o, m, p isomers) (CAS 1330-20-7)	Listed.

16. Other Information

Further information

HMIS® is a registered trade and service mark of the NPCA.

Other information

Note: This Material Safety Data Sheet applies to the listed products and synonym descriptions for Hazard Communication purposes only. Technical Specifications vary greatly depending on the products and are not reflected in this document. Consult specification sheets for technical information.

HMIS® ratings

Health: 2*
Flammability: 3
Physical hazard: 0

NFPA ratings

Health: 1
Flammability: 3
Instability: 0

Disclaimer

This Material Safety Data Sheet (MSDS) was prepared in accordance with 29 CFR 1910.1200 by Valero Marketing & Supply Co., ("VALERO"). VALERO does not assume any liability arising out of product use by others. The information, recommendations, and suggestions presented in this MSDS are based upon test results and data believed to be reliable. The end user of the product has the responsibility for evaluating the adequacy of the data under the conditions of use, determining the safety, toxicity and suitability of the product under these conditions, and obtaining additional or clarifying information where uncertainty exists. No guarantee expressed or implied is made as to the effects of such use , the results to be obtained, or the safety and toxicity of the product in any specific application. Furthermore, the information herein is not represented as absolutely complete, since it is not practicable to provide all the scientific and study information in the format of this document, plus additional information may be necessary under exceptional conditions of use, or because of applicable laws or government regulations.

Material safety data sheet for SKF automotive wheel bearing grease

1. Chemical product and company identification

Trade name: SKF Automotive wheel bearing grease

Synonyms: Red lithium complex R&O EP-2

Product use: Lubricating grease

Supplier: Chemtool Incorporated
8200 Ridgefield Road
P.O. Box 538
Crystal Lake, IL 60039-0538

2. Composition, information on ingredients

Ingredient name	CAS no.	Weight
Distillates, petroleum, severely hydrotreated heavy naphthenic	64742-52-5	30-50 %
Distillates, petroleum, solvent-dewaxed heavy paraffinic petroleum Distillates	64742-65-0	30-50 %
Residual oils, petroleum, solvent-refined	64742-01-4	10-30 %

Composition comments: Refer to section eight for exposure limits on ingredients.
Chemical ingredients not regulated by OSHA or SARA are treated confidentially.

3. Hazards identification

Emergency overview: Exposure to vapors generated at high temperatures, may cause respiratory irritation. For further information, please refer to section 11.

Acute effects:

Chronic effects:

Sensitization: No known information.

Carcinogenicity: IARC: Not listed. OSHA: Not regulated. NTP: Not listed.

Teratogenicity: No known information.

Health warnings:	**Inhalation.** Heating can generate vapors that may cause respiratory irritation, nausea and headaches. Inhalation hazard at room temperature is unlikely due to the low volatility of this product. **Skin contact.** Repeated or prolonged contact can result in drying of the skin. **Eye contact.** Irritating. **Ingestion.** Can cause stomach ache and vomiting. Main hazard, if ingested, is aspiration into the lungs and subsequent pneumonitis.
Other information:	Route of entry: Inhalation. Skin and/or eye contact. Ingestion.
Medical symptoms:	Medical conditions aggravated by exposure: Not determined

4. First aid measures

Inhalation:	Vapor inhalation under ambient conditions is normally not a problem. If overcome by vapor of hot product, immediately remove from source of exposure. Move the exposed person to fresh air at once. For breathing difficulties oxygen may be necessary. Get medical attention if any discomfort continues.
Eyes:	Rinse the eye with water immediately. Continue to rinse for at least 15 minutes. Contact physician if discomfort continues.
Skin:	Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
Ingestion:	**Do not induce vomiting!** Get medical attention immediately!

5. Fire fighting measures

Flash point (°C):	> 149 Cd OC (Cleveland open cup).
Flammability limit - lower(%):	N/D
Flammability limit - upper(%):	N/D
Extinguishing media:	Use: Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc. Alcohol resistant foam. Water spray, fog or mist.
Special fire fighting procedures:	Use water to keep fire exposed containers cool and disperse vapors. Water spray may be used to flush spills away from exposures and dilute spills to non-flammable mixtures. Avoid water in straight hose stream; will scatter and spread fire. Keep run-off water out of sewers and water sources. Dike for water control.
Unusual fire & explosion hazards:	Pressure will increase in over heated, closed containers.
Hazardous combustion products:	Acrid smoke/fumes. Oxides of: Carbon. Sulfur.
Protective measures in case of fire:	Self-contained breathing equipment and chemical resistant clothing recommended.

6. Accidental release measures

Personal precautions:	Minimize skin contact.
Precautions to protect the environment:	Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with applicable government regulations.
Spill clean-up procedures:	Keep all sources of ignition and hot metal surfaces away from spill. Avoid contact with eyes or skin. Place leaking containers in well ventilated area. If fire potential exists, blanket spill with foam or use water spray to disperse vapors. Contain spill to minimize contaminated area and facilitate salvage or disposal. To clean up spill, flush area sparingly with water or use absorbant material. Avoid discharge to natural water ways.

7. Handling and storage

Handling precautions:	Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Do not reuse container. Keep lid closed when not in use. Do not store or mix with strong oxidizers. Avoid spilling, skin and eye contact. Eye wash and emergency shower must be available at the work place.
Storage precautions:	Store separate from strong acids and oxidizers. Keep away from heat, sparks and open flame.
Storage criteria:	Chemical storage.

8. Exposure controls, personal protection

Component	STD	TWA	STEL	TWA	STEL
Distillates, petroleum, severely hydrotreated heavy naphthenic	OSHA ACGIH	5 mg/m 5 mg/m3	3 N/E 10 mg/m3		
Distillates, petroleum, solvent-dewaxed heavy paraffinic petroleum distillates	OSHA ACGIH	5 mg/m3 5 mg/m3	N/E 10 mg/m3		
Residual oils, petroleum, solvent-refined	OSHA ACGIH	5 mg/m3 5 mg/m3	N/E 10 mg/m3		

Protective equipment

Engineering controls:	Use engineering controls to reduce air contamination to permissible exposure level.
Ventilation:	No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.
Respirators:	No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.
Protective gloves:	Chemical resistant gloves recommended to prevent prolonged or repeated contact. Use protective gloves made of: Neoprene, nitrile, polyethylene or PVC or latex.
Eye protection:	Wear splash-proof eye goggles to prevent any possibility of eye contact.
Protective clothing:	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Hygienic work practices:	Wash at the end of each work shift and before eating, smoking and using the toilet.

9. Physical and chemical properties

Appearance/physical state:	Grease.		
Color:	Red.		
Odor:	Mild (or faint). Petroleum.		
Solubility description:	Insoluble in water.		
Density:	0.90	**Temperature (°C)**	16
Vapor density (air=1):	> 5		
Vapor pressure:	< 0.01 mmHg	**Temperature (°C)**	20
Evaporation rate:	Nil	**Reference**	BuAc=1
pH-value, conc. solution:	N/A		

10. Stability and reactivity

Stability:	Normally stable.
Conditions to avoid:	Avoid contact with acids and oxidizing substances.
Hazardous polymerization:	Will not occur.
Polymerization description:	Not applicable.
Hazardous decomposition products:	Oxides of: Carbon. Sulfur.

11. Toxicological information

Toxicological information: No experimental toxicological data on the preparation as such is available.

12. Ecological information

Ecological information: There is no ecological data on the product itself.

13. Disposal considerations

Disposal methods: Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.

14. Transport information

DOT hazard class: Not regulated.

Identification no.: N/A

U.S. DOT hazard label: No DOT label requirement noted

Sea transport notes: Not regulated.

Air transport notes: Not regulated.

15. Regulatory information

US Federal regulations:

Component	SARA 302	CERCLA	SARA 313
Distillates, petroleum, severely hydrotreated heavy naphthenic	N/A	N/A	N/A
Distillates, petroleum, solvent-dewaxed heavy paraffinic	N/A	N/A	N/A
Petroleum distillates			
Residual oils, petroleum, solvent-refined	N/A	N/A	N/A

Regulatory status: None.

Clean air act:

US State regulations:

Workplace hazardous materials information system - WHIMIS:

Component	Inventories CAN	US	EU	AUS	JAP	KOR	CHN	PHLP
Distillates, petroleum, severely Hydrotreated heavy naphthenic	DSL	Yes	EINECS	Yes	No	Yes	NAV	Yes
Distillates, petroleum, solvent-dewaxed Heavy paraffinic petroleum distillates	DSL	Yes	NAV	NAV	NAV	NAV	NAV	NAV
Residual oils, petroleum, solvent-refined	DSL	Yes	EINECS	Yes	No	Yes	NAV	Yes

16. Other information

Health: Irritation, minor residual injury (1).

Flammability: Burns only if pre-heated (1).

Reactivity: N/A (0).

Prepared by: John Dingess Maria Maka

Date: 2014-11-01

Disclaimer: While the information and recommendations set forth herein are believed to be accurate as of the date thereof, Chemtool Incorporated makes no warranty with respect thereto and disclaims all liability from reliance therein.

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SAFETY DATA SHEET

Section 1. Identification

Product name Fuels, diesel

Other means of identification DMA LS, Marine Distillate Fuels, Ultra Low Sulfur No. 2 Diesel Fuel

SDS # SMF2115

Code SMF2115

Relevant identified uses of the substance or mixture and uses advised against

Product use Fuel for marine engines.

Supplier

BP Products North America Inc.
150 West Warrenville Road
Naperville, Illinois 60563-8460
USA

EMERGENCY HEALTH INFORMATION:

1 (800) 447-8735

Outside the US: +1 703-527-3887 (CHEMTREC)

EMERGENCY SPILL INFORMATION:

1 (800) 424-9300 CHEMTREC (USA)

OTHER PRODUCT INFORMATION

1 (866) 4 BP - MSDS
(866-427-6737 Toll Free - North America)
email: bpcares@bp.com

Section 2. Hazards identification

OSHA/HCS status

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

FLAMMABLE LIQUIDS - Category 4
ACUTE TOXICITY (inhalation) - Category 4
SKIN IRRITATION - Category 2
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1

GHS label elements

Hazard pictograms

Signal word Danger

Hazard statements

Combustible liquid.
Harmful if inhaled.
Causes skin irritation.
Suspected of causing cancer.
May be fatal if swallowed and enters airways.
May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

Section 2. Hazards identification

Prevention
Obtain special instructions before use.
Wear protective gloves and eye protection.
Do not breathe vapor.
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Use explosion-proof electrical/ventilating/lighting/material-handling equipment.
Avoid release to the environment.

Response
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
Do NOT induce vomiting.
IF ON SKIN: Wash with plenty of soap and water.
Take off contaminated clothing and wash it before reuse.

Storage
Keep cool.

Disposal
Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified
This material may contain significant quantities of polycyclic aromatic hydrocarbons (PAHs), some of which have been shown by experimental studies to induce skin cancer.
Note: High Pressure Applications
Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency.
See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data Sheet.

Section 3. Composition/information on ingredients

May also contain small quantities of proprietary performance additives.

Substance/mixture Mixture

Ingredient name	CAS number	%
Fuels, diesel, No 2 Contains: naphthalene	68476-34-6 91-20-3	> 99 1 - 3

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact
In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Check for and remove any contact lenses. Get medical attention.

Skin contact
In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention.

Inhalation
If inhaled, remove to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention.

Ingestion
Do not induce vomiting. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Aspiration hazard if swallowed. Can enter lungs and cause damage. Get medical attention immediately.

Protection of first-aiders
No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Section 4. First aid measures

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician

Treatment should in general be symptomatic and directed to relieving any effects. Product can be aspirated on swallowing or following regurgitation of stomach contents, and can cause severe and potentially fatal chemical pneumonitis, which will require urgent treatment. Because of the risk of aspiration, induction of vomiting and gastric lavage should be avoided. Gastric lavage should be undertaken only after endotracheal intubation. Monitor for cardiac dysrhythmias.

Note: High Pressure Applications
Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis.
Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

Specific treatments

No specific treatment.

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

In case of fire, use foam, dry chemical or carbon dioxide extinguisher or spray.

Unsuitable extinguishing media

Do not use water jet.

Specific hazards arising from the chemical

Combustible liquid. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Hazardous combustion products

Combustion products may include the following:
carbon oxides (CO, CO_2) (carbon monoxide, carbon dioxide)
other hazardous substances.

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. This material is toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Special protective equipment for fire-fighters

Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Immediately contact emergency personnel. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Eliminate all ignition sources.

For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

Section 6. Accidental release measures

Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Small spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres.

Large spill

Eliminate all ignition sources. Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Dike spill area and do not allow product to reach sewage system and surface or ground water. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product. The method and equipment used must be in conformance with appropriate regulations and industry practice on explosive atmospheres. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Avoid contact of spilled material and runoff with soil and surface waterways. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Do not breathe vapor or mist. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not swallow. Aspiration hazard if swallowed. Can enter lungs and cause damage. Never siphon by mouth.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/ containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Light hydrocarbon vapors can build up in the headspace of tanks. These can cause flammability/explosion hazards even at temperatures below the normal flash point (note: flash point must not be regarded as a reliable indicator of the potential flammability of vapor in tank headspaces). Tank headspaces should always be regarded as potentially flammable and care should be taken to avoid static electrical discharge and all ignition sources during filling, ullaging and sampling from storage tanks. Do not enter storage tanks. If entry to vessels is necessary, follow permit to work procedures. Entry to any tanks or other confined space requires a full risk assessment and appropriate control measures to be put in place in conformance with appropriate regulations and industry practice on confined space entry. When the product is pumped (e.g. during filling, discharge or ullaging) and when sampling, there is a risk of static discharge. Ensure

Section 7. Handling and storage

equipment used is properly earthed or bonded to the tank structure. Electrical equipment should not be used unless it is intrinsically safe (i.e. will not produce sparks). Explosive air/vapor mixtures may form at ambient temperature. If product comes into contact with hot surfaces, or leaks occur from pressurized fuel pipes, the vapor or mists generated will create a flammability or explosion hazard. Product contaminated rags, paper or material used to absorb spillages, represent a fire hazard, and should not be allowed to accumulate. Dispose of safely immediately after use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Fuels, diesel, No 2	**ACGIH TLV (United States). Absorbed through skin.** TWA: 100 mg/m³, (measured as total hydrocarbons) 8 hours. Issued/Revised: 1/2007 Form: Inhalable fraction and vapor
naphthalene	**ACGIH TLV (United States). Absorbed through skin.** TWA: 52 mg/m³ 8 hours. Issued/Revised: 5/1996 TWA: 10 ppm 8 hours. Issued/Revised: 5/1996 **OSHA PEL (United States).** TWA: 50 mg/m³ 8 hours. Issued/Revised: 6/1993 TWA: 10 ppm 8 hours. Issued/Revised: 6/1993

While specific OELs for certain components may be shown in this section, other components may be present in any mist, vapor or dust produced. Therefore, the specific OELs may not be applicable to the product as a whole and are provided for guidance only.

Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.
Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.
The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

Chemical splash goggles.

Skin protection

Section 8. Exposure controls/personal protection

Hand protection

Wear chemical resistant gloves. Recommended: Nitrile gloves.

Do not re-use gloves. Protective gloves must give suitable protection against mechanical risks (i.e. abrasion, blade cut and puncture). Protective gloves will deteriorate over time due to physical and chemical damage. Inspect and replace gloves on a regular basis. The frequency of replacement will depend upon the circumstances of use.

Consult your supervisor or Standard Operating Procedure (S.O.P) for special handling instructions.

Body protection

Use of protective clothing is good industrial practice. Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required. Wear suitable protective clothing. Footwear highly resistant to chemicals. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For greatest effectiveness against static electricity, overalls, boots and gloves should all be anti-static. When there is a risk of ignition wear inherently fire resistant protective clothes and gloves. Work clothing / overalls should be laundered on a regular basis. Laundering of contaminated work clothing should only be done by professional cleaners who have been told about the hazards of the contamination. Always keep contaminated work clothing away from uncontaminated work clothing and uncontaminated personal clothes. When the risk of skin exposure is high (from experience this could apply to the following tasks: cleaning work, maintenance and service, filling and transfer, taking samples and cleaning up spillages) then a chemical protective suit and boots will be required. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

Use only with adequate ventilation. Do not breathe vapor or mist. If ventilation is inadequate, use a NIOSH certified respirator with an organic vapor cartridge and P95 particulate filter. If operating conditions cause high vapor concentrations or the TLV is exceeded, use supplied-air respirator.

CAUTION: The protection provided by air-purifying respirators is limited. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are not known, or if concentrations exceed the protection limits of air-purifying respirator.

Use with adequate ventilation.
In case of insufficient ventilation, wear suitable respiratory equipment.
If there is a requirement for the use of a respiratory protective device, but the use of breathing apparatus (independent of ambient atmosphere) is not required, then a suitable filtering device must be worn.
The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.
The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Section 9. Physical and chemical properties

Appearance

Physical state Liquid.

Color Yellow. [Light]

Odor Kerosene

Odor threshold Not available.

pH Not available.

Section 9. Physical and chemical properties

Melting point	Not available.
Boiling point	162.78°C (325°F)
Flash point	Closed cup: >60°C (>140°F)
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable. Based on - Physical state
Lower and upper explosive (flammable) limits	Lower: 0.7% Upper: 5%
Vapor pressure	<0.266 kPa (<2 mm Hg) at 20°C
Vapor density	Not available.
Density	860 kg/m³ (0.86 g/cm³)
Solubility	negligible <0.1%
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	257°C (494.6°F)
Decomposition temperature	Not available.
Viscosity	Dynamic: 0.003 Pa·s (3 cP) at 37.778°C Kinematic: 2 to 11 mm^2/s (2 to 11 cSt) at 40°C

Section 10. Stability and reactivity

Reactivity	No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.
Chemical stability	The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not occur.
Conditions to avoid	Keep away from heat, sparks and flame. Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis. halogenated compounds.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Test	Species	Result	Exposure	Remarks
Fuels, diesel, No 2	LC50 Inhalation Dusts and mists	Rat	4.1 mg/l	4 hours	Based on Diesel fuel
	LD50 Dermal	Rabbit	>4300 mg/kg	-	Based on No. 2 Heating Oil.
	LD50 Dermal	Rabbit	>4300 mg/kg	-	Based on Diesel fuel
	LD50 Oral	Rat	17900 mg/kg	-	Based on No. 2 Heating Oil.
	LD50 Oral	Rat	7600 mg/kg	-	Based on Diesel

fuel

Conclusion/Summary Not available.

Irritation/Corrosion

Product/ingredient name	Species	Result	Score	Exposure	Observation	Conc.	Remarks
Fuels, diesel, No 2	Rabbit	Skin - Irritation	-	-	-	-	Based on No. 2 Heating Oil.
	Rabbit	Skin - Irritation	-	-	-	-	Based on Diesel fuel
	Rabbit	Eyes - Non-irritating to the eyes.	-	-	-	-	Based on No. 2 Heating Oil.
	Rabbit	Eyes - Non-irritating to the eyes.	-	-	-	-	Based on Diesel fuel

Sensitizer

Product/ingredient name	Route of exposure	Species	Result	Remarks
Fuels, diesel, No 2	skin	Guinea pig	Not sensitizing	Based on No. 2 Heating Oil.
	skin	Guinea pig	Not sensitizing	Based on Diesel fuel

Mutagenicity

Product/ingredient name	Test	Experiment	Result	Remarks
Fuels, diesel, No 2	OECD 471	Experiment: In vitro Subject: Non-mammalian species	Positive	Based on Diesel fuel
	Equivalent to OECD 476	Experiment: In vitro Subject: Mammalian-Animal Cell: Germ	Negative	Based on Heating Oil.
	not guideline	Experiment: In vivo Subject: Unspecified Cell: Somatic	Negative	Based on Heating Oil.

Conclusion/Summary Not classified. Based on available data, the classification criteria are not met.

Carcinogenicity

Product/ingredient name	Species	Route	Exposure	Test	Result	Remarks
Fuels, diesel, No 2	Mouse	Dermal	Positive - Dermal - Unspecified	2 years	-	Based on Heating Oil.

Conclusion/Summary Suspected of causing cancer.

Classification

Product/ingredient name	OSHA	IARC	NTP
naphthalene	-	2B	Reasonably anticipated to be a human carcinogen.

IARC :
2B - Possible carcinogen to human.

NTP :
Possible - Reasonably anticipated to be human carcinogens.

Reproductive toxicity

Section 11. Toxicological information

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Result	Exposure
Fuels, diesel, No 2	-	-	Negative	Rat	Dermal	20 days
	-	-	Negative	Rat	Dermal	10 days
	-	-	Negative	Rat	Dermal	10 days

Conclusion/Summary Development: Not classified. Based on available data, the classification criteria are not met.
Fertility: Not classified. Based on available data, the classification criteria are not met.
Effects on or via lactation: Not classified. Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Fuels, diesel, No 2	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
Fuels, diesel, No 2	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact No known significant effects or critical hazards.

Skin contact Causes skin irritation.

Inhalation Harmful if inhaled.

Ingestion Irritating to mouth, throat and stomach. Aspiration hazard if swallowed -- harmful or fatal if liquid is aspirated into lungs.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact Adverse symptoms may include the following:
pain or irritation
watering
redness

Skin contact Adverse symptoms may include the following:
irritation
redness

Inhalation Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness

Ingestion Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects Vapor, mists or fumes may contain polycyclic aromatic hydrocarbons some of which are known to produce skin cancer. May be harmful by inhalation if exposure to vapor, mists or fumes resulting from thermal decomposition products occurs. Vapor, mist or fume may irritate the nose, mouth and respiratory tract. Vapor, mist or fume may cause eye irritation. Exposure to vapor, mist or fume may cause stinging, redness and watering of the eyes.

Potential delayed effects As with all such products containing potentially harmful levels of PCAs, prolonged or repeated skin contact may eventually result in dermatitis or more serious irreversible skin disorders including cancer.

Section 11. Toxicological information

Long term exposure

Potential immediate effects Not available.

Potential delayed effects Not available.

Potential chronic health effects

General May cause damage to organs through prolonged or repeated exposure. Vapor, mists or fumes may contain polycyclic aromatic hydrocarbons some of which are known to produce skin cancer.

Carcinogenicity Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity No known significant effects or critical hazards.

Teratogenicity No known significant effects or critical hazards.

Developmental effects No known significant effects or critical hazards.

Fertility effects No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Other information Aspiration of this product into the lungs can cause chemical pneumonia and can be fatal. Aspiration into the lungs can occur while vomiting after ingestion of this product. Do not siphon by mouth.

Additional information Middle distillate: From skin-painting studies of petroleum distillates of similar composition and distillate range, it has been shown that these types of materials often possess weak carcinogenic activity in laboratory animals. In these tests, the material is painted on the shaved backs of mice twice a week for their lifetime. The material is not washed off between applications. Therefore, there may be a potential risk of skin cancer from prolonged or repeated skin contact with this product in the absence of good personal hygiene. This particular product has not been tested for carcinogenic activity, but we have chosen to be cautious in light of the findings with other distillate streams.

Occasional skin contact with this product is not expected to have serious effects, but good personal hygiene should be practiced and repeated skin contact avoided. This product can also be expected to produce skin irritation upon prolonged or repeated skin contact. Personal hygiene measures taken to prevent skin irritation are expected to be adequate to prevent risk of skin cancer.

Diesel exhaust particulates have been classified by the National Toxicological Program (NTP) to be a reasonably anticipated human carcinogen. Exposure should be minimized to reduce potential risk.

Naphthalene has been reported to cause developmental toxicity in mice after oral exposure to relatively high dose levels, but developmental toxicity was not observed in NTP (National Toxicology Program) sponsored studies in rats and rabbits. Ingestion or inhalation of naphthalene can result in hemolysis and other blood abnormalities, and individuals (and infants) deficient in glucose-6-phosphate dehydrogenase may be especially susceptible to these effects. Inhalation of naphthalene may cause headache and nausea. Airborne exposure can result in eye irritation. Naphthalene exposure has been associated with cataracts in animals and humans.

Section 12. Ecological information

Toxicity

Product/ingredient name	Species	Test/Result	Exposure	Effects	Remarks

Section 12. Ecological information

Fuels, diesel, No 2	Micro-organism	EL50 >1000 mg/l Nominal Fresh water	40 hours	growth inhibition	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate Fuel
	Micro-organism	NOELR 3.217 mg/l Nominal Fresh water	40 hours	growth inhibition	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate Fuel
	Algae	Acute EL50 22 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Daphnia	Acute EL50 210 mg/l Nominal Fresh water	48 hours	Mobility	Based on Diesel fuel
	Daphnia	Acute EL50 68 mg/l Nominal Fresh water	48 hours	Mobility	Based on Diesel fuel
	Algae	Acute ErL50 78 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Fish	Acute LL50 65 mg/l Nominal Fresh water	96 hours	Mortality	Based on Diesel fuel
	Fish	Acute LL50 21 mg/l Nominal Fresh water	96 hours	Mortality	Based on Diesel fuel
	Algae	Acute NOELR 10 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Algae	Acute NOELR 1 mg/l Nominal Fresh water	72 hours	(growth rate)	Based on Diesel fuel
	Daphnia	Acute NOELR 46 mg/l Nominal Fresh water	48 hours	Mobility	Based on Diesel fuel
	Fish	Chronic NOEL 0.083 mg/l Nominal Fresh water	14 days	Mortality	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate Fuel
	Daphnia	Chronic NOELR 0.2 mg/l Nominal Fresh water	21 days	Immobilization	Based on Vacuum gas oil / Hydrocracked gas oil / Distillate Fuel

Conclusion/Summary Not available.

Persistence and degradability

Not available.

Product/ingredient name	Test	Result	Remarks

Section 12. Ecological information

Fuels, diesel, No 2	OECD 301 F	60 % - Readily - 28 days	Based on Diesel fuel
	OECD 301 F	57.5 % - Not readily - 28 days	Based on Diesel fuel
	Equivalent to EPA OTS 796. 3100	35 % - Not readily - 28 days	Based on Gas Oils (petroleum), solvent refined

Conclusion/Summary Not available.

Bioaccumulative potential

This product is not expected to bioaccumulate through food chains in the environment.

Mobility in soil

Soil/water partition coefficient (K_{OC}) Not available.

Mobility Spillages may penetrate the soil causing ground water contamination. This material may accumulate in sediments.

Other adverse effects No known significant effects or critical hazards.

Other ecological information Spills may form a film on water surfaces causing physical damage to organisms. Oxygen transfer could also be impaired.

Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
Naphthalene	91-20-3	Listed	U165

Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	NA 1993	UN 1202	UN1202	UN1202
UN proper shipping name	DIESEL FUEL	DIESEL FUEL	DIESEL FUEL MARINE POLLUTANT	DIESEL FUEL

Section 14. Transport information

Transport hazard class(es)	Combustible liquid.	3	3	3
Packing group	III	III	III	III
Environmental hazards	No.	No.	Yes.	No.
Additional information	Non-bulk packages (less than or equal to 119 gal) of combustible liquids are not regulated as hazardous materials in package sizes less than the product reportable quantity. **Reportable quantity** 3333.3 lbs / 1513.3 kg [464.86 gal / 1759.7 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.	-	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. **Emergency schedules (EmS)** F-E, S-E	The environmentally hazardous substance mark may appear if required by other transportation regulations.

Special precautions for user Not available.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Proper shipping name MARPOL Annex 1 rules apply for bulk shipments by sea.
Category: gas oils, including ship's bunkers

Section 15. Regulatory information

U.S. Federal regulations

United States inventory (TSCA 8b) All components are listed or exempted.

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 311/312

Classification Fire hazard
Immediate (acute) health hazard
Delayed (chronic) health hazard

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	naphthalene	91-20-3	1 - 3
Supplier notification	naphthalene	91-20-3	1 - 3

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts The following components are listed: NAPHTHALENE

New Jersey The following components are listed: NAPHTHALENE; MOTH FLAKES

Pennsylvania The following components are listed: NAPHTHALENE

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer.
naphthalene; ethylbenzene; cumene

WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.
toluene

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.
Benzene

Prop 65 chemicals will result under certain conditions from the use of this material. For example, burning fuels produces combustion products including diesel exhaust, a Prop 65 carcinogen, and carbon monoxide, a Prop 65 reproductive toxin.

Other regulations

Australia inventory (AICS) At least one component is not listed.

Canada inventory All components are listed or exempted.

China inventory (IECSC) All components are listed or exempted.

Japan inventory (ENCS) Not determined.

Korea inventory (KECI) All components are listed or exempted.

Philippines inventory (PICCS) At least one component is not listed.

REACH Status For the REACH status of this product please consult your company contact, as identified in Section 1.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health	*	2
Flammability		2
Physical hazards		0
Personal protection		X

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

National Fire Protection Association (U.S.A.)

History

Date of issue/Date of revision	10/07/2014.
Date of previous issue	10/03/2014.
Key to abbreviations	ACGIH = American Conference of Industrial Hygienists ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor CAS Number = Chemical Abstracts Service Registry Number GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) OEL = Occupational Exposure Limit SDS = Safety Data Sheet STEL = Short term exposure limit TWA = Time weighted average UN = United Nations UN Number = United Nations Number, a four digit number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods.

Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

SAFETY DATA SHEET

1. Identification

Product identifier	**RemOx® S ISCO Reagent**
Other means of identification	Not available.
Recommended use	Remediation of soils and groundwater.
Recommended restrictions	Use in accordance with supplier's recommendations.

Manufacturer / Importer / Supplier / Distributor information

Manufacturer/Supplier	CARUS CORPORATION
Address	315 Fifth Street, Peru, IL 61354, USA
Telephone	815 223-1500 - All other non-emergency inquiries about the product should be directed to the company
E-mail	salesmkt@caruscorporation.com
Website	www.caruscorporation.com
Contact person	Dr. Chithambarathanu Pillai
Emergency Telephone	For Hazardous Materials [or Dangerous Goods] Incidents ONLY (spill, leak, fire, exposure or accident), call CHEMTREC at CHEMTREC®, USA: 001 (800) 424-9300 CHEMTREC®, Mexico (Toll-Free - must be dialed from within country): 01-800-681-9531 CHEMTREC®, Other countries: 001 (703) 527-3887

2. Hazard(s) identification

Physical hazards	Oxidizing solids	Category 2
Health hazards	Acute toxicity, oral	Category 4
	Skin corrosion/irritation	Category 1B
	Specific target organ toxicity, single exposure	Category 1 (Respiratory System)
	Specific target organ toxicity, repeated exposure	Category 1 (Respiratory System, central nervous system)

OSHA defined hazards Not classified.

Label elements

Signal word Danger

Hazard statement May intensify fire; oxidizer. Harmful if swallowed. Causes severe skin burns and eye damage. Causes damage to organs (Respiratory System). Causes damage to organs (Respiratory System, central nervous system) through prolonged or repeated exposure.

Precautionary statement

Prevention Keep away from heat. Take any precaution to avoid mixing with combustibles/ Keep/Store away from clothing//combustible materials. Wash thoroughly after handling. Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product.

Response In case of fire: Use water for extinction. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center/doctor.

Storage Store locked up.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Hazard(s) not otherwise classified (HNOC) Not classified.

Environmental hazards	Hazardous to the aquatic environment, long-term hazard	Category 1

3. Composition/information on ingredients

Substances

Chemical name	Common name and synonyms	CAS number	%
Potassium permanganate		7722-64-7	> 97.5

Composition comments All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. For breathing difficulties, oxygen may be necessary. Get medical attention immediately.

Skin contact Take off immediately all contaminated clothing. Immediately flush skin with plenty of water. Get medical attention immediately. Wash contaminated clothing before reuse.

Contact with skin may leave a brown stain of insoluble manganese dioxide. This can be easily removed by washing with a mixture of equal volume of household vinegar and 3% hydrogen peroxide, followed by washing with soap and water.

Eye contact Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids wide apart. Continue rinsing. Get medical attention immediately.

Ingestion Immediately rinse mouth and drink plenty of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Get medical attention immediately.

Most important symptoms/effects, acute and delayed Contact with this material will cause burns to the skin, eyes and mucous membranes. Permanent eye damage including blindness could result.

Indication of immediate medical attention and special treatment needed Provide general supportive measures and treat symptomatically. In case of shortness of breath, give oxygen. Decomposition products are alkaline. Brown stain is insoluble manganese dioxide.

General information In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media Flood with water from a distance, water spray or fog.

Unsuitable extinguishing media The following extinguishing media are ineffective: Dry chemical. Foam. Carbon dioxide (CO2). Halogenated materials.

Specific hazards arising from the chemical May intensify fire; oxidizer. May ignite combustibles (wood, paper, oil, clothing, etc.). Contact with incompatible materials or heat (135 ºC / 275 ºF) could result in violent exothermic chemical reaction. Oxidizing agent, may cause spontaneous ignition of combustible materials. By heating and fire, corrosive vapors/gases may be formed.

Special protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire. Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace.

Fire-fighting equipment/instructions Move container from fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Dike fire control water for later disposal. Water runoff can cause environmental damage.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep upwind. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid inhalation of vapors and contact with skin and eyes. Wear protective clothing as described in Section 8 of this safety data sheet. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up

Keep combustibles (wood, paper, oil, etc.) away from spilled material. Should not be released into the environment. This product is miscible in water. Stop leak if possible without any risk. Dike the spilled material, where this is possible. Clean up spills immediately by sweeping or shoveling up the material. Do not return spilled material to the original container; transfer to a clean metal or plastic drum. To clean up potassium permanganate solutions, follow either of the following two options:

Option # 1: Dilute to approximately 6% with water, and then reduce with sodium thiosulfate, a bisulfite or ferrous salt solution. The bisulfite or ferrous salt may require some dilute sulfuric acid (10% w/w) to promote reduction. Neutralize with sodium carbonate to neutral pH, if acid was used. Decant or filter and deposit sludge in approved landfill. Where permitted, the sludge may be drained into sewer with large quantities of water.

Option # 2: Absorb with inert media like diatomaceous earth or inert floor dry, collect into a drum and dispose of properly. Do not use saw dust or other incompatible media. Disposal of all materials shall be in full and strict compliance with all federal, state, and local regulations pertaining to permanganates.

To clean contaminated floors, flush with abundant quantities of water into sewer, if permitted by federal, state, and local regulations. If not, collect water and treat as described above.

Never return spills in original containers for re-use. For waste disposal, see Section 13 of the MSDS.

Environmental precautions

Do not allow to enter drains, sewers or watercourses. Contact local authorities in case of spillage to drain/aquatic environment.

7. Handling and storage

Precautions for safe handling

Take any precaution to avoid mixing with combustibles. Keep away from clothing and other combustible materials. Do not get this material in your eyes, on your skin, or on your clothing. Do not breathe dust or mist or vapor of the solution. If clothing becomes contaminated, remove and wash off immediately. When using, do not eat, drink or smoke. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Avoid release to the environment.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep container tightly closed and in a well-ventilated place. Store in a cool, dry place. Store away from incompatible materials (See Section 10). Follow applicable local/national/international recommendations on storage of oxidizers. Store in accordance with NFPA 430 requirements for Class II oxidizers.

Before using, read Material Safety Data Sheet (MSDS) for this product.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
Potassium permanganate (CAS 7722-64-7)	Ceiling	5 mg/m3

US. ACGIH Threshold Limit Values

Components	Type	Value
Potassium permanganate (CAS 7722-64-7)	TWA	0.2 mg/m3

US NIOSH Pocket Guide to Chemical Hazards: Recommended exposure limit (REL)

Components	Type	Value	Form
Potassium permanganate (CAS 7722-64-7)	TWA	1 mg/m3	Fume.

US NIOSH Pocket Guide to Chemical Hazards: Short Term Exposure Limit (STEL)

Components	Type	Value	Form
Potassium permanganate (CAS 7722-64-7)	STEL	3 mg/m3	Fume.

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Follow standard monitoring procedures.

Appropriate engineering controls

Provide adequate general and local exhaust ventilation. An eye wash and safety shower must be available in the immediate work area.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear safety glasses with side shields (or goggles). Wear face shield if there is risk of splashes.

Skin protection	
Hand protection	Use protective gloves made of: Rubber or plastic. Suitable gloves can be recommended by the glove supplier.
Other	Wear chemical-resistant, impervious gloves.
Respiratory protection	In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134. Measurement Element: Manganese (Mn) 10 mg/m3 Any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100 or P100. Any supplied-air respirator. 25 mg/m3 Any supplied-air respirator operated in a continuous-flow mode. Any powered, air-purifying respirator with a high-efficiency particulate filter. 50 mg/m3 Any air-purifying, full-face piece respirator equipped with an N100, R100, or P100 filter. Any supplied-air respirator with a tight-fitting face piece that is operated in a continuous-flow mode. Any powered, air-purifying respirator with a tight-fitting face piece and a high-efficiency particulate filter. Any self-contained breathing apparatus with a full face piece. Any supplied-air respirator with a full face piece. 500 mg/m3 Any supplied-air respirator operated in a pressure-demand or other positive-pressure mode. Emergency or planned entry into unknown concentrations or IDLH conditions - Any self-contained breathing apparatus that has a full face piece and is operated in a pressure-demand or other positive-pressure mode. Escape Any air-purifying, full-face piece respirator equipped with an N100, R100, or P100 filter. Any appropriate escape-type, self-contained breathing apparatus.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	When using, do not eat, drink or smoke. Keep from contact with clothing and other combustible materials. Remove and wash contaminated clothing promptly. Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance	Dark purple solid with metallic luster.
Physical state	Solid.
Form	Solid.
Color	Dark purple.
Odor	Odorless.
Odor threshold	Not available.
pH	Not applicable.
Melting point/freezing point	Starts to decompose with evolution of oxygen (O2) at temperatures above 150 °C. Once initiated, the decomposition is exothermic and self sustaining.
Initial boiling point and boiling range	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Non flammable.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not applicable.
Flammability limit - upper (%)	Not applicable.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.

Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	2.7 (20 °C) (Water = 1)
Solubility(ies)	6 % (20 °C) 20 % (65 °C)
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not applicable.
Other information	
Explosive properties	Not explosive. Can explode in contact with sulfuric acid, peroxides and metal powders.
Molecular weight	158.03
Oxidizing properties	Strong oxidizing agent.

10. Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable at normal conditions.
Possibility of hazardous reactions	Contact with combustible material may cause fire. Can explode in contact with sulfuric acid, peroxides and metal powders. Starts to decompose with evolution of oxygen (O2) at temperatures above 150 °C. Once initiated, the decomposition is exothermic and self sustaining.
Conditions to avoid	Contact with incompatible materials or heat (135 °C / 275 °F) could result in violent exothermic chemical reaction.
Incompatible materials	Acids. Peroxides. Reducing agents. Combustible material. Metal powders. Contact with hydrochloric acid liberates chlorine gas.
Hazardous decomposition products	By heating and fire, corrosive vapors/gases may be formed.

11. Toxicological information

Information on likely routes of exposure

Ingestion	Harmful if swallowed.
Inhalation	May cause irritation to the respiratory system.
Skin contact	Causes severe skin burns.
Eye contact	Causes serious eye damage.
Symptoms related to the physical, chemical and toxicological characteristics	Contact with this material will cause burns to the skin, eyes and mucous membranes. Permanent eye damage including blindness could result.

Information on toxicological effects

Acute toxicity Harmful if swallowed.

Components	Species	Test Results
Potassium permanganate (CAS 7722-64-7)		
Acute		
Oral		
LD50	Rat	780 mg/kg, 14 days, (Male) 525 mg/kg, 14 days, (Female)

Skin corrosion/irritation	Causes severe skin burns.
Serious eye damage/eye irritation	Causes serious eye damage.
Respiratory sensitization	Not classified.
Skin sensitization	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Not classified.
Reproductive toxicity	Not classified.
Specific target organ toxicity - single exposure	Causes damage to organs (respiratory system).

Specific target organ toxicity - repeated exposure	Causes damage to organs (respiratory system, central nervous system) through prolonged or repeated exposure.
Aspiration hazard	Not classified.
Chronic effects	May cause damage to respiratory system. Prolonged exposure, usually over many years, to manganese oxide fume/dust can lead to chronic manganese poisoning, chiefly affecting the central nervous system.
Further information	No other specific acute or chronic health impact noted.

12. Ecological information

Ecotoxicity Very toxic to aquatic life with long lasting effects.

Components		Species	Test Results
Potassium permanganate (CAS 7722-64-7)			
Aquatic			
Fish	LC50	Bluegill (Lepomis macrochirus)	2.7 mg/l, 96 hours, static
			2.3 mg/l, 96 hours, flow through
			2.3 mg/l, 96 hours
			1.8 - 5.6 mg/l
		Carp (Cyprinus carpio)	3.16 - 3.77 mg/l, 96 hours
			2.97 - 3.11 mg/l, 96 hours
		Goldfish (Carassius auratus)	3.3 - 3.93 mg/l, 96 hours, static
		Milkfish, salmon-herring (Chanos chanos)	> 1.4 mg/l, 96 hours
		Rainbow trout (Oncorhynchus mykiss)	1.8 mg/l, 96 hours
			1.08 - 1.38 mg/l, 96 hours
			0.77 - 1.27 mg/l, 96 hours
		Rainbow trout,donaldson trout (Oncorhynchus mykiss)	0.275 - 0.339 mg/l, 96 hours

Persistence and degradability	Expected to be readily converted by oxidizable materials to insoluble manganese oxide.
Bioaccumulative potential	Potential to bioaccumulate is low.
Mobility in soil	Not available.
Mobility in general	The product is water soluble and may spread in water systems.
Other adverse effects	None known.

13. Disposal considerations

Disposal instructions	Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Hazardous waste code	D001: Ignitable waste The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products	Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Rinse container at least three times to an absence of pink color before disposing. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

UN number	UN1490
UN proper shipping name	Potassium permanganate
Transport hazard class(es)	5.1
Subsidiary class(es)	-
Packing group	II
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.
Labels required	5.1
Special provisions	IB8, IP2, IP4, T3, TP33
Packaging exceptions	152
Packaging non bulk	212
Packaging bulk	240

IATA

UN number	UN1490
UN proper shipping name	Potassium permanganate
Transport hazard class(es)	5.1
Subsidiary class(es)	-
Packaging group	II
Environmental hazards	Yes
Labels required	5.1
ERG Code	5L
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.

IMDG

UN number	UN1490
UN proper shipping name	POTASSIUM PERMANGANATE
Transport hazard class(es)	5.1
Subsidiary class(es)	-
Packaging group	II
Environmental hazards	
Marine pollutant	Yes
Labels required	5.1
EmS	F-H, S-Q
Special precautions for user	Read safety instructions, MSDS and emergency procedures before handling.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code This substance/mixture is not intended to be transported in bulk.

15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
All components are on the U.S. EPA TSCA Inventory List.

CERCLA/SARA Hazardous Substances - Not applicable.

Drug Enforcement Administration (DEA) (21 CFR 1310.02 (b) 8: List II chemical.

Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (6 CFR 27, Appendix A): Listed.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - Yes Fire Hazard - Yes Pressure Hazard - No Reactivity Hazard - No
SARA 302 Extremely hazardous substance	No
SARA 311/312 Hazardous chemical	Yes

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Potassium permanganate (CAS 7722-64-7)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Water Act (CWA) Section 112(r) (40 CFR 68.130)	Hazardous substance
Safe Drinking Water Act (SDWA)	Not regulated.

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and Chemical Code Number

Potassium permanganate (CAS 7722-64-7) 6579

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

Potassium permanganate (CAS 7722-64-7) 15 % wt

DEA Exempt Chemical Mixtures Code Number

Potassium permanganate (CAS 7722-64-7) 6579

Food and Drug Administration (FDA) Not regulated.

US state regulations This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

California OSH Hazardous Substance List: Listed.

US. Massachusetts RTK - Substance List

Potassium permanganate (CAS 7722-64-7)

US. New Jersey Worker and Community Right-to-Know Act

Potassium permanganate (CAS 7722-64-7) 500 lbs

US. Pennsylvania RTK - Hazardous Substances

Potassium permanganate (CAS 7722-64-7)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 04-03-2013

Revision date -

Version # 01

Further information Not available.

List of abbreviations LD50: Lethal Dose, 50%.
LC50: Lethal Concentration, 50%.

References

HSDB® - Hazardous Substances Data Bank
Registry of Toxic Effects of Chemical Substances (RTECS)
ACGIH
EPA: AQUIRE database
NLM: Hazardous Substances Data Base
US. IARC Monographs on Occupational Exposures to Chemical Agents
IARC Monographs. Overall Evaluation of Carcinogenicity
National Toxicology Program (NTP) Report on Carcinogens
ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices

Disclaimer

This safety data sheet was prepared in accordance with the Safety Data Sheet for Chemical Products (JIS Z 7250:2005). The information contained herein is accurate to the best of our knowledge. However, data, safety standards and government regulations are subject to change and, therefore, holders and users should satisfy themselves that they are aware of all current data and regulations relevant to their particular use of product. CARUS CORPORATION DISCLAIMS ALL LIABILITY FOR RELIANCE ON THE COMPLETENESS OR ACCURACY OR THE INFORMATION INCLUDED HEREIN. CARUS CORPORATION MAKES NO WARRANTY, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY WARRANTIES OF MERCHANTIABILITY OR FITNESS FOR PARTICULAR USE OR PURPOSE OF THE PRODUCT DESCRIBED HEREIN. All conditions relating to storage, handling, and use of the product are beyond the control of Carus Corporation, and shall be the sole responsibility of the holder or user of the product.

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APPENDIX D

HEAT ILLNESS PRVENTION PLAN

PROCEDURES FOR HEAT ILLNESS PREVENTION

Employer Name: Tetra Tech

Work Site: 10153 Folsom Blvd., Rancho Cordova, CA

The following designated person or persons (Program Administrator Safety Coordinator / Supervisor/Foreman/Field Supervisor/Crew Leader) have the authority and responsibility for implementing the provisions of this program at this worksite.

Name/Title	Responsibility	Telephone No.
Tetra Tech Personnel:		
Betty Li	Program Manager	(916) 853-1800 (office)
Keith Hoofard	Project Manager/SSC	(916) 709-4732 (cell)
Zack Laforet	Field Supervisor	(603) 801-1624 (cell)
Garrett Kuhl	Field Staff	(650) 804-8412 (cell)
Robert Rolon, CIH	Corporate Health & Safety (HSR)	(407) 448-9553

California Employers with any outdoor places of employment must comply with the Heat Illness Prevention Standard T8 CCR 3395. These procedures have been created to assist the employer in crafting their heat illness prevention procedures, and to reduce the risk of work related heat illnesses among their employees.

These procedures are not intended to supersede or replace the application of any other Title 8 regulation, particularly T8 3203 Injury and Illness Prevention Program (IIPP). Title 8 CCR 3203 requires an employer to establish, implement, and maintain an effective IIPP. The measures listed here may be integrated into the Employer's Injury and Illness Prevention Program.

The employer must also be aware that other standards apply to Heat Illness Prevention such as the requirement to provide for drinking water, first aid and emergency response.

Please note: These procedures provide the minimal steps applicable to most outdoor work settings and are essential to reducing the incidence of heat related illnesses. In working environments with a higher risk for heat illness (e.g., during a heat wave, or other severe working or environmental conditions), Tetra Tech will exercise greater caution and additional protective measures beyond what is listed in this document, as needed to protect their employees.

For additional information on preventing Heat Related Illness, please visit the DOSH website at: http://www.dir.ca.gov/DOSH/DOSH/HeatIllnessInfo.html

HEAT ILLNESS PREVENTION ELEMENTS

The elements reflected within this Heat Illness Prevention guide are those contained in Title 8 of the California Code of Regulations, Section 3395 (T8 CCR 3395) and consist of the following:

- Provision of Water
- Access to Shade
- Procedures for Handling a Heat Wave
- Weather Monitoring and Acclimatization
- Written Procedures
- Training

> PROVISION OF WATER

Water is a key preventive measure to minimize the risk of heat related illnesses.

3395 (c) Employees shall have access to potable drinking water meeting the requirements of Sections 1524, 3363, and 3457, as applicable. Where the supply of water is not plumbed or otherwise continuously supplied, water shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. The frequent drinking of water, as described in (e), shall be encouraged.

To ensure access to sufficient quantities of potable drinking water, the following steps will be taken:

- Tetra Tech employee will bring at least 2 quarts per employee at the start of the shift. Each subcontractor's employer will also bring same quantities of water for their employees.
- Supervisor/designated person will monitor water containers every 30 minutes, and employees are encouraged to report to supervisor/designated person low levels or dirty water.
- Water containers will be located as close as practicable to the areas where employees are working (given the working conditions and layout of the worksite), to encourage the frequent drinking of water. If field terrain prevents the water from being placed as close as possible to the workers, bottled water or personal water containers will be made available, so that workers can have drinking water readily accessible.
- When drinking water levels within a container drop below 50%, the water shall be replenished immediately; or water levels should not fall below the point that will allow for adequate water during the time necessary to effect replenishment.
- Disposable/single use drinking cups or bottles will be provided to employees, or provisions will be made to issue employees their own cups or bottles each day.

- Water will be fresh, pure, and suitably cool and provided to employees free of charge. During hot weather, the water must be cooler than the ambient temperature but not so cool as to cause discomfort.
- When employees are working across large areas, water will be placed in multiple locations.
- All water containers will be kept in sanitary condition. Water from non-approved or non-tested water sources (e.g., untested wells) is not acceptable. If hoses or connections are used, they must be governmentally approved for potable drinking water systems, as shown on the manufactures label.

To encourage frequent drinking of potable water, the following steps will be taken:

- Supervisor will provide frequent reminders to employees to drink frequently, and more water breaks will be provided.
- Every morning there will be short tailgate meetings to remind workers about the importance of frequent consumption of water throughout the shift.
- When the temperature equals or exceeds 95 degrees Fahrenheit or during a heat wave, pre-shift meetings will be held before start of work to encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary will be conducted. Additionally, the number of water breaks will be increased. Supervisors/foreman will lead by example and workers will be reminded throughout the work shift to drink water.
- Noise making devices, such as air horns, may be used to remind employee's to take their water break.

> ACCESS TO SHADE

Access to rest and shade or other cooling measures are important preventive steps to minimize the risk of heat related illnesses.

3395 (d) Access to shade

(1) Shade shall be present when the temperature exceeds 80 degrees Fahrenheit. When the outdoor temperature in the work area exceeds 80 degrees Fahrenheit, the employer shall have and maintain one or more areas with shade at all times while employees are present that are either open to the air or provided with ventilation or cooling. The amount of shade present shall be at least enough to accommodate the number of employees on recovery or rest periods, so that they can sit in a normal posture fully in the shade without having to be in physical contact with each other. The shade shall be located as close as practicable to the areas where employees are working. Subject to the same specifications, the amount of shade present during meal periods shall be at least enough to accommodate the number of employees on the meal period who remain onsite.

(2) Shade shall be available when the temperature does not exceed 80 degrees Fahrenheit. When the outdoor temperature in the work area does not exceed 80 degrees Fahrenheit employers shall either provide shade as per subsection (d)(1) or provide timely access to shade upon an employee's request.

(3) Employees shall be allowed and encouraged to take a preventative cool-down rest in the shade when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times. An individual employee who takes a preventative cool-down rest:

(A) shall be monitored and asked if he or she is experiencing symptoms of heat illness; (B) shall be encouraged to remain in the shade; and (C) shall not be ordered back to work until any signs or symptoms of heat illness have abated, but in no event less than 5 minutes in addition to the time needed to access the shade.

(4) If an employee exhibits signs or reports symptoms of heat illness while taking a preventative cool-down rest or during a preventative cool-down rest period, the employer shall provide appropriate first aid or emergency response according to subsection (f) of this section

To ensure access to shade at all time and to a preventative recovery period, the following steps will be taken:

- Shade structures will be opened and placed as close as practical to the workers, when the temperature equals or exceeds 80 degrees Fahrenheit. When the temperature is below 80 degrees Fahrenheit, access to shade will be provided promptly, when requested by an employee.

Note: The interior of a vehicle may not be used to provide shade unless the vehicle is air-conditioned and the air conditioner is on.

- Enough shade structures will be available at the site, to accommodate all of the employees who are on such a break at any point in time. During meal periods there will be enough shade for all of the employees who choose to remain in the general area of work or in areas designated for recovery and rest periods. (Employers may rotate employees in and out of meal periods, as with recovery and rest periods.)
- Daily, workers will be informed of the location of the shade structures and will be encouraged to take a five minute cool-down rest in the shade. An employee who takes a preventative cool-down rest break will be monitored and asked if he/she is experiencing symptoms of heat illness and in no case will the employee be ordered back to work until signs or symptoms of heat illness have abated. (see also the section on Emergency Response for additional information)
- Shade structures will be relocated to follow along with the crew and they will be placed as close as practical to the employees, so that access to shade is provided at all times. All employees on a recovery, rest break or meal period will have full access to shade so they can sit in a normal posture without having to be in physical contact with each other.
- In situations where it is not safe or feasible to provide access to shade (e.g., during high winds), a note will be made of these unsafe or unfeasible conditions, and of the steps that will be taken to provide shade upon request.

Procedures for Monitoring the Weather

- The Tetra Tech field supervisor will check the weather in advance to determine whether high temperatures or a heat wave is expected. The field supervisor will check readily available internet National Weather Service website (www.nws.noaa.gov/).
- A thermometer will be used at the jobsite to monitor for sudden increases in temperature, and to ensure that once the temperature exceeds 80 degrees F, shade structures will be opened and made available to the workers. In addition, when the temperature equals or exceeds 95 degrees F, additional preventive measures such as the High Heat Procedures will be implemented.

> PROCEDURES FOR HANDLING A HEAT WAVE:

For purposes of this section only, “heat wave” means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit **and** at least ten degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

- During a heat wave or heat spike, the work day will be cut short or rescheduled (example conducted at night or during cooler hours).
- During a heat wave or heat spike, and before starting work, tailgate meetings will be held, to review the company heat illness prevention procedures, the weather forecast and emergency response. In addition, if schedule modifications are not possible, workers will be provided with an increased number of water and rest breaks and will be observed closely for signs and symptoms of heat illness.
- Tetra Tech will ensure effective employee observation/monitoring by implementing one or more of the following to be on the lookout for signs and symptoms of heat illness and to ensure that emergency procedures are initiated when someone displays possible signs or symptoms of heat illness:
    - Supervisor or designee observation of 20 or fewer employees, or
    - Mandatory buddy system, or
    - Regular communication with sole employee such as by radio or cellular phone, or
    - Some other means of observation.

> HIGH HEAT PROCEDURES:

High Heat Procedures are additional preventive measures that this company will use when the temperature equals or exceeds 95 degrees Fahrenheit.

- Effective communication by voice, direct observation (applicable for work crews of 20 or fewer), mandatory buddy system, or electronic means will be maintained, so that employees at the worksite can contact a supervisor when necessary. If the supervisor is unable to be near the workers (to observe them or communicate with them), then an electronic device, such as a cell phone or text messaging device, may be used for this purpose if reception in the area is reliable.
- Frequent communication will be maintained with employees working by themselves or in smaller groups (keep tabs on them via phone or two-way radio), to be on the lookout for possible symptoms of heat illness. The employee(s) will be contacted regularly and as frequently as possible throughout the day, since an employee in distress may not be able to summon help on his or her own.
- Effective communication and direct observation for alertness and/or signs and symptoms of heat illness will be conducted frequently. When the supervisor is not available, a designated alternate responsible person must be assigned, to look for signs and symptoms of heat illness. If a supervisor, designated observer, or any employee reports any signs or symptoms of heat illness in any employee, the supervisor or designated person will take immediate action commensurate with the severity of the illness (see Emergency Response Procedures).
- Employees will be reminded constantly throughout the work shift to drink plenty of water and take preventative cool-down rest break when needed.

> PROCEDURES FOR ACCLIMATIZATION:

Acclimatization is the temporary and gradual physiological change in the body that occurs when the environmentally induced heat load to which the body is accustomed is significantly and suddenly exceeded by sudden environmental changes. In more common terms, the body needs time to adapt when temperatures rise suddenly, and an employee risks heat illness by not taking it easy when a heat wave strikes or when starting a new job that exposes the employee to heat to which the employee's body hasn't yet adjusted.

Inadequate acclimatization can be significantly more perilous in conditions of high heat and physical stress. Employers are responsible for the working conditions of their employees, and they must act effectively when conditions result in sudden exposure to heat their employees are not used to.

- The weather will be monitored daily. The supervisor will be on the lookout for sudden heat wave(s), or increases in temperatures to which employees haven't been exposed to for several weeks or longer. During a heat wave or heat spike, the work day will be cut short (example 12 p.m.), will be rescheduled (example conducted at night or during cooler hours) or if at all possible cease for the day.
- New employees, or those employees who have been newly assigned to a high heat area will be closely observed by the supervisor or designee for the first 14 days. The intensity of the work will be lessened during a two-week break-in period (such as scheduling slower paced, less physically demanding work during the hot parts of the day and the heaviest work activities during the cooler parts of the day (early-morning or evening). Steps taken to lessen the intensity of the workload for new employees will be documented.
- The supervisor, or the designee will be extra-vigilant with new employees and stay alert to the presence of heat related symptoms. New employees will be assigned a "buddy" or experienced coworker to watch each other closely for discomfort or symptoms of heat illness. During a heat wave, all employees will be observed closely (or maintain frequent communication via phone or radio), to be on the lookout for possible symptoms of heat illness. Employees and supervisors will be trained on the importance of acclimatization, how it is developed and how these company procedures address it

> SAMPLE PROCEDURES FOR EMERGENCY RESPONSE:

- Every morning, Tetra Tech employees will be reminded about site addresses and directions to the worksite and emergency procedures (see HASP), to avoid a delay of emergency medical services.
- Supervisors of each company will carry cell phones or other means of communication, to ensure that emergency services can be called, and check that these are functional at the worksite prior to each shift. See HASP for medical emergency facility location and phone numbers.
- When an employee is showing symptoms of possible heat illness, steps will be taken immediately to keep the stricken employee cool and comfortable once emergency service responders have been called (to reduce the progression to more serious illness). Under no

circumstances will the affected employee be left unattended.

- During a heat wave or hot temperatures, workers will be reminded and encouraged to immediately report to their supervisor any signs or symptoms they are experiencing.
- Employees and supervisors training will include every detail of these written emergency procedures.

> WRITTEN PROCEDURES

Written procedures help reduce the risk of heat related illnesses, and ensure that emergency assistance is provided without delay.

3395 (i) Heat Illness Prevention Plan. The employer shall establish, implement, and maintain shall be in writing in both English and the language understood by the majority of the employees and shall be made available at the worksite to employees and to representatives of the Division upon request. The Heat Illness Prevention Plan may be included as part of the employer's Illness and Injury Prevention Program required by 3203, and shall, at a minimum, contain:

(1) Procedures for the provision of water and access to shade.
(2) The high heat procedures referred to in subsection (e).
(3) Emergency Response Procedures in accordance with subsection (f).
(4) Acclimatization methods and procedures in accordance with subsection (g).

> TRAINING

Training is critical to help reduce the risk of heat related illnesses and to assist with obtaining emergency assistance without delay.

3395 (e) (1) Employee training: Training in the following topics shall be provided to all supervisory and non-supervisory employees:

(A) The environmental and personal risk factors for heat illness;

(B) The employer's procedures for complying with the requirements of this standard;

(C) The importance of frequent consumption of small quantities of water, up to 4 cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties;

(D) The importance of acclimatization;

(E) The different types of heat illness and the common signs and symptoms of heat illness;

(F) The importance to employees of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-workers;

(G) The employer's procedures for responding to symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary;

(H) The employer's procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider;

(I) The employer's procedures for ensuring that, in the event of an emergency, clear and precise directions to the work site can and will be provided as needed to emergency responders.

Note: T8 CCR 3203(a)(3) requires that communication for employees shall be in a form readily understandable by all affected employees.

(e) (2) Supervisor training: Prior to assignment to supervision of employees working in the heat, training on the following topics shall be provided:

(A) The information required to be provided by section (e) (1) above.

(B) The procedures the supervisor is to follow to implement the applicable provisions in this section.

(C) The procedures the supervisor is to follow when an employee exhibits symptoms consistent with possible heat illness, including emergency response procedures.

To ensure employees are trained and are provided training, the following steps will be taken:

- Tetra Tech and each subcontractor's employees will receive heat illness prevention training from their respective employers prior to working outdoors. Especially all newly hired employees. All workers will read and comply with heat illness prevention brochures attached to this document.
- On hot days, and during a heat wave, supervisors will hold short tailgate meetings to review this important information with all workers.
- All newly hired workers will be assigned a buddy or experienced coworker to ensure that they understood the training and follow the company procedures.
- Supervisors will be trained prior to being assigned to supervise outdoor workers.

> PROCEDURES FOR HANDLING A SICK EMPLOYEE:

Tetra Tech will implement effective emergency response procedures including:

- Ensuring that effective communication by voice, observation, or electronic means is maintained so that employees at the work site can contact a supervisor or emergency medical services when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable. If an electronic device will not furnish reliable communication in the work area, the employer will ensure a means of summoning emergency medical services.
- Responding to signs and symptoms of possible heat illness, including but not limited to first aid measures and how emergency medical services will be provided.
- If a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee, the supervisor shall take immediate action commensurate with the severity of the illness.
- If the signs or symptoms are indicators of severe heat illness (such as, but not limited to, decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior or convulsions), the employer must implement emergency response procedures.

- An employee exhibiting signs or symptoms of heat illness shall be monitored and shall not be left alone or sent home without being offered onsite first aid and/or being provided with emergency medical services in accordance with the employer’s procedures.
- Contacting emergency medical services and, if necessary, transporting

APPENDIX B
Perimeter Air and Dust Monitoring Plan

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AIR AND DUST MONITORING PLAN

SOIL CLEANUP
10153 FOLOSOM BLVD,
RANCHO CORDOVA, CALIFORNIA

March 15, 2022

Prepared for:

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1.0 INTRODUCTION

This air and dust monitoring plan addresses methods for monitoring potential fugitive dust and volatile organic compound (VOC) emissions – laden dust around the work area perimeter during soil excavation and trenching activities within the 10153 Folsom Blvd, Rancho Cordova (the "Site"). A description of field monitoring instruments, field monitoring protocols, air sampling procedures, action levels, and meteorological monitoring is presented.

The purpose of the perimeter air and dust monitoring is to protect members of the public from being exposed to elevated concentrations of dust and/or VOC contaminants while soil is being excavated and stockpiled on-site. Residential development is present immediately west and north of the proposed excavation area and overall Site boundary. Commercial development is located southwest and south of the Site. Additional residential development present east of the Site along with a Folsom Lake College building.

The primary VOC chemical of concern (COC) at this site is tetrachloroethene (PCE), with lesser concentrations of trichloroethene (TCE) and cis-1,2-dchlorothene (cis-1,2-DCE) having been detected intermittently in on-site media (soil, groundwater, and soil vapor) since initial investigation work in 2008. Subsequent on-site soil vapor and groundwater extraction activities resulted in reduced concentrations of the three COCs. Concentrations of dust (to be measured as particles less than 10 microns in diameter, referred to as "PM10") and VOCs in ambient air around the work perimeter will be compared to action levels to document that the work being performed is protective of public health. Should monitoring results exceed action levels then work practices will be modified in response to the exceedance. Such modifications could include additional soil wetting to minimize dust and volatilization of VOCs, and/or placement of clean soil over suspected VOC-impacted soil to minimize volatilization of VOCs.

While this plan addresses the potential for exposure by members of the public in proximity of the Site while excavating and loading soil into trucks, it does not address the potential for exposure by Site workers. The potential for exposure by Site workers will be handled separately by the contractors under their respective health and safety plans, as different monitoring procedures and action levels apply to Site workers as opposed to members of the public. Tetra Tech has developed a Site-specific Health and Safety Plan for the on-site Tetra Tech employees.

Figure 1 shows the Site and proposed excavation area. The Site is currently a vacant lot which includes vegetated soil areas, some trees, and remnant asphalt paved parking areas. An inactive sewer line runs through the northwest quadrant of the Site, including through the proposed soil excavation area. Perimeter air monitoring stations are indicated on Figure 2, marking the locations where periodic real-time VOC and dust measurements will be collected. As the active work area will be limited to the west half of the Site, the eastern air monitoring station will be established near the center of the Site, instead of the far eastern fence line.

2.0 SUMMARY OF SOIL EXCAVATION

The soil excavation area is planned for a total depth of 15 feet below ground surface (bgs). The excavation includes removing the sanitary sewer line within the excavation limits as well as the balance of the sewer that extends beyond the excavation footprint. The soil will be removed using a standard excavator and loaded into a transport truck for stockpiling and covering just east of the excavation. The resultant excavation sidewalls will be sloped for safety, according to the Competent Person's determination (e.g., 1:1 slope).

Routine real-time air and dust monitoring will be conducted during all excavation, stockpiling and backfilling activities, with laboratory air samples collected three times during the excavation phase of the work at selected depth intervals.

3.0 PERIMETER AIR AND DUST MONITORING LOCATIONS

Perimeter air and dust monitoring will be performed at four fixed locations outside the work area, as shown on Figure 2. The locations will provide monitoring data close to the adjacent residential area.

Visual evidence of fugitive dust emissions will be assessed by the Tetra Tech field representative. Visual dust emissions will trigger additional soil wetting to suppress fugitive dust from becoming airborne and potentially leaving the Site.

4.0 FIELD MONITORING INSTRUMENTS

Perimeter air monitoring will be performed during soil excavation, stockpiling, and backfill, consisting of: 1) real-time dust monitoring using portable dust monitors; and 2) real-time VOC monitoring using a portable screening level photo-ionizing detector (PID). Ambient 8-hour air samples will also be collected three times during the excavation phase for

laboratory analysis of VOCs. Collection of 8-hour ambient air samples will facilitate achieving low laboratory reporting limits of VOCs in air, lower than the field instruments can reach. The laboratory samples will also report concentrations of specific compounds, whereas the field monitoring provides for a total of all VOCs in air that the instrument can recognize (ionize). Since automobile and equipment exhaust and other external sources can affect field instrument readings, the field monitoring results can contain false-positive readings due to influences from compounds not related to the Site.

A description of the real-time field monitoring instrumentation is presented below.

4.1 Real-Time Dust Monitors

Real-time dust monitoring and data logging will be performed using a Thermo Scientific personal DataRAM (pDR-1000AN) instrument, or equivalent. The pDR-1000AN instrument measures mass concentrations of dust, smoke, mists, and fumes in real time, and can sound an audible alarm whenever the user-defined action level is exceeded. According to product literature, the pDR-1000AN is a light scattering photometer (i.e., nephelometer) incorporating a pulsed, high output, near infrared light emitting diode source, a silicon detector/ hybrid preamplifier, and collimating optics and a source reference feedback PIN silicon detector.

The datalogging option will be enabled on the dust monitor, allowing the pDR-1000AN to automatically tag and time stamp the collected data to be stored for subsequent retrieval, printing or computer graphing.

The unit will be calibrated (zeroed) at the beginning of each day before earthwork commences, and the zeroing documented. The unit is zeroed by drawing in filtered ambient air using a “z-pouch”. The instrument provides continuous readouts of instantaneous and time-averaged dust levels and will provide an average dust level at the end of each monitoring period (workday).

The dust monitors will be rented from a reputable equipment supplier such as EnviroTech, Pine Environmental, or Argus-Hazco.

Results of the real time dust monitoring will be used to document field dust (PM-10) conditions throughout each day of field work while soil excavation is being performed within the Site.

Visible dust emissions will trigger response actions to suppress the dust, including additional wetting of the soil.

4.2 Real-Time VOC Monitor

Real-time VOC monitoring will be performed using a ppbRAE 3000 PID equipped with a 10.6 eV lamp. The ppbRAE 3000 has an extended measuring range of 1 part per billion (ppb) to 10,000 parts per million (ppm) and has humidity compensation.

The unit will be calibrated at the beginning of each day with 10 ppm isobutylene calibration gas and zeroed using either ambient air passed through a carbon filter cartridge or certified zero gas, and the calibration documented.

The PID will be rented from a reputable equipment supplier such as EnviroTech, Pine Environmental, or Argus-Hazco.

5.0 FIELD MONITORING PROTOCOLS

A description of the field monitoring protocols is presented below.

5.1 Real-Time Dust Monitoring

Real-time dust monitoring will be performed at four stations located around the excavation and stockpile area (Figure 2). The dust monitors will be mounted to a fence, support pole or placed on a surface approximately 5-feet above grade. The dust monitors will be operational during periods in which soil is being excavated, stockpiled, and backfilled, and will continuously monitor and log dust concentrations at 1-minute intervals. The daily average dust reading will be recorded at the end of each field day. Dust readings will also be recorded manually on a field sheet throughout every 60-mintues throughout the workday.

Field personnel will periodically check each instrument during the day for proper operation and battery life.

Visual evidence of fugitive dust emissions will be assessed by the Tetra Tech field representative during each day soil is excavated and/or loaded into trucks. Visual dust emissions will trigger additional soil wetting to suppress fugitive dust from becoming airborne and potentially leaving the Site. The real-time dust monitoring data will be used to establish actual dust conditions throughout each day that soil is handled, and to

correlate measured dust sample results with observed periods of visible fugitive dust emissions, if any. If visible fugitive dust is observed, a reading from the nearest dust monitor will be recorded within a few minutes of that observation.

5.2 Real-Time VOC Monitoring

Real-time VOC air monitoring will be conducted by field personnel during periods of active earthwork (excavation, stockpiling, backfill). Field measurements will be collected at the four perimeter monitoring station locations with the ppbRAE 3000 PID at approximate 60-minute intervals during active earthwork. The field readings will be collected at the same four locations as the dust reading stations. Monitoring results will be recorded on a field sheet, noting station, time, and current excavation activities/depths below grade. Real-time VOC air monitoring will also be performed more frequently near the areas of active soil excavation during each field day (direct soil readings) and recorded on the field sheet. Direct soil readings will be collected roughly every 15-minutes until a baseline is established in each excavation depth interval (see below), then every 30- to 60-minutes thereafter. Additional direct soil readings will be collected if site conditions change, or unexpected soil impacts are encountered. A grid will be developed for the excavation area to aid in noting the location where direct soil readings were taken and at what depth.

The real-time monitoring results will be compared to a target total VOC concentration value to assess whether response actions are necessary to suppress VOC emissions. Response actions would include soil wetting.

6.0 AIR SAMPLING PROCEDURES FOR LABORATORY ANALYSIS

To augment real-time dust and VOC field monitoring, work perimeter ambient air samples will be periodically collected for laboratory analysis during excavation and stockpiling of soil. A minimum of three sampling episodes will be performed while excavating down to 15-feet below grade – the first event during the 0-to-5-foot depth interval, the second event during the 5-to-10-foot depth interval, and the third event during the 10-to15-foot depth interval. The perimeter ambient air samples will be collected from the same locations as the dust and VOC field monitoring stations. One ambient background air sample will also be collected during the 8-hour air sampling events. The background sample will be placed near the east site boundary, away and upwind of the active work area. If the prevailing wind direction is west to east (or otherwise) during air sample collection, the background sample will be moved to the upwind side of the site.

Each ambient air sample will be collected in a laboratory-supplied SIM-Certified 6-liter Summa canister, equipped with an 8-hour sample flow regulator. The sample intake will be positioned approximately 5-feet above grade. Prior to initiating sample collection, the canister number, sample ID, and vacuum will be noted for each canister and recorded on a chain of custody form. At the end of the 8-hour sample collection period, the final canister vacuum will be noted, the canisters properly packaged, and delivered to Eurofins Air Toxics laboratory for analysis.

Each air sample will be analyzed for tetrachloroethene (PCE), trichloroethene (TCE) and cis-1,2-DCE, in addition to two additional compounds often detected at dry cleaner sites (trans-1,2-DCE and vinyl chloride) using EPA Method TO-15 (SIM). The data will be reported in micrograms per cubic meter ($\mu g/m^3$). The laboratory reporting limits in $\mu g/m^3$ for each compound, dependent on the final sample volume and assuming a dilution factor of 1, are approximately:

PCE – 0.19

TCE – 0.15

Cis-1,2-DCE - 0.11

Trans-1,2-DCE - 0.55

Vinyl chloride – 0.035

The laboratory results of perimeter ambient air monitoring will be compared to screening levels to assess the significance of the results. Screening levels are presented in Section 9.0. As the air sample results will be received following completion of the soil excavation in the target depth interval, they will serve to document air quality conditions for the record.

7.0 METEOROLOGICAL MONITORING

Prior to the on-set of earthwork activities within the Site, a weather monitoring station will be installed along the Site perimeter to continuously monitor daily wind patterns (speed and direction), as well as other conditions such as temperature and humidly.

Meteorological data will be manually recorded at approximately every 60 minutes. The information will be entered into field notes. Photographs of the monitor display may also be taken to supplement the field notes. The weather station will be operational throughout the time that soil is being excavated and stockpiled.

Results of the meteorological monitoring will allow for determination of factors that could have a bearing on field conditions, such as wind speed and direction. The results will allow for determination of up-wind and down-wind areas during different times of each day, and correlation between perimeter air sample results and wind/temperature conditions. Comparing up-wind perimeter air monitoring results to down-wind air monitoring results will be helpful in evaluating whether ambient air conditions may be affected by Site excavation and soil handling activities.

8.0 REPORTING

Results of the perimeter air and dust monitoring will be presented in a written report to be prepared at the conclusion of the soil cleanup activities.

9.0 AIR MONITORING COMPARISON CRITERIA

Comparison levels for VOCs in ambient air will be the California Region 2 Regional Water Quality Control Board Environmental Screening Levels (ESLs) for cancer hazard endpoint, commercial/industrial air (ESL Table 1A-1, 2019 rev 2). If a cancer endpoint value does not exist, the non-cancer hazard value is used. The commercial/industrial air value is used rather than the residential air value because the commercial/industrial air exposure duration of a workday matches the potential exposure posed by the work activities at the site (8-hour workday). Tetra Tech notes that the commercial/industrial ESLs are predicated on chronic exposure over a 25-year time frame. Conversely, potential exposure posed by the soil excavation would only occur over the duration of the soil excavation activities, which are anticipated to take approximately 2 weeks. Therefore, use of the ESLs is conservative and extremely protective.

Comparison levels for the laboratory analytical results of the air samples from the Site are as follows:

PCE	2.0 µg/m^3
TCE	3.0 µg/m^3
Cis-1,2-DCE	35 µg/m^3 (non-cancer hazard)
Trans-1,2-DCE	350 µg/m^3 (non-cancer hazard)
Vinyl chloride	0.16 µg/m^3

9.1 Real-Time Field Monitoring – PID Action Level

Real-time VOC air monitoring will be periodically performed with a part per billion (ppb) level PID instrument, the ppbRAE 3000 model, or equivalent.

The PID measurements will be compared to an action level of 500 ppbv (0.5 ppmv). The 500 ppbv value has been used at DTSC-lead cleanup sites for VOCs and can be used as a real-time screening value for these VOCs at the Site. Additionally, a 500 ppbv value is considered technically achievable using the PID meter.

In practice, ambient total VOC concentrations may periodically approach 500 ppbv depending on climate conditions, construction equipment exhaust, traffic exhaust, and other possible sources of emissions. The PID meter will be field calibrated daily prior to the start of work, and background readings away from the work area will be collected and recorded daily.

As described in the Tetra Tech Health and Safety Plan, a field PID reading of 5 ppmv (5,000 ppbv) will be used as an action level for worker safety. The action level is based on Cal-OSHA permissible exposure levels (PELs) and includes safety factors. Use of PEL values in evaluating potential exposure to non-workers is not appropriate.

9.2 Dust Monitoring and Action Level

Real-time perimeter air monitoring for dust will be periodically performed with an instrument such as a Thermo Scientific personal DataRAM (pDR-1000AN), or equivalent. The instrument records concentrations of dust (suspended particulate matter) less than 10 microns in size (PM10).

The Sacramento Metropolitan Air Quality Management District's (SMAQMD's) Air Quality Standard for PM10 is 50 $\mu g/m^3$ (0.050 mg/m^3), measured as a 24-hour TWA. The 24-hour TWA value is converted to an 8-hour TWA value for use as an action level at the Site since work will only be performed over an 8-hour time-period each day. Review of annual 2021 data for the Sacramento Valley Air Basin (Sacramento-T Street location), obtained from the California Air Resources Board AQMIS website, shows an average background PM10 of 23.3 $\mu g/m^3$ in 2021 (average of 12-month daily averages).

The 8-hour TWA value is therefore calculated as follows:

$$\text{8-hour TWA} = \frac{(24\text{hrs} \times \text{PM10 Air Quality Standard}) - (16\text{ hrs} \times \text{PM10 Background})}{8\text{ hrs}}$$

$$= \frac{(24\text{ hrs} \times 50\ \mu g/m^3) - (16\text{ hrs} \times 23.3\ \mu g/m^3)}{8\text{ hrs}}$$

$$= \frac{1{,}200\ \text{hrs-}\mu g/m^3 - 372.8\ \text{hrs-}\mu g/m^3}{8\text{ hrs}}$$

$$= \frac{827.2\ \text{hrs-}\mu g/m^3}{8\text{ hrs}}$$

$$= 103.4\ \mu g/m^3$$

The action level for dust (PM10) at the Site will be 103.4 µg/m^3 as an 8-hour TWA value.

Visible dust emissions will be used on a short-term basis as an indication to modify work practices, such as increasing soil wetting to suppress dust.

Background readings will be collected prior to start of work each day and may also be collected later in the day if readings throughout the day become elevated and potential ambient sources are suspected.

Action/Comparison Level Summary

Perimeter air monitoring action levels for use at the Site are as follows:

Monitoring Method	**Compound**	**Action Level**
Real Time	VOCs	500 ppbv
	Dust (PM10)	103 µg/m^3 (8-hr TWA)
Summa Canisters	PCE	2.0 µg/m^3
	TCE	3.0 µg/m^3
	Cis-1,2-DCE	35 µg/m^3
	Trans-1,2-DCE	350 µg/m^3
	Vinyl Chloride	0.16 µg/m^3

9.3 Comparison Criteria Exceedances

The comparison levels to be used for VOCs are based on screening levels (not cleanup values) published by the RWQCB. Screening levels are appropriate for use as comparison levels because they are conservative and protective of human health. As such, if exceeded, that does not necessarily indicate a human health threat.

If dust or PID action levels are exceeded, then additional water will be applied to the soil to suppress fugitive emissions. Clean soil may also be temporarily added to the surface of soil suspected as being impacted to aid in suppressing emissions. If dust or PID levels cannot be adequately controlled through the application of clean soil or additional water, excavation activities will be halted until a plan can be implemented to maintain concentrations below the action level.

Monitoring real-time dust levels throughout each day at the four fixed monitoring station locations, along with looking for visible emissions, will allow for quick response if needed to add additional water to suppress dust. Real time VOC monitoring at the four station locations will also be used to trigger additional water application if VOC concentrations exceed 500 ppbv.

If laboratory test results from the quantitative VOC monitoring events show one or more compounds detected above screening levels, then the RWQCB will be notified of the exceedance(s). As the laboratory data will be received after the soil excavation work has been completed in the excavation depth interval, the data will be for the record only. The use of real-time dust/VOC monitoring instrumentation remains the most effective method for mitigating emissions while actively handling soil.

10.0 REFERENCES

Regional Water Quality Control Board Environmental Screening Levels, ESL Workbook, Table 1A-1, prepared by the Regional Water Quality Control Board, San Francisco Bay Region, dated January 2019 (Rev 2).

2021 Daily PM10 Averages, Sacramento T-Street Monitoring Station, California Air Resources Board AQMIS database, online data retrieval 3/7/2022.

P:\ACAD\9040-001-CORD\9040001009A.DWG

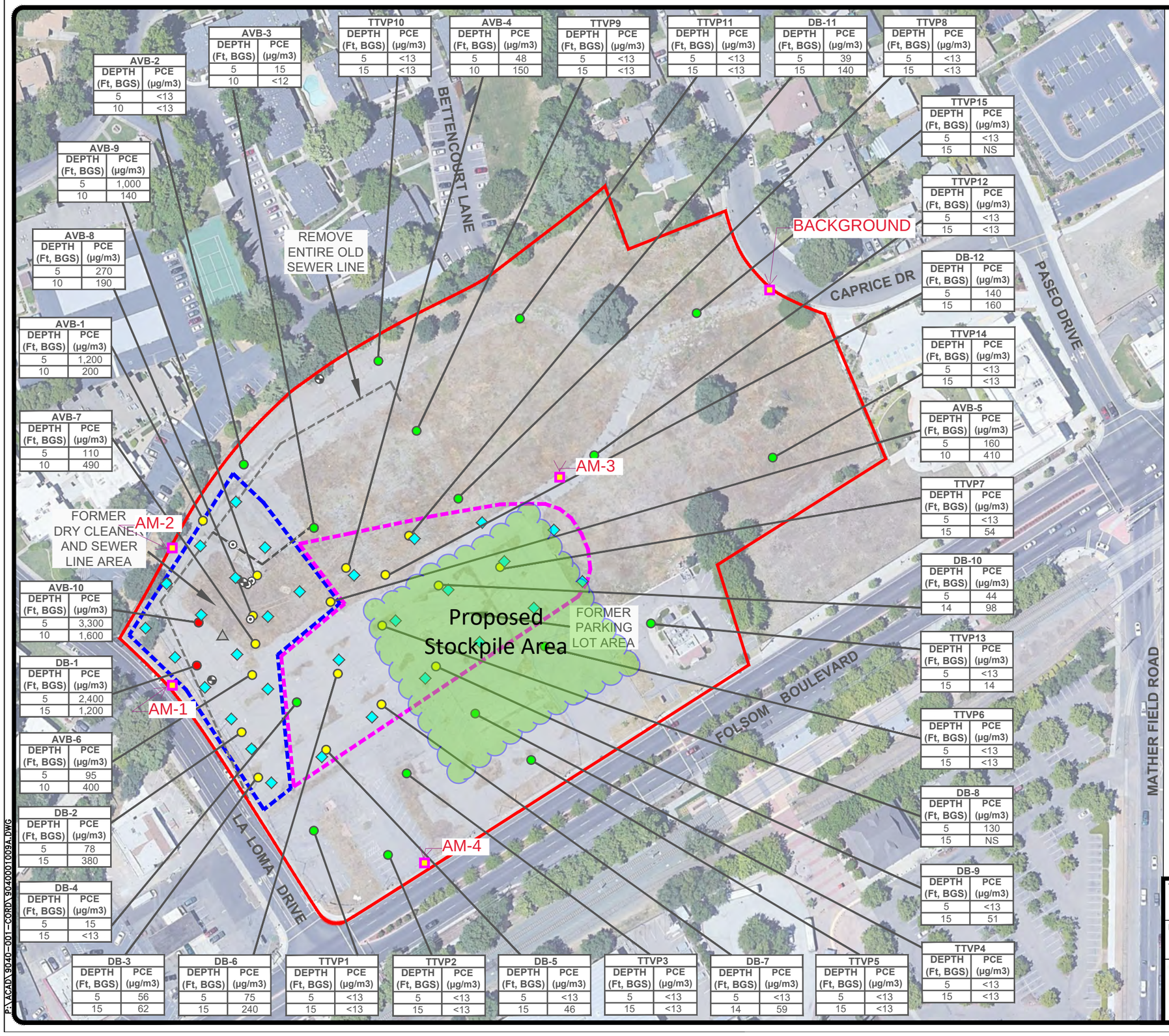
TITLE: EXTENT OF SOIL EXCAVATION, ADDITIONAL SITE REMEDIATION LOCATIONS, AND SEWER LINE REMOVAL

LOCATION: 10153 Through 10179 Folsom Boulevard
Rancho Cordova, California

TETRA TECH

APPROVED	BL
DRAFTED	CP
PROJECT#	117-9040001
DATE	03-14-22

FIGURE 1



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AIR MONITORING STATIONS

LOCATION: 10153 Through 10179 Folsom Boulevard
Rancho Cordova, California

TETRA TECH

APPROVED	BL
DRAFTED	CP
PROJECT#	117-9040001
DATE	03-14-22

FIGURE 2

Appendices

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Appendix 5.6-2 Site Cleanup Plan Addendum

TETRA TECH

August 30, 2023

Isabella Hagopian
Engineering Geologist, Private Sites Cleanup Unit
Central Valley Regional Water Quality Control Board
11020 Sun Center Drive, Suite 200
Rancho Cordova, CA 95670-6114

Re: ***Site Cleanup Plan Addendum, Former Lily Company Property, 10153 – 10175 Folsom Boulevard, Rancho Cordova, California***

Dear Ms. Hagopian:

On behalf of City of Rancho Cordova (the City), Tetra Tech, Inc. (Tetra Tech) prepared the Site Cleanup Plan Addendum (the Addendum) for the former Lily Company site located at 10153 – 10175 Folsom Boulevard, Rancho Cordova, California (the Site), in accordance with our call on August 10, 2023.

Background

The environmental impact identified at the Site is related to historical operation of a former dry cleaner. The Site has been previously remediated via soil vapor extraction (SVE) from 2010 – 2016 and groundwater extraction from 2014 to 2017. Residual tetrachloroethene (PCE) was identified in soil vapor after the remediation, which appeared to be emanating from residual PCE in soil along a sewer line onsite. The City plans to conduct additional remediation at the Site, and a *Site Cleanup Plan, Former Lily Company Property, 10153 – 10175 Folsom Boulevard, Rancho Cordova, California* (the Cleanup Plan) was subsequently prepared and approved by the Central Valley Regional Water Quality Control Board (the RWQCB) in a RWQCB letter dated March 30, 2022.

In summary, the planned additional remediation detailed in the Cleanup Plan includes additional SVE and soil excavation, stockpiling, and backfill. The stockpiles of the excavated soil will be sampled. Depending on the soil sampling results, dry potassium permanganate may be added to the stockpiled soil prior to backfill and compaction. The dosing of the oxidant will be based on the results of a bench scale test. For the planned oxidant use, the RWQCB's March 30, 2022 letter indicates that "Central Valley Water Board staff may require additional information on the use of the oxidant addition prior to approval".

The City, the RWQCB, and Tetra Tech had a conference call on August 10, 2023 to discuss the RWQCB's note in the approval letter for oxidant use at the Site. Per the call, this addendum is prepared to provide additional information about the planned soil handling at the Site for the stockpiled soil.

Planned Soil Handling

Soil will be excavated, stockpiled, and sampled in accordance with the approved Cleanup Plan. Since the highest PCE soil concentration found at the Site was 54 microgram per kilogram (µg/kg)[1] it is expected the PCE concentrations in the stockpiled soil would be low. Based on the stockpile soil PCE concentrations, the excavated soil will be handled as follows:

- Soil with PCE concentrations greater than the San Francisco Bay RWQCB Environmental Screening Level (ESL) for residential Soil Direct Exposure Human Health Risk Screening (i.e., 590 µg/kg): the soil in the stockpiles will be disposed offsite.
- Soil with positive PCE detections at concentrations between 60 and 590 µg/kg: the soil in the stockpiles will be aerated via additional mechanic soil mixing (e.g., relocation of stockpiles) or landfarming. Before backfill, dry potassium permanganate will be mixed with the soil at a dosing of 3 - 4% by weight, in accordance with the soil oxidant demand bench scale test results (Attachment A). As discussed in the Cleanup Plan, the oxidant is expected to react with the residual PCE (if any) and natural organics in the soil when in contact and when tap water is applied as part of the backfill and compaction processes.
- Soil with positive PCE detections at concentrations lower than 60 µg/kg: the soil in the stockpiles will be aerated via additional mechanic soil mixing (e.g., relocation of stockpiles) or landfarming.
- Soil without PCE detections: the soil in the stockpiles will be backfilled directly.

Closing

If additional information is needed or you have any question, please feel free to contact Betty Li at (916) 853-4525.

Sincerely,

Tetra Tech

Betty Li, PhD

Senior Environmental Engineer

Enclosure:

Attachment A

cc: Ms. Kristine Courdy and Mr. Stefan Heisler, City of Rancho Cordova

[1] Tetra Tech, 2022. Additional Soil and Soil Vapor Testing, Former Lily Company Property, 10153 – 10175 Folsom Boulevard, Rancho Cordova, California.

Attachment A – Bench Scale Test Laboratory Report

August 2, 2023

Betty Li, Ph.D.
Tetra Tech
3101 Zinfandel Drive, Suite 200
Rancho Cordova, CA 95670

RE: Report of Findings, $KMnO_4$ Soil Oxidant Demand and Mixing
Client Project ID: 10153 Folsom
PRIMA Project ID: TT-Folsom

Dear Dr. Li:

This letter report describes the results of the soil oxidant demand (SOD) measurement conducted by PRIMA Environmental, Inc on two soil samples from the 10153 Folsom site.

Sample Receipt and Preparation

Two soil samples (10153Folsom-A, 10153Folsom-B) were received on July 5, 2023. $KMnO_4$ SOD was measured for each sample. Prior to testing, each sample was sieved to remove particles greater than 4 mesh then homogenized.

Materials

Potassium Permanganate, $KMnO_4$. ACS reagent grade $KMnO_4$ was used for these tests.

Procedures

For each soil, five reactors containing 20 g soil and 20 mL of $KMnO_4$ solution were prepared, with each reactor containing a different initial concentration of $KMnO_4$ ranging from 512 to 20,800 mg/L $KMnO_4$. Controls containing $KMnO_4$ solution, but no soil were also prepared. The reactors were placed on a shaker table. At 48 hours, the reactors were destructively sampled and the residual $KMnO_4$ was measured via visible spectroscopy by PRIMA. Because all $KMnO_4$ was consumed in all reactors, two additional reactors were set. These reactors contained 10 g soil and 20 mL $KMnO_4$ solution. The reactors were mixed and analyzed as before. The SOD was calculated as follows:

$$SOD = ([Ox]_{init} - [Ox]_t) \times (V/M)$$

where

- SOD is soil oxidant demand, in g (or mg) oxidant/kg soil
- $[Ox]_{init}$ is the initial concentration of oxidant, in g (or mg) oxidant/L
- $[Ox]_t$ is the concentration of oxidant at time, t, in g (or mg) oxidant/L
- V is total volume of the aqueous phase, in L
- M is mass of soil, in kg

Results

The results of the 48-hour $KMnO_4$ SOD test are shown in **Table 1** (attached)**.** The SOD was similar for both samples, ranging from 32,000 to 43,000 mg $KMnO_4$/kg soil, depending upon the initial concentration of $KMnO_4$. These values are considered very high. Higher SOD values with increasing initial concentration of $KMnO_4$ is a common phenomenon.

If you have any questions regarding these results, please give me a call at 916-939-7300. Thank you for the opportunity to be of service.

Sincerely,
PRIMA Environmental, Inc.

Cindy G. Schreier, Ph.D.
President

Table 1. 48-Hour $KMnO_4$ SOD Results.

Soil ID	Soil to $KMnO_4$ Ratio	Initial $KMnO_4$ mg/L	$KMnO_4$ Remaining mg/L	$KMnO_4$ Consumed^ mg/kg soil
Control (No soil)	1:1*	512	507	not applicable
	1:1*	1,010	947	
	1:1*	2,510	2,530	
	1:1*	5,210	5,180	
	1:1*	20,800	21,000	
	1:2**	20,600	20,700	
	1:2**	43,500	44,000	
Soil 10153 Folsom-A	1:1	512	< 20	> 510
	1:1	1,010	< 5	> 1,000
	1:1	2,510	< 5	> 2,500
	1:1	5,210	< 5	> 5,200
	1:1	20,800	< 5	> 21,000
	1:2	20,600	4,600	32,000
	1:2	43,500	22,480	42,000
Soil 10153 Folsom-B	1:1	512	< 20	> 510
	1:1	1,010	< 5	> 1,000
	1:1	2,510	< 5	> 2,500
	1:1	5,210	< 5	> 5,200
	1:1	20,800	< 5	> 21,000
	1:2	20,600	4,560	32,000
	1:2	43,500	22,100	43,000

* These Controls associated with soil tests using 1:1 ratio.

** These Controls associated with soil tests using 1:2 ratio.

^wet-weight basis

5070 Robert J Mathews Parkway, Suite 300
El Dorado Hills, CA 95762
916-939-7300
www.primaenvironmental.com

Sample Receipt Summary

Date/Time: July 5, 2023

Client/Company: Tetra Tech - Folsom (KMnO4)

Project: _____

	Yes	No	N/A
Custody seals intact?	☐	☐	☒
Chain of custody Present?	☐	☐	☒

If no, list number of samples and Sample ID

Ice present?	☐	☐	☒
If no, what is temperature? _____			
Samples in good condition?	☒	☐	☐
If no, explain:			
Do sample IDs on containers match IDs on COC?	☒	☐	☐
If no, explain:			

Other Comments:

PRIMA ENVIRONMENTAL INC. Questions Answered.
5070 Robert J. Mathews Parkway, Suite 300 • El Dorado Hills, CA 95762
(916) 939-7300 • www.primaenvironmental.com

Project Manager: Betty Li
Company: Tetra Tech
Phone:
Email: Betty.Li@tetratech.com

Project Name: 10153 Folsom
Project Number:
TAT: standard
Sampler Signature:

SAMPLE ID	Date	Time	Matrix	# Containers	Analysis or Proposal Description/Date (test per Betty Li)	Comments
10153 Folsom-A	7-5-23	900		1		
10153 Folsom-B	↓	930		1		
10153 Folsom-Dosage	↓	1000		1		

Special Instructions	Relinquished by:		Received by:
	Company: Tetra Tech	Date: July 5, 2023 (CST)	Company: PRIMA
	Printed Name: Zach Laforet	Time: 1227	Printed Name: Cindy Schreier
	Signature:		Signature:
	Relinquished by:		Received by:
	Company	Date	Company
	Printed Name	Time	Printed Name
	Signature		Signature

Matrix key: S - soil/sediment; W - water; OT - other

Appendices

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Appendix 5.6-3 Site Remediation Notice of Exemption

NOTICE OF EXEMPTION

To: ☐ Office of Planning and Research
1400 Tenth Street
Sacramento, CA 95814

☒ County Clerk-Recorder
Sacramento County
600 8th Street
Sacramento, CA 95814

From: City of Rancho Cordova
Public Works Department
2729 Prospect Park Drive
Rancho Cordova, CA 95670

Project Title:	**SEWER LINE REMOVAL AND SOIL EXCAVATION AND BACKFILL**
Project Location:	Northeast corner of Folsom Boulevard and La Loma Drive
Assessor's Parcel Number(s):	076-0020-019, -20, -21, -22
Project Description:	The City of Rancho Cordova proposes to remove an old sewer pipe section from an approximately 1.1-acre excavation area at the Project Location. The soil within the excavation area will be stockpiled onsite, and then backfilled to the excavation area. The site will be restored to its original condition after the excavation and backfill.
Lead Agency:	City of Rancho Cordova
Applicant:	City of Rancho Cordova 2729 Prospect Park Drive Rancho Cordova, CA 95670

Exemption Status:

☐ Ministerial [Section 21080(b); 15268];

☐ Declared Emergency [Section 21080(b)(3); 15269(a)];

☐ Emergency Project [Section 21080(b)(4); 15269(b)(c)];

☒ Minor Alterations to Land [Section 15304(f)

☐ Categorical Exemption [Section 15301(a), Existing Facilities];

☐ Approval of Rates, Tolls, Fares, and Charges [Section 21080(b)(8)(D)];

☐ Statutory Exemption [Section 15273(a)(4)].

REASONS WHY THIS PROJECT IS EXEMPT OR DOES NOT REQUIRE FURTHER ENVIRONMENTAL DOCUMENTATION:

The project is exempt under State CEQA Guidelines Section 15304(f), which states (in part):

> *Class 4 consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes. Examples include, but are not limited to:*
>
> *f) Minor trenching and backfilling where the surface is restored*

The California Environmental Quality Act (Section 21000, et. seq. of the California Public Resources Code, hereafter CEQA) requires analysis of agency approvals of discretionary "projects." A "project," under CEQA, is defined as "the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." The proposed project would remove an old sewer line section within an approximate 1.1-acre area. The soil within the 1.1-acre area

would also be excavated to approximately 15 feet deep and stockpiled onsite for aeration purpose. The aeration would allow volatile organic compounds in the soil vapor to dissipate, if any. The City will conduct soil testing of the stockpiles and, when determined to be clean, the soil will be returned to the excavation site and the former grades will be established. The overall goal of this project is to remove the sewer line and reduce potential contamination to below the minimum regulatory screening levels for residential projects.

The proposed activity is considered a project as defined by CEQA. Pursuant to CEQA Guidelines Section 15304, trenching and backfilling of soil where the ground surface is restored to the original condition is generally exempt except for parcels of land located in an area of statewide, regional, or areawide concern identified in Section 15206(b)(4) and the property does not have significant values for wildlife habitat or other environmental purposes. The property is not located in an area of statewide, regional, or areawide concern identified in Section 15206(b)(4) and the use of the property and adjacent property has not changed since the time of purchase by the City of Rancho Cordova. Therefore, the project is exempt from further CEQA analysis.

By _____

Stefan Heisler, Environmental Coordinator
City of Rancho Cordova
(916) 851-8757
November 1, 2023

Appendices

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Appendix 5.9-1 Noise Impact Assessment

Noise Impact Assessment

Mills Crossing Project

Rancho Cordova, California

Prepared For:

Placeworks, Inc.
101 Parkshore Drive, Suite 112
Folsom, California 95630

Prepared By:

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS
55 Hanover Lane, Suite A
Chico, California 95973

June 2023

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Attachment D – SoundPLAN 3-D Noise Model Outputs – Project Onsite Noise Propagation

LIST OF ACRONYMS AND ABBREVIATIONS

Term	Description
ADT	Average Daily Trips
APN	Assessor's Parcel Number
CAlEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
City	City of Rancho Cordova
CNEL	Community Noise Equivalent Level
County	Sacramento County
dB	Decibel
dBA	Decibel is A-weighted
FB-RMU	Residential Mixed-Use
FBSP	Folsom Boulevard Specific Plan
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FTA	Federal Transit Administration
Hz	Hertz
L_{dn}	Day-night average sound level
L_{eq}	Measure of ambient noise
L_{max}	The maximum A-weighted noise level during the measurement period.
L_{min}	The minimum A-weighted noise level during the measurement period.
NIOSH	National Institute for Occupational Safety and Health
OPR	Office of Planning and Research
OSHA	Federal Occupational Safety and Health Administration
PPV	Peak particle velocity
Project	Mills Crossing Project
RMS	Root mean square
RMU	Residential Mixed-Use
RMU (FBSP)	Residential Mixed-Use – Folsom Boulevard Specific Plan
STC	Sound Transmission Class
VdB	Vibration Velocity Level

1.0 INTRODUCTION

This report documents the results of a Noise Impact Assessment completed for the Mills Crossing Project (Project), which proposes the construction of a community center with a health and wellness center, a parking structure, arts center and theater, a multifamily and single-family housing development, commercial and retail businesses, and community and event centers in Rancho Cordova, California. This assessment was prepared as a comparison of predicted Project noise levels to noise standards promulgated by the City of Rancho Cordova General Plan Noise Element and the City of Rancho Cordova Municipal Code. The purpose of this report is to estimate Project-generated noise levels and to determine the level of impact the Project would have on the environment.

1.1 Project Location and Description

The Project Site is a 9.85-acre property located at the corner of Folsom Boulevard and La Loma Drive in the City of Rancho Cordova, Sacramento County, and encompasses the following Assessor's Parcel Numbers (APNs): 076-0020-019, -20, -21, -22. The Proposed Project Area is roughly bounded by Folsom Boulevard to the south, La Loma Drive to the west, El Caprice Drive to the east, and residential housing to the north fronting Malaga Way and Ashbury Court. Surrounding land uses includes the residential uses to the north, residential uses and Folsom Lake College/Rancho Cordova Civic Center to the east, light industrial uses to the south, and commercial and residential uses to the west. The Mather Field/Mills Train Station is located directly across Folsom Boulevard from the Project Site and can be accessed via a pedestrian crosswalk with stop-traffic control. Additionally, the site is fronted by a Class II bike lane on Folsom Boulevard.

The Project Site is located within the Folsom Boulevard Specific Plan area. The Folsom Boulevard Specific Plan (FBSP or Specific Plan) is the primary planning tool the City uses to guide future development and redevelopment within the Specific Plan area. It seeks to increase the density of both housing and commercial activity; increase pedestrian, bicycle, and transit trips to, from, and through the area; increase the visibility of the corridor as a destination; and change the dynamic and image to that of a high demand, thriving urban area. The site is zoned Residential Mixed-Use – Folsom Boulevard Specific Plan (RMU [FBSP]). The RMU (FBSP) Zoning District is intended to designate property for the development of medium and high-density housing (between 6.1 and 40 dwelling units per acre) that may incorporate office and/or commercial services. While the predominant use of the development is residential, the City encourages the vertical and/or horizontal integration of commercial and/or office uses that are compatible with the residential development.

The Project Site has a City of Rancho Cordova General Plan land use designation of Residential Mixed-Use (FB-RMU).

The Project proposes a mix of land uses as follows:

Community-Commercial Buildings

The community-commercial buildings would include up to 140,000 square feet of uses, and would include the following:

- Health and Wellness
    - Community Health Clinic – up to 30,000 square feet
- Events and Meetings Space
    - Space for meetings, community and cultural events, banquet, and weddings – up to 15,000 square feet
- Arts Center (Subtotal – up to 35,000 square feet)
    - Flex Theater (black/white/green box) – up to 18,000 square feet
    - Flexible Classrooms and Rehearsal Space – up to 6,000 square feet
    - Production/Artist's Studios – up to 4,000 square feet
    - Gallery/Exhibits – up to 4,000 square feet
    - Administrative Space – up to 3,000 square feet
- Community-Commercial Building (Subtotal – up to 52,500 square feet)
    - Commercial Office-Anchor – up to 25,000 square feet
    - Commercial Office-Shared – up to 10,000 square feet
    - Flexible Studios 1 – up to 5,000 square feet
    - Flexible Studios 2 – up to 7,500 square feet
    - Commercial Kitchen – up to 5,000 square feet
- Commercial-Retail (Subtotal – up to 7,500 square feet)
    - Fresh Market, Food and Beverage, Café, Retail – up to 5,000 square feet
    - Café – up to 2,500 square feet

Housing

The Proposed Project would provide up to 120 dwelling units, as follows:

- Between 55-60 Multi-Family Affordable Apartments
- Between 50-60 Zero Lot Line Townhouse-Style Homes for Sale

Public Open Space

The Proposed Project would include up to 2.5 acres of public open space as follows:

- Between 1.3-1.5 acres of Neighborhood and Community Greens
- Between 0.75-1.0-acre of Plaza and Green Space

Parking Structure

The Proposed Project would include a parking structure with between 275-325 parking spaces.

The Project Site would be accessible via Folsom Boulevard to the south and La Loma Drive to the west of the Project Site.

Construction activities would involve the removal of vegetation and paved areas; grading to finished design elevations; excavation to allow construction of building foundations, utilities, roadways, parking areas, sidewalks, and landscaping. Equipment used during construction may include, but is not limited to, crawler tractors, tractors, loaders, backhoes, excavators, graders, scrapers, cranes, forklifts, generator sets, welders, pavers, paving equipment, rollers, and air compressors. It is anticipated that construction of the Project would occur from 2024 through 2029.

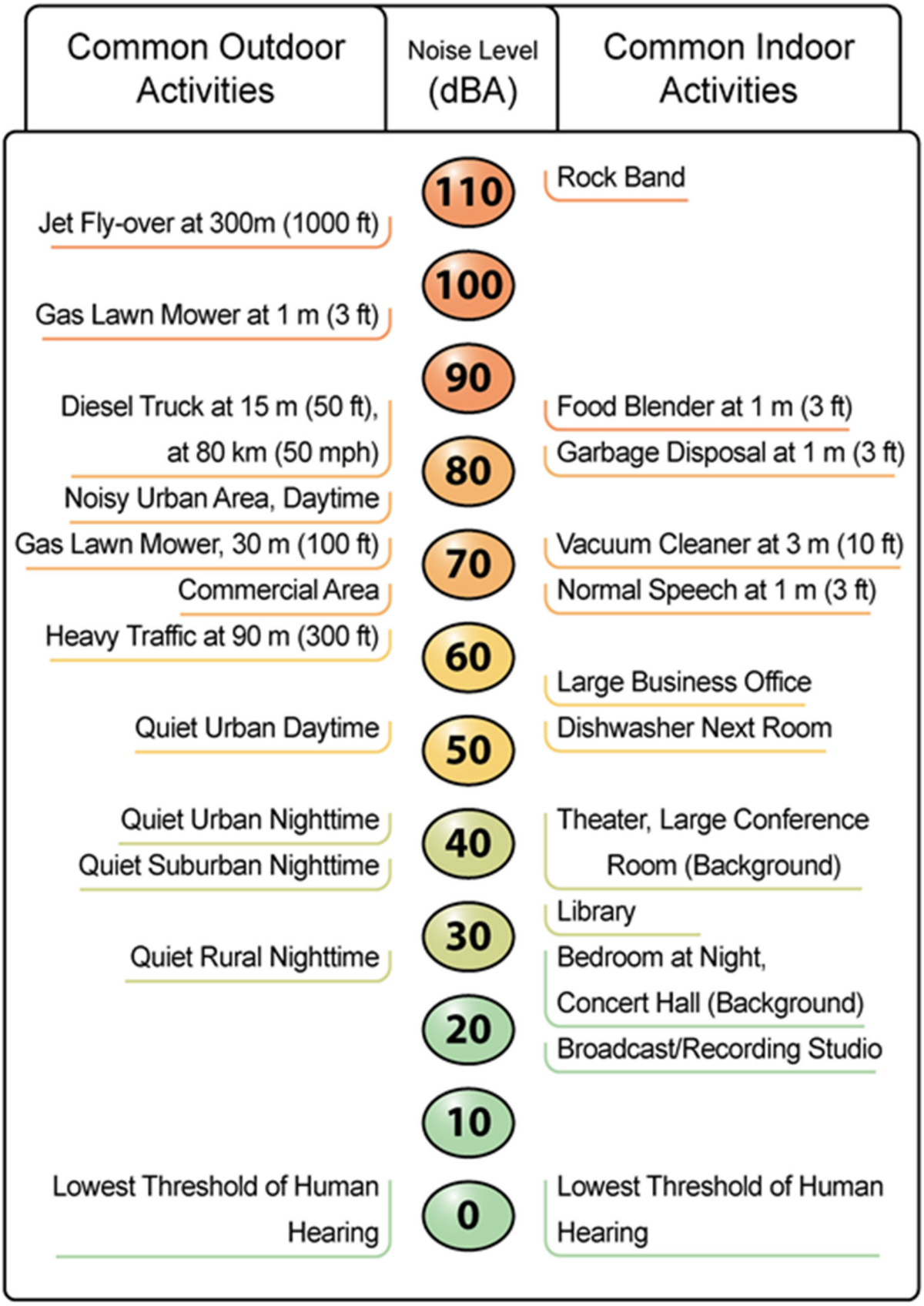
2.0 ENVIRONMENTAL NOISE AND GROUNDBORNE VIBRATION ANALYSIS

2.1 Fundamentals of Noise and Environmental Sound

2.1.1 Addition of Decibels

The decibel (dB) scale is logarithmic, not linear, and therefore sound levels cannot be added or subtracted through ordinary arithmetic. Two sound levels 10 dB apart differ in acoustic energy by a factor of 10. When the standard logarithmic decibel is A-weighted (dBA), an increase of 10 dBA is generally perceived as a doubling in loudness. For example, a 70-dBA sound is half as loud as an 80-dBA sound and twice as loud as a 60-dBA sound. When two identical sources are each producing sound of the same loudness, the resulting sound level at a given distance would be three dB higher than one source under the same conditions (Federal Transit Administration [FTA] 2018). For example, a 65-dB source of sound, such as a truck, when joined by another 65 dB source results in a sound amplitude of 68 dB, not 130 dB (i.e., doubling the source strength increases the sound pressure by three dB). Under the decibel scale, three sources of equal loudness together would produce an increase of five dB.

Typical noise levels associated with common noise sources are depicted in Figure 2-1.



Source: California Department of Transportation (Caltrans) 2020a

Figure 2-1. Common Noise Levels

2023-009 Mills Crossing

2.1.2 Sound Propagation and Attenuation

Noise can be generated by a number of sources, including mobile sources such as automobiles, trucks and airplanes, and stationary sources such as construction sites, machinery, and industrial operations. Sound spreads (propagates) uniformly outward in a spherical pattern, and the sound level decreases (attenuates) at a rate of approximately 6 dB (dBA) for each doubling of distance from a stationary or point source (FHWA 2017). Sound from a line source, such as a highway, propagates outward in a cylindrical pattern, often referred to as cylindrical spreading. Sound levels attenuate at a rate of approximately three dB for each doubling of distance from a line source, such as a roadway, depending on ground surface characteristics (Federal Highway Administration [FHWA] 2017). No excess attenuation is assumed for hard surfaces like a parking lot or a body of water. Soft surfaces, such as soft dirt or grass, can absorb sound, so an excess ground-attenuation value of 1.5 dB per doubling of distance is normally assumed. For line sources, an overall attenuation rate of three dB per doubling of distance is assumed (FHWA 2011).

Noise levels may also be reduced by intervening structures; generally, a single row of detached buildings between the receptor and the noise source reduces the noise level by about five dBA (FHWA 2006), while a solid wall or berm generally reduces noise levels by 10 to 20 dBA (FHWA 2011). However, noise barriers or enclosures specifically designed to reduce site-specific construction noise can provide a sound reduction 35 dBA or greater (Western Electro-Acoustic Laboratory, Inc. 2000). To achieve the most potent noise-reducing effect, a noise enclosure/barrier must physically fit in the available space, must completely break the “line of sight” between the noise source and the receptors, must be free of degrading holes or gaps, and must not be flanked by nearby reflective surfaces. Noise barriers must be sizable enough to cover the entire noise source and extend lengthwise and vertically as far as feasibly possible to be most effective. The limiting factor for a noise barrier is not the component of noise transmitted through the material, but rather the amount of noise flanking around and over the barrier. In general, barriers contribute to decreasing noise levels only when the structure breaks the "line of sight" between the source and the receiver.

The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows (California Department of Transportation [Caltrans] 2002). The exterior-to-interior reduction of newer residential units is generally 30 dBA or more (Harris Miller, Miller & Hanson Inc. 2006). Generally, in exterior noise environments ranging from 60 dBA Community Noise Equivalent Level (CNEL) to 65 dBA CNEL, interior noise levels can typically be maintained below 45 dBA, a typically residential interior noise standard, with the incorporation of an adequate forced air mechanical ventilation system in each residential building, and standard thermal-pane residential windows/doors with a minimum rating of Sound Transmission Class (STC) 28. (STC is an integer rating of how well a building partition attenuates airborne sound. In the U.S., it is widely used to rate interior partitions, ceilings, floors, doors, windows, and exterior wall configurations.) In exterior noise environments of 65 dBA CNEL or greater, a combination of forced-air mechanical ventilation and sound-rated construction methods is often required to meet the interior noise level limit. Attaining the necessary noise reduction from exterior to interior spaces is readily achievable in noise environments less than 75 dBA CNEL with proper wall construction techniques following California Building Code methods, the selections of proper windows and doors, and the incorporation of forced-air mechanical ventilation systems.

2.1.3 Noise Descriptors

The decibel scale alone does not adequately characterize how humans perceive noise. The dominant frequencies of a sound have a substantial effect on the human response to that sound. Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The noise descriptors most often encountered when dealing with traffic, community, and environmental noise include the average hourly noise level (in L_{eq}) and the average daily noise levels/community noise equivalent level (in L_{dn}/CNEL). The L_{eq} is a measure of ambient noise, while the L_{dn} and CNEL are measures of community noise. Each is applicable to this analysis and defined as follows:

- **Equivalent Noise Level (L_{eq})** is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- **Day-Night Average (L_{dn})** is a 24-hour average L_{eq} with a 10-dBA "weighting" added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.
- **Community Noise Equivalent Level (CNEL)** is a 24-hour average L_{eq} with a 5-dBA weighting during the hours of 7:00 pm to 10:00 pm and a 10-dBA weighting added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the evening and nighttime, respectively.

Table 2-1 provides a list of other common acoustical descriptors.

Table 2-1. Common Acoustical Descriptors

Descriptor	Definition
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.
Sound Pressure Level	Sound pressure is the sound force per unit area, usually expressed in micropascals (or 20 micronewtons per square meter), where 1 pascal is the pressure resulting from a force of 1 newton exerted over an area of 1 square meter. The sound pressure level is expressed in decibels as 20 times the logarithm to the base 10 of the ratio between the pressures exerted by the sound to a reference sound pressure (e.g., 20 micropascals). Sound pressure level is the quantity that is directly measured by a sound level meter.
Frequency, Hz	The number of complete pressure fluctuations per second above and below atmospheric pressure. Normal human hearing is between 20 Hz and 20,000 Hz. Infrasonic sound are below 20 Hz and ultrasonic sounds are above 20,000 Hz.
A-Weighted Sound Level, dBA	The sound pressure level in decibels as measured on a sound level meter using the A weighting filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Equivalent Noise Level, L_{eq}	The average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
L_{max}, L_{min}	The maximum and minimum A-weighted noise level during the measurement period.
L_{01}, L_{10}, L_{50}, L_{90}	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% of the time during the measurement period.
Day/Night Noise Level, L_{dn} or DNL	A 24-hour average L_{eq} with a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.
Community Noise Equivalent Level, CNEL	A 24-hour average L_{eq} with a 5 dBA "weighting" during the hours of 7:00 p.m. to 10:00 p.m. and a 10 dBA "weighting" added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.7 dBA CNEL.
Ambient Noise Level	The composite of noise from all sources near and far. The normal or existing level of environmental noise at a given location.
Decibel, dB	A unit describing the amplitude of sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure. The reference pressure for air is 20.

The A weighted decibel sound level scale gives greater weight to the frequencies of sound to which the human ear is most sensitive. Because sound levels can vary markedly over a short period of time, a method

for describing either the average character of the sound or the statistical behavior of the variations must be utilized. Most commonly, environmental sounds are described in terms of an average level that has the same acoustical energy as the summation of all the time-varying events.

The scientific instrument used to measure noise is the sound level meter. Sound level meters can accurately measure environmental noise levels to within about ±1 dBA. Various computer models are used to predict environmental noise levels from sources, such as roadways and airports. The accuracy of the predicted models depends on the distance between the receptor and the noise source. Close to the noise source, the models are accurate to within about ±1 to 2 dBA.

2.1.4 Human Response to Noise

The human response to environmental noise is subjective and varies considerably from individual to individual. Noise in the community has often been cited as a health problem, not in terms of actual physiological damage, such as hearing impairment, but in terms of inhibiting general well-being and contributing to undue stress and annoyance. The health effects of noise in the community arise from interference with human activities, including sleep, speech, recreation, and tasks that demand concentration or coordination. Hearing loss can occur at the highest noise intensity levels.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day or night or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60 to 70 dBA range, and high above 70 dBA. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet, suburban, residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate-level noise environments are urban residential or semi-commercial areas (typically 55 to 60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with noisier urban residential or residential-commercial areas (60 to 75 dBA) or dense urban or industrial areas (65 to 80 dBA). Regarding increases in A-weighted noise levels (dBA), the following relationships should be noted in understanding this analysis:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived by humans.
- Outside of the laboratory, a 3-dBA change is considered a just-perceivable difference.
- A change in level of at least 5 dBA is required before any noticeable change in community response would be expected. An increase of 5 dBA is typically considered substantial.
- A 10-dBA change is subjectively heard as an approximate doubling in loudness and would almost certainly cause an adverse change in community response.

2.1.5 Effects of Noise on People

2.1.5.1 Hearing Loss

While physical damage to the ear from an intense noise impulse is rare, a degradation of auditory acuity can occur even within a community noise environment. Hearing loss occurs mainly due to chronic exposure to excessive noise but may be due to a single event such as an explosion. Natural hearing loss associated with aging may also be accelerated from chronic exposure to loud noise.

The Occupational Safety and Health Administration (OSHA) has a noise exposure standard that is set at the noise threshold where hearing loss may occur from long-term exposures. The maximum allowable level is 90 dBA averaged over eight hours. If the noise is above 90 dBA, the allowable exposure time is correspondingly shorter.

2.1.5.2 Annoyance

Attitude surveys are used for measuring the annoyance felt in a community for noises intruding into homes or affecting outdoor activity areas. In these surveys, it was determined that causes for annoyance include interference with speech, radio and television, house vibrations, and interference with sleep and rest. The L_{dn} as a measure of noise has been found to provide a valid correlation of noise level and the percentage of people annoyed. People have been asked to judge the annoyance caused by aircraft noise and ground transportation noise. There continues to be disagreement about the relative annoyance of these different sources.

2.2 Fundamentals of Environmental Groundborne Vibration

2.2.1 Vibration Sources and Characteristics

Sources of earthborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) or manmade causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous (e.g., factory machinery) or transient (e.g., explosions).

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. Several different methods are typically used to quantify vibration amplitude. One is the peak particle velocity (PPV); another is the root mean square (RMS) velocity. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. The RMS velocity is defined as the average of the squared amplitude of the signal. The PPV and RMS vibration velocity amplitudes are used to evaluate human response to vibration.

PPV is generally accepted as the most appropriate descriptor for evaluating the potential for building damage. For human response, however, an average vibration amplitude is more appropriate because it takes time for the human body to respond to the excitation (the human body responds to an average vibration amplitude, not a peak amplitude). Because the average particle velocity over time is zero, the RMS amplitude is typically used to assess human response. The RMS value is the average of the amplitude squared over time, typically a 1- sec. period (FTA 2018).

Table 2-2 displays the reactions of people and the effects on buildings produced by continuous vibration levels. The annoyance levels shown in the table should be interpreted with care since vibration may be found to be annoying at much lower levels than those listed, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying. Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors, or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high-noise environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Ground vibration can be a concern in instances where buildings shake, and substantial rumblings occur. However, it is unusual for vibration from typical urban sources such as buses and heavy trucks to be perceptible. For instance, heavy-duty trucks generally generate groundborne vibration velocity levels of 0.006 PPV at 50 feet under typical circumstances, which as identified in Table 2-2 is considered very unlikely to cause damage to buildings of any type. Common sources for groundborne vibration are planes, trains, and construction activities such as earth-moving which requires the use of heavy-duty earth moving equipment.

Table 2-2. Human Reaction and Damage to Buildings for Continuous or Frequent Intermittent Vibration Levels

Peak Particle Velocity (inches/second)	Approximate Vibration Velocity Level (VdB)	Human Reaction	Effect on Buildings
0.006–0.019	64–74	Range of threshold of perception	Vibrations unlikely to cause damage of any type
0.08	87	Vibrations readily perceptible	Recommended upper level to which ruins and ancient monuments should be subjected
0.1	92	Level at which continuous vibrations may begin to annoy people, particularly those involved in vibration sensitive activities	Virtually no risk of architectural damage to normal buildings
0.2	94	Vibrations may begin to annoy people in buildings	Threshold at which there is a risk of architectural damage to normal dwellings
0.4–0.6	98–104	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges	Architectural damage and possibly minor structural damage

Source: Caltrans 2020b

3.0 EXISTING ENVIRONMENTAL NOISE SETTING

3.1 Noise Sensitive Land Uses

Noise-sensitive land uses are generally considered to include those uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels. Additional land uses such as hospitals, historic sites, cemeteries, and certain recreation areas are considered sensitive to increases in exterior noise levels. Schools, churches, hotels, libraries, and other places where low interior noise levels are essential are also considered noise-sensitive land uses.

The nearest existing noise sensitive receptors to the Project Site are single-family residences approximately 49 feet from the Project's northeastern boundary, fronting El Caprice Drive. Furthermore, there are several residential apartments on Bettencourt Lane and La Loma Drive that are along the Project's Site's north and western boundaries, with the closest location being 56 feet distant.

3.1.1 Existing Ambient Noise Measurements

The Project Site is currently undeveloped land surrounded mainly by residential and commercial land uses. In order to quantify existing ambient noise levels in the Project Area, ECORP Consulting, Inc. conducted three short-term noise measurements (15-minutes) in the surrounding areas and one long-term noise measurement (24 hours) on the Project Site on April 11th, 2023. The 15-minute measurements were taken between 10:54 a.m. and 11:54 a.m. on April 11th and are representative of typical existing noise exposure within and immediately adjacent to the Project Site during the daytime. The long-term measurement was taken from 12:28 p.m. on April 11th to 12:28 p.m. on April 12th. This 24-hour noise measurement is representative of typical existing noise exposure on the Project Site during a typical 24-hour day. The average noise levels of noise measured at each location are listed in Table 3-1.

Table 3-1. Existing (Baseline) Noise Measurements						
Location Number	**Location**	**L_{eq} dBA**	**L_{dn} dBA**	**L_{min} dBA**	**L_{max} dBA**	**Time**
Short Term Measurements						
1	End of cul-de-sac of White Rock Road adjacent to Aspen Grove Mobile Home Park	**54.0**	N/A	50.3	68.2	10:54 a.m. – 11:09 a.m.
2	On La Verta Court adjacent to the Ashbury Court Apartments	**47.9**	N/A	39.7	62.9	11:39 a.m. – 11:54 a.m.
3	On La Loma Drive behind the Project Site adjacent to the Meadows Apartments	**61.8**	N/A	44.9	74.4	11:16 a.m. – 11:31 a.m.
4	North end of Project Site	57.1	**60.9**	38.3	83.2	12:28 p.m. – 12:28 p.m.

Source: Measurements were taken by ECORP with a Larson Davis SoundExpert LxT precision sound level meter, which satisfies the American National Standards Institute for general environmental noise measurement instrumentation. Prior to the measurements, the SoundExpert LxT sound level meter was calibrated according to manufacturer specifications with a Larson Davis CAL200 Class I Calibrator. See Attachment A for noise measurement outputs.

Notes: L_{eq} is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. L_{min} is the minimum noise level during the measurement period and L_{max} is the maximum noise level during the measurement period.

As shown in Table 3-1, the ambient recorded noise levels range from 47.9 to 61.8 dBA L_{eq} over the course of the three short-term noise measurements taken in the Project vicinity. The ambient noise levels recorded by the long-term measurement indicate that the Project currently experiences a noise level of 60.9 dBA L_{dn}. The most common noise in the Project vicinity is produced by automotive vehicles (e.g., cars, trucks, buses, motorcycles) on Folsom Boulevard, noise from light rail train activity, and noises from residential activity.

3.1.1 Existing Roadway Noise Levels

Existing roadway noise levels were calculated for the roadway segments in the Project vicinity. This task was accomplished using the FHWA Highway Traffic Noise Prediction Model (FHWA-RD-77-108) (see Attachment B) and traffic volumes from the Mills Crossing Local Traffic Analysis (DKS Associates 2023). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) used in the FHWA model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data shows that California automobile noise is 0.8 to 1.0 dBA higher than national levels and

that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along these roadway segments are presented in Table 3-2.

Table 3-2. Existing Roadway Noise Levels

Roadway Segment	Surrounding Uses	L_{dn} at 100 feet from Centerline of Roadway
Folsom Boulevard		
West of Mather Field Road	Commercial	**64.1**
East of Mather Field Road	Commercial	**65.7**
Between La Loma Drive and Paseo Drive	Commercial	**64.1**
Routier Road		
South of Folsom Boulevard	Residential	**59.1**
La Loma Drive		
North of Folsom Boulevard	Commercial and Residential	**51.9**
Paseo Drive		
North of Folsom Boulevard	Commercial and Residential	**50.7**
Mather Field Road		
South of Folsom Boulevard	Commercial and Residential	**65.5**

Source: Traffic noise levels were calculated by ECORP using the FHWA roadway noise prediction model in conjunction with the trip generation rate identified by DKS Associates (2023). The most relevant roadway segments were chosen by DKS Associates. Refer to Attachment B for traffic noise modeling assumptions and results.

As shown, the existing traffic-generated noise level on Project-vicinity roadways currently ranges from 50.7 to 65.7 dBA L_{dn} at a distance of 100 feet from the centerline. As previously described, L_{dn} is a 24-hour average L_{eq} with a 10-dBA "weighting" added to noise during the hours of 10:00 pm to 7:00 am to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}. It should be noted that the modeled noise levels depicted in Table 3-2 may differ from measured levels in Table 3-1 because the measurements represent noise levels at different locations around the Project Area and are also reported in different noise metrics (e.g., noise measurements are the L_{eq} values and traffic noise levels are reported in L_{dn}).

4.0 REGULATORY FRAMEWORK

4.1 Federal

4.1.1 Occupational Safety and Health Act of 1970

OSHA regulates onsite noise levels and protects workers from occupational noise exposure. To protect hearing, worker noise exposure is limited to 90 decibels with A-weighting (dBA) over an eight-hour work shift (29 Code of Regulations 1910.95). Employers are required to develop a hearing conservation program when employees are exposed to noise levels exceeding 85 dBA. These programs include provision of hearing protection devices and testing employees for hearing loss on a periodic basis.

4.1.2 National Institute of Occupational Safety and Health

A division of the US Department of Health and Human Services, the National Institute for Occupational Safety and Health (NIOSH) has established a construction-related noise level threshold as identified in the Criteria for a Recommended Standard: Occupational Noise Exposure prepared in 1998. NIOSH identifies a noise level threshold based on the duration of exposure to the source. The NIOSH construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. The intention of these thresholds is to protect people from hearing losses resulting from occupational noise exposure.

4.1.3 Federal Interagency Committee on Noise (FICON)

The FICON thresholds of significance assist in the evaluation of increased traffic noise. The 2000 FICON findings provide guidance as to the significance of changes in ambient noise levels due to transportation noise sources. FICON recommendations are based on studies that relate aircraft and traffic noise levels to the percentage of persons highly annoyed by the noise. FICON's measure of substantial increase for transportation noise exposure is as follows:

- If the existing ambient noise levels at existing and future noise-sensitive land uses (e.g. residential, etc.) are less than 60 dBA L_{dn} and the project creates a readily perceptible 5 dBA L_{dn} or greater noise level increase and the resulting noise level would exceed acceptable exterior noise standards;
  or
- If the existing noise levels range from 60 to 65 dBA L_{dn} and the project creates a barely perceptible 3 dBA L_{dn} or greater noise level increase and the resulting noise level would exceed acceptable exterior noise standards;
  or
- If the existing noise levels already exceed 65 dBA L_{dn} and the project creates a community noise level increase of greater than 1.5 dBA L_{dn}.

4.2 State

4.2.1 State of California General Plan Guidelines

The State of California regulates vehicular and freeway noise affecting classrooms, sets standards for sound transmission and occupational noise control, and identifies noise insulation standards and airport noise/land-use compatibility criteria. The State of California General Plan Guidelines (State of California 2003), published by the Governor's Office of Planning and Research (OPR), also provides guidance for the acceptability of projects within specific CNEL/L_{dn} contours. The guidelines also present adjustment factors that may be used in order to arrive at noise acceptability standards that reflect the noise control goals of the community, the particular community's sensitivity to noise, and the community's assessment of the relative importance of noise pollution.

4.2.2 State Office of Planning and Research Noise Element Guidelines

The State OPR Noise Element Guidelines include recommended exterior and interior noise level standards for local jurisdictions to identify and prevent the creation of incompatible land uses due to noise. The Noise Element Guidelines contain a land use compatibility table that describes the compatibility of various land uses with a range of environmental noise levels in terms of the CNEL.

4.2.3 California Department of Transportation

In 2020, Caltrans published the Transportation and Construction Vibration Manual (Caltrans 2020b). The manual provides general guidance on vibration issues associated with the construction and operation of projects concerning human perception and structural damage. Table 2 presents recommendations for levels of vibration that could result in damage to structures exposed to continuous vibration.

4.3 Local

4.3.1 City of Rancho Cordova General Plan Noise Element

The Noise Element of the General Plan provides policy direction to protect its citizens and community from noise disturbances. By quantifying existing noise sources and identifying noise policies and actions, the City ensures comfortable and safe noise levels throughout the community. The main goals of the document are to improve the noise environment for its residents, employees, visitors, and other persons. The City's existing noise ordinance establishes allowable exterior and interior noise levels for affected land uses. The Noise Element notes that activities that are generally considered to be exempt from the noise standards include construction activities (provided that they occur within the daytime hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and 9:00 a.m. to 6:00 p.m. on Sunday), school athletic and entertainment events, activities conducted on public parks and playgrounds, and transportation noise. The General Plan goals and policies applicable to the Proposed Project are listed below.

- **Policy N 1.2:** Ensure that the indoor and outdoor areas of new projects will be located, constructed, and/or shielded from noise sources in compliance with the City's noise standards to the maximum extent feasible [shown below in Table 4-1].

Table 4-1. City of Rancho Cordova Noise Standards		
Land Use Category	**Outdoor Activity Areas L_{dn} [1], dB**	**Interior L_{dn} dB**
Residential	60[3]	45
Transportation Residential[2]	60[3]	40[5]
Transient lodging	60[4]	45
Hospitals, nursing homes	60[3]	45
Theaters, auditoriums, music halls	--	--
Churches, meeting halls	60[3]	--
Office buildings	--	--
Schools, libraries, museums	--	--
Playgrounds, neighborhood parks	70	--

Source: City of Rancho Cordova General Plan Noise Element 2006

Notes:

[1] Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use. Where it is not practical to mitigate exterior noise levels at patio or balconies of apartment complexes, a common area such as a pool or recreation area may be designated as the outdoor activity area.

[2] Transportation Residential applies to residence that are subject to noise from railroad tracks, aircraft overflights, or similar noise sources which produce clearly identifiable, discrete noise events (e.g., the passing of a single train).

[3] Where it is not possible to reduce noise in outdoor activity areas to 60 dB L_{dn} or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dB L_{dn} may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

[4] In the case of hotel/motel facilities or other transient lodging, outdoor activity areas such as pool areas may not be included in the project design. In these cases, only the interior noise level criterion will apply.

[5] The intent of this noise standard is to provide increased protection against sleep disturbance for residences located near railroad tracks.

- **Policy N 1.3:** Ensure that proposed non-residential land uses likely to exceed the City's standards do not create noise disturbances in existing noise-sensitive areas.
- **Policy N.1.4**: Mitigate noise created by proposed non-transportation noise sources to comply with the City's noise standards to the maximum extent feasible.
    - **Action N.1.4.1** - Limit construction activity to the hours of 7:00 a.m. to 7:00 p.m. weekdays and 8:00 a.m. to 6:00 p.m. weekends when construction is conducted in proximity to residential uses.
- **Policy N.1.7**: To the extent feasible and appropriate, the City shall require the use of temporary construction noise control measures for public and private project that may include the use of

temporary noise barriers, temporary relocation of noise-sensitive land uses or other appropriate measures.

5.0 IMPACT ASSESSMENT

5.1 Thresholds of Significance

The impact analysis provided below is based on the following California Environmental Quality Act Guidelines Appendix G thresholds of significance. The Project would result in a significant noise-related impact if it would produce:

1) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

2) Generation of excessive groundborne vibration or groundborne noise levels.

3) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

For purposes of this analysis, Project construction noise is compared to the allowable hours of construction mandated by the City as well as the NIOSH standard of 85 dBA for more than 8 hours per day, since construction work for the Proposed Project is anticipated to span a typical workday of 8 hours daily. The City does not regulate vibrations associated with construction or operations. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, Project groundborne vibration is evaluated against the Caltrans (2020b) recommended standard of 0.2 inches per second PPV.

The noise/land use compatibility associated with locating the proposed residences on the Project Site is determined by a comparison of existing noise levels against the City's noise/land use compatibility standard of 60 dBA L_{dn} for Residential and Transportation Residential land uses (shown in Table 4-1). Furthermore, noise generated by the Project's offsite transportation noise is compared to the FICON thresholds of significance in the evaluation of increased traffic noise, and the Caltrans *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (2013) that notes that a doubling of traffic on a roadway is required to result in an increase of 3 dB (outside of the laboratory, a 3-dBA change is considered a just-perceivable difference). Onsite noise generated by Project operations is compared against the City's protective standard of 60 dBA L_{dn} promulgated by the City's General Plan, which establishes exterior and interior noise levels for various land uses.

5.2 Methodology

This analysis of the existing and future noise environments is based on noise-prediction modeling. In order to estimate the worst-case construction noise levels that may occur at the nearest noise-sensitive receptors in the Project vicinity, predicted construction noise levels were calculated utilizing the FHWA's Roadway Construction Noise Model (2006). Groundborne vibration levels associated with construction-related activities for the Project were evaluated utilizing typical groundborne vibration levels associated with construction equipment. Potential groundborne vibration impacts related to structural damage and human

annoyance were evaluated, taking into account the distance from construction activities to nearby structures and typically applied criteria for structural damage and human annoyance.

Transportation-source noise levels associated with the Project were calculated using the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108) with trip generation rates from the Mills Crossing Local Traffic Analysis (DKS Associates 2023). Onsite stationary source noise levels associated with the Project have been calculated with the SoundPLAN 3D noise model, which predicts noise propagation from a noise source based on the location, noise level, and frequency spectra of the noise sources as well as the geometry and reflective properties of the local terrain, buildings and barriers.

5.3 Impact Analysis

5.3.1 Project Construction Noise

Would the Project Result in Short-Term Construction-Generated Noise in Excess of Standards?

Onsite Construction Noise

Construction noise associated with the Proposed Project would be temporary and would vary depending on the nature of the activities being performed. Noise generated would primarily be associated with the operation of off-road equipment for onsite construction activities as well as construction vehicle traffic on area roadways. Construction noise typically occurs intermittently and varies depending on the nature or phase of construction (e.g., land clearing, grading, excavation, building construction, paving). Noise generated by construction equipment, including earth movers, material handlers, and portable generators, can reach high levels. Typical operating cycles for these types of construction equipment may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). During construction, exterior noise levels could negatively affect sensitive land uses in the vicinity of the construction site.

The nearest existing noise sensitive receptors to the Project Site are several residences on the northern boundary of the Project Site, approximately 49 feet distant at the nearest. As previously mentioned, construction is exempt from the noise standards, provided that the construction occurs between the daytime hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and 9:00 a.m. to 6:00 p.m. on Sunday. Outside of the provided time frames where construction is exempt, construction activities are subject to the City's noise standards. Furthermore, City General Plan Noise Element Action N.1.4.1 limits construction activity to the hours of 7:00 a.m. to 7:00 p.m. weekdays and 8:00 a.m. to 6:00 p.m. weekends when construction is conducted in proximity to residential uses. The Project Site is located in proximity to existing residential land uses and is therefore required to adhere to the construction timing limitations established by Noise Element Action N.1.4.1 (7:00 a.m. to 7:00 p.m. weekdays and 8:00 a.m. to 6:00 p.m. weekends). However, in order to be considered exempt from City noise standards Project construction must be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and 9:00 a.m. to 6:00 p.m. on Sunday.

Outside of the provided time frames where construction is exempt, construction activities are subject to the City's noise standards. As shown in Table 5-1 below, Project construction noise would surpass the City's protective standard of 60 dBA and therefore must be limited to the hours of 7:00 a.m. to 6:00 p.m., Monday through Saturday, and 9:00 a.m. to 6:00 p.m. on Sunday in order to be considered a less than significant impact.

To estimate the worst-case onsite construction noise levels that may occur at the nearest noise-sensitive receptor and in order to evaluate the potential health-related effects (physical damage to the ear, psychological effects) from construction noise, the construction equipment noise levels were calculated using the Roadway Noise Construction Model and compared against the construction-related noise level threshold established in the Criteria for a Recommended Standard: Occupational Noise Exposure prepared in 1998 by National Institute for Occupational Safety and Health (NIOSH). A division of the US Department of Health and Human Services, NIOSH identifies a noise level threshold based on the duration of exposure to the source. The NIOSH construction-related noise level threshold starts at 85 dBA for more than 8 hours per day; for every 3-dBA increase, the exposure time is cut in half. This reduction results in noise level thresholds of 88 dBA for more than 4 hours per day, 92 dBA for more than 1 hour per day, 96 dBA for more than 30 minutes per day, and up to 100 dBA for more than 15 minutes per day. For the purposes of this analysis, the lowest, more conservative threshold of 85 dBA L_{eq} is used as an acceptable threshold for construction noise at the nearby sensitive receptors.

It is acknowledged that the majority of construction equipment is not situated at any one location during construction activities, but rather spread throughout the Project Site and at various distances from sensitive receptors. Therefore, this analysis employs the Federal Transit Administration (FTA) guidance for calculating construction noise, which recommends measuring construction noise produced by all construction equipment from the center of the Project Site (FTA 2018), which in this case is approximately 341 feet from the closest residence on Bettencourt Lane. The anticipated short-term construction noise levels generated for the necessary equipment for each phase of construction are presented in Table 5-1.

Table 5-1. Construction Average (dBA) Noise Levels at Nearest Receptors			
Construction Phase	**Estimated Exterior Construction Noise Level at Nearest Sensitive Receptor (dBA L_{eq})**	**Construction Noise Standards (dBA L_{eq})**	**Exceeds Standards?**
Pavement Excavation	69.8	*85*	**No**
Site Preparation	70.9	*85*	**No**
Grading	70.1	*85*	**No**
Building Construction, Paving and Painting	73.8	*85*	**No**

Source: Construction noise levels were calculated by ECORP Consulting using the FHWA Roadway Noise Construction Model (FHWA 2006). Refer to Attachment C for Model Data Outputs.

Notes: Construction equipment used during construction derived from the California Emissions Estimator Model (CalEEMod) version 2022.1. CalEEMod is designed to calculate air pollutant emissions from construction activity and contains default construction equipment and usage parameters for typical construction projects based on several construction surveys conducted in order to identify such parameters. Consistent with FTA recommendations for calculating construction noise, construction noise was measured from the center of the Project Site (FTA 2018), which is 341 feet from the nearest residence. Construction, paving and painting are assumed to occur simultaneously.

L_{eq} = The equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.

As shown in Table 5-1, construction activities would not exceed the 85 dBA NIOSH construction noise threshold during any phase of construction at the nearby noise-sensitive receptors. It is noted that construction noise was modeled on a worst-case basis. It is very unlikely that all pieces of construction equipment would be operating at the same time for the various phases of Project construction as well as at the point closest to residences.

Offsite Construction Worker Traffic Noise

Project construction would result in additional traffic on adjacent roadways over the period that construction occurs. According to the California Emissions Estimator Model, which is used to predict the maximum number of construction related vehicle trips traveling to and from the Project Site, the maximum number of construction related trips traveling to and from the Project Site during a single construction phase would not be expected to exceed 298 trips in total (241 construction worker commute trips and 57 vendor trips). According to Caltrans' *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (2013), doubling of traffic on a roadway is required to result in an increase of 3 dB (outside of the laboratory, a 3-dBA change is considered a just-perceivable difference). During construction, the Project Site would be accessible from Folsom Boulevard. According to analysis done in conjunction with the Project's Traffic Report from DKS Associates (2023), the portion of Folsom Boulevard between Mather Field Road and La Loma Drive, which includes the Project Site, currently accommodates approximately 19,136 average daily trips (ADT). Thus, the Project construction would not result in a doubling of traffic, and therefore its contribution to existing traffic noise would not be perceptible. Additionally, it is noted that construction is temporary, and these trips would cease upon completion of the Project.

5.3.2 Project Operational Noise

Would the Project Result in a Substantial Permanent Increase in Ambient Noise Levels in Excess of City Standards During Operations?

As previously described, noise-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise-sensitive and may warrant unique measures for protection from intruding noise. The nearest existing noise sensitive receptors to the Project Site are several residences on the northern boundary of the Project Site, approximately 49 feet away at the nearest.

The Project proposes the construction of a community center with a health and wellness center, a parking structure, arts center and theater, a multifamily and single-family housing development, commercial and retail businesses, and community and event centers. Operational noise sources associated with the Proposed Project include mobile and stationary (i.e., people talking, car door opening and closing, parking garage noise, park activities, the unloading of trucks, typical neighborhood noise, and internal circulation) sources.

Project Land Use Compatibility

The City's General Plan establishes the use of exterior and interior noise standards as seen in Table 4-1 above. The City's noise level standards are applicable to new projects and act as a tool to gauge the compatibility of new land uses relative to existing noise levels. Table 4-1 identifies the exterior noise levels standards for various land uses, including residential, meeting hall, and community park uses such as those proposed by the Project. In the case that the noise levels identified at the Proposed Project Site fall below the protective noise limits presented in the General Plan, the Project is considered compatible with the existing noise environment. As previously stated, the Project is proposing the construction of a community center with a health and wellness center, a parking structure, arts center and theater, a multifamily and single-family housing development, commercial and retail businesses, and community and event centers.

The long-term noise measurement taken by ECORP Consulting Inc. on April 11th to April 12th, 2023, can be used to quantify existing ambient noise levels in the Project Area. The ambient noise levels recorded by the long-term measurement indicate that the Project Site currently experiences a noise level of 60.9 dBA L_{dn}. According to the City's noise level standards table, presented in Table 4-1, this noise level falls above the exterior noise standard for residential and meeting hall land uses (60 dBA). However, as noted in the General Plan, where it is not possible to reduce noise in outdoor activity areas to 60 dBA L_{dn} or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 65 dBA L_{dn} may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with the standards identified in Table 4-1. As such, the Project Site currently experiences an ambient noise level of 60.9 dBA L_{dn}, which is just over the exterior noise standard of 60 dBA L_{dn} for residential and meeting hall land uses, yet below the maximum standard of 65 dBA L_{dn} when the application of the best-available noise reduction measures is implemented.

The maximum standard of 65 dBA L_{dn}, to be applied to Projects that employ the best-available noise reduction measures, is appropriate for the Proposed Project. According to the Project's Site Plans, the Project's design and layout would reduce offsite transportation noise sources at the proposed noise-sensitive residential land uses. Specifically, the community commercial, art center, event center, and health and wellness buildings would be located on the southern portion of the Project Site directly fronting Folsom Boulevard, while the northern portion of the Site, farthest from Folsom Boulevard, would accommodate the residential component. As such, the layout of the Proposed Project's nonresidential buildings would effectively shield the residential receptors from offsite traffic noise occurring on Folsom Boulevard. According to the FHWA (2006), when a receiver is shielded from a noise source with a barrier (such as a building) with some gaps it experiences a 5 dBA noise reduction from the source. Thus, the residents located on the northern portion of the Project Site would have an approximate 5 dBA reduction from the traffic noise on Folsom Boulevard due to the positioning of the other proposed nonresidential buildings on Site. This would result in an exterior ambient noise level of approximately 55.9 dBA L_{dn}, which would be under the City's exterior standard for residences. Thus, the Project Site design of placing the proposed nonresidential buildings between the predominate source of noise in the Project Area, Folsom Boulevard, and the proposed noise-sensitive residential buildings represents the best-available noise reduction measure to reduce noise on the Project Site. Furthermore, the exterior-to-interior reduction of newer residential units is generally 30 dBA or more (Harris Miller, Miller & Hanson Inc. 2006). With this reduction, the exterior to interior noise environment would be reduced so that interior noise levels would be maintained below the City's protective interior standards of 45 dBA. For these reasons, the Project complies with the City's noise/land use compatibility standards.

Operational Offsite Traffic Noise

Future traffic noise levels throughout the Project vicinity for the Proposed Project were modeled based on the traffic volumes identified by DKS Associates (2023) to determine the noise levels along Project vicinity roadways. Table 5-2 shows the calculated offsite roadway noise levels with traffic levels during existing levels and the projected levels of project buildout. The City of Rancho Cordova does not regulate noise from transportation sources and does not have noise standards for such sources. As such, the thresholds recommended by FICON will be used in this analysis.

- If the existing ambient noise levels at existing and future noise-sensitive land uses (e.g. residential, etc.) are less than 60 dBA L_{dn} and the project creates a readily perceptible 5 dBA L_{dn} or greater noise level increase and the resulting noise level would exceed acceptable exterior noise standards;
  or
- If the existing noise levels range from 60 to 65 dBA L_{dn} and the project creates a barely perceptible 3 dBA L_{dn} or greater noise level increase and the resulting noise level would exceed acceptable exterior noise standards;
  or
- If the existing noise levels already exceed 65 dBA L_{dn} and the project creates a community noise level increase of greater than 1.5 dBA L_{dn}.

Table 5-2. Proposed Project Predicted Traffic Noise Levels

Roadway Segment	Surrounding Uses	L_{dn} at 100 feet from Centerline of Roadway		Change	FICON's Standard	Exceed Standard?
		Existing	Existing + Project			
Folsom Boulevard						
West of Mather Field Road	Commercial	64.1	64.5	+0.4	*>3*	**No**
East of Mather Field Road	Commercial	65.7	65.9	+0.2	*>1.5*	**No**
Between La Loma Drive and Paseo Drive	Commercial	64.1	64.5	+0.4	*>3*	**No**
Routier Road						
South of Folsom Boulevard	Commercial & Residential	59.1	59.4	+0.3	*>5*	**No**
La Loma Drive						
North of Folsom Boulevard	Commercial & Residential	51.9	54.7	+2.8	*>5*	**No**
Paseo Drive						
North of Folsom Boulevard	Commercial & Residential	50.7	52.6	+1.9	*>5*	**No**
Mather Field Road						
South of Folsom Boulevard	Commercial & Residential	65.5	65.8	+0.3	*>1.5*	**No**

Source: Traffic noise levels were calculated by ECORP using the FHWA roadway noise prediction model in conjunction with the trip generation rate identified by DKS Associates (2023). The most relevant roadway segments were chosen by DKS Associates. Refer to Attachment B for traffic noise modeling assumptions and results.

As shown in Table 5-2, none of the Project vicinity roadway segments would experience an increase of traffic noise in excess of the FICON standards.

Operational Onsite Stationary Noise

The Project is proposing the construction of a community center with a health and wellness center, a parking structure, arts center and theater, a multifamily and single-family housing development, commercial and retail businesses, and community and event centers. The main stationary operational noise associated with the Project would include internal circulation/ parking lot activity at the commercial buildings (i.e., people

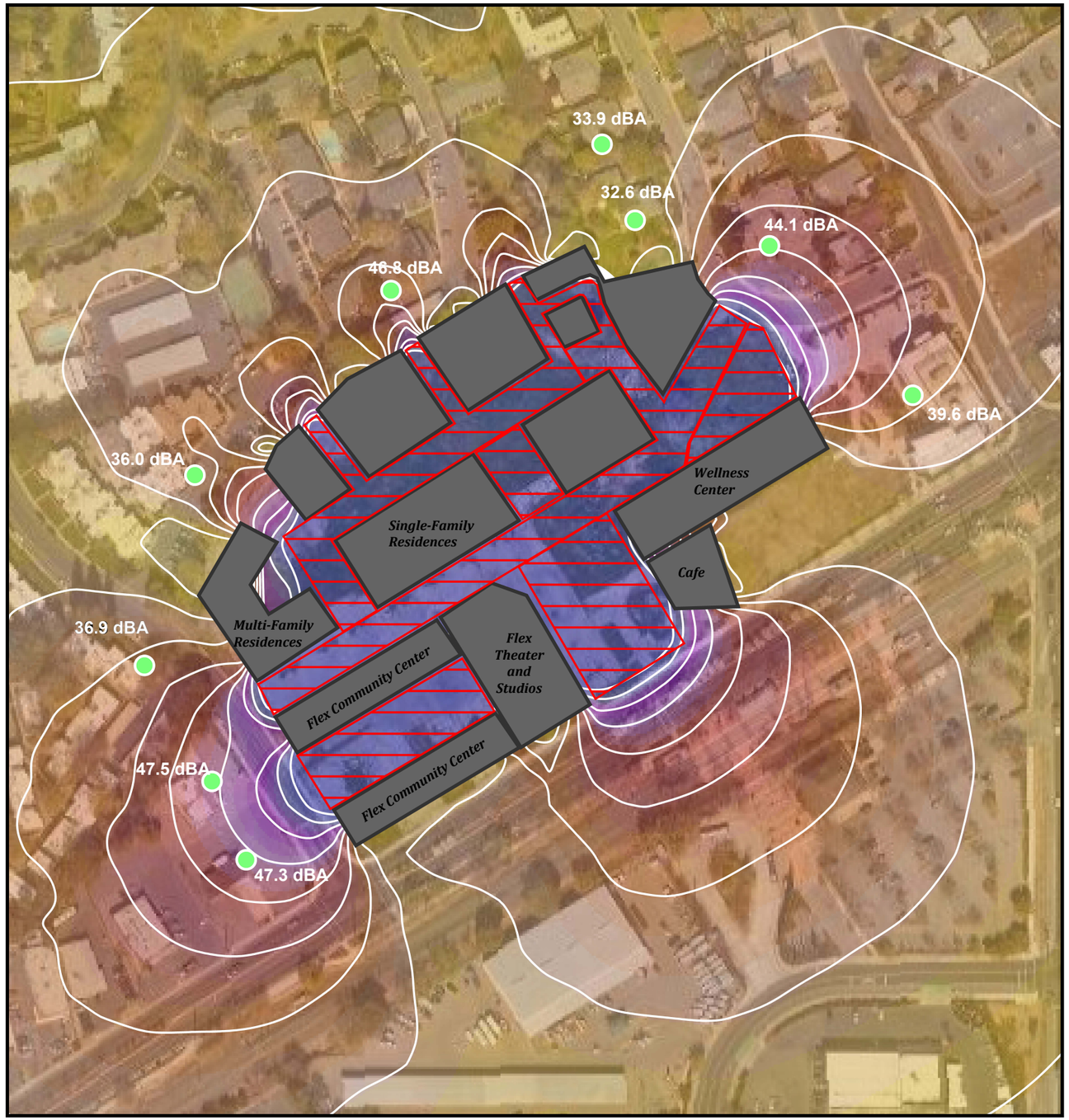
talking, car door opening and closing, and car stereos). Noise associated with residential neighborhoods is quieter than commercial uses and includes activities such as internal circulation, dogs barking, lawnmowers, and other mechanical equipment). Onsite Project operations have been calculated using the SoundPLAN 3D noise model. The modeling scenario includes the features of the Proposed Project, namely the parking lots, community commercial and art center buildings, residential units, and recreational/park plaza. Reference sound power measurements used to inform the 3D noise model representing the parking areas, single-family housing, mixed used developments, and residential parks were previously recorded by ECORP Consulting. The results of the SoundPLAN model can be found in Attachment D.

The City has established noise exterior standards for various land uses, shown in Table 4-1 above. The standard for residential receptors is under 60 dBA. Table 5-3 shows the predicted Project noise levels at nine locations in the Project vicinity, as predicted by SoundPLAN. These locations represent the closest residential and commercial land uses to the Project Site. Additionally, a noise contour graphic (see Figure 5-1) has been prepared to provide a visual depiction of the predicted noise levels in the Project vicinity from Project operations.

Table 5-3. Operational Noise Levels			
Location	**Operational Noise Attributed to Project (dBA)**	**City Exterior Noise Standard (dBA)**	**Exceed Standard?**
#1 Apartments on Bettencourt Lane	40.4 dBA	*60*	**No**
#2 Apartments on La Loma Drive	39.6 dBA	*60*	**No**
#3 Apartments on La Loma Drive	36.0 dBA	*60*	**No**
#4 Auto Repair Shop on La Loma Drive	47.3 dBA	*60*	**No**
#5 Folsom Lake College	39.4 dBA	*60*	**No**
#6 Medical Clinic	47.5 dBA	*60*	**No**
#7 Residence on El Caprice Drive	44.1 dBA	*60*	**No**
#8 Residence on El Caprice Drive	32.6 dBA	*60*	**No**
#9 Residence on El Caprice Drive	33.9 dBA	*60*	**No**

Source: Stationary source noise levels were modeled by ECORP Consulting using SoundPLAN 3D noise model. Refer to Attachment D for noise modeling assumptions and results.

As shown in Table 5-3, the operational noise levels as a result of operational activities on the Project Site would not exceed the City's noise standards (shown in Table 4-1) for the existing residential uses west and south of the Project Site. Furthermore, it is noted that the modeled noise levels identified are a worst-case scenario. All noise producing sources on the Project Site were modeled for noise as if occurring at the same time and at the highest activity level to produce noise levels at the level as those predicted. Not all activities taking place on the Project Site would generate as much noise as predicted.



Mills Crossing Noise Activity

Project Noise
in dB(A)

	>= 64
	61 - 64
	58 - 61
	55 - 58
	52 - 55
	49 - 52
	46 - 49
	43 - 46
	40 - 43
	< 40

Legend
- Area Sources
- Proposed Buildings
- Receiver

N

Scale 1:199
0 50 100

Map Date: *6/27/2023*
Photo (or Base) Source: *SoundPLAN*

ECORP Consulting, Inc.
ENVIRONMENTAL CONSULTANTS

Figure 5-1 SoundPLAN Noise Contour

2023-009 Mills Crossing Project

5.3.3 Project Groundborne Vibration

Would the Project Expose Structures to Substantial Groundborne Vibration During Construction?

Excessive groundborne vibration impacts result from continuously occurring vibration levels. Increases in groundborne vibration levels attributable to the Project would be primarily associated with short-term construction-related activities. Construction on the Project Site would have the potential to result in varying degrees of temporary groundborne vibration, depending on the specific construction equipment used and the operations involved. Ground vibration generated by construction equipment spreads through the ground and diminishes in magnitude with increases in distance.

Construction-related ground vibration is normally associated with impact equipment such as pile drivers, jackhammers, and the operation of some heavy-duty construction equipment, such as dozers and trucks. Vibration decreases rapidly with distance, and it is acknowledged that construction activities would occur throughout the Project Site and would not be concentrated at the point closest to sensitive receptors. Groundborne vibration levels associated with standard construction equipment at 25 feet distant are summarized in Table 5-4.

Table 5-4. Representative Vibration Source Levels for Construction Equipment

Equipment Type	Peak Particle Velocity at 25 Feet (inches per second)
Vibratory Roller	0.210
Impact Pile Driver	0.170
Large Bulldozer	0.089
Caisson Drilling	0.089
Hoe Ram	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer/Tractor	0.003

Source: FTA 2018; Caltrans 2020b

The City does not have a numeric threshold associated with construction vibrations. However, a discussion of construction vibration is included for full disclosure purposes. For comparison purposes, the Caltrans (2020b) recommended standard of 0.2 inches per second PPV with respect to the prevention of structural damage for older residential buildings is used as a threshold. This is also the level at which vibrations may begin to annoy people in buildings. Consistent with FTA recommendations for calculating vibration generated from construction equipment, construction vibration was measured from the center of the Project Site (FTA 2018). The nearest structure of concern to the construction site are residences located 341 feet from the center of the Site.

Based on the representative vibration levels presented for various construction equipment types in Table 5-4 and the construction vibration assessment methodology published by the FTA (2018), it is possible to estimate the potential Project construction vibration levels. The FTA provides the following equation:

$$[PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}]$$

Table 5-5 presents the expected Project related vibration levels at a distance of 341 feet.

Table 5-5. Onsite Construction Vibration Levels at 341 Feet

Receiver PPV Levels (in/sec)[1]						Peak Vibration	Threshold	Exceed Threshold
Impact Pile Driver	Vibratory Roller	Large Bulldozer, Caisson Drilling, & Hoe Ram	Loaded Trucks	Jack-hammer	Small Bulldozer			
0.003	0.004	0.002	0.001	0.001	0.000	**0.004**	0.2	**No**

Notes: [1]Based on the Vibration Source Levels of Construction Equipment included on Table 5-3 (FTA 2018). Distance to the nearest structure of concern is approximately 341 feet measured from Project Site center.

As shown in Table 5-5, vibration as a result of onsite construction activities on the Project Site would not exceed 0.2 PPV at the nearest structure. Thus, onsite Project construction would not exceed the recommended threshold.

Would the Project Expose Structures to Substantial Groundborne Vibration During Operations?

Project operations would not include the use of any stationary equipment that would result in excessive vibration levels. Therefore, the Project would not result in groundborne vibration impacts during operations.

5.3.4 Excess Airport Noise

Would the Project Expose People Residing or Working in the Project area to Excessive Airport Noise?

The Project Site is located approximately 2.1 miles northwest of the Mather Airport. According to the Sacramento County Department of Airports (2023), the Project Site is not located within the Mather Airport planning noise contours. The Proposed Project would not expose people residing or working on the Project Site to excess airport noise levels.

6.0 REFERENCES

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LIST OF ATTACHMENTS

Attachment A - Baseline (Existing) Noise Measurements – Project Vicinity

Attachment B – Federal Highway Noise Prediction Model (FHWA-RD-77-108) Outputs – Project Traffic Noise

Attachment C – Federal Highway Administration Roadway Construction Noise Model Outputs – Project Construction

Attachment D- SoundPLAN 3-D Noise Model Outputs – Project Onsite Noise Propagation

ATTACHMENT A

Baseline (Existing) Noise Measurements –Project Vicinity

Site Number: 1			
Recorded By: Rosey Worden			
Job Number: 2023-009			
Date: 4/11/2023			
Time: 10:54 a.m. – 11:09 a.m.			
Location: End of cul-de-sac of White Rock Road adjacent to Aspen Grove Mobile Home Park			
Source of Peak Noise: Humming from White Rock SMUD Power Station and light rail train activity			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Peak (dB)**
54.0	50.3	68.2	90.3

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Larson Davis**	**LxT SE**	**0006133**	**02/24/2021**	
	Microphone	**Larson Davis**	**377B02**	**315201**	**02/24/2021**	
	Preamp	**Larson Davis**	**PRMLxT1L**	**069947**	**02/24/2021**	
	Calibrator	**Larson Davis**	**CAL200**	**17325**	**02/25/2021**	

Weather Data			
Est.	**Duration:** 15 min		**Sky:** Clear
	Note: dBA Offset = 0.04		**Sensor Height (ft):** 4.5
	Wind Ave Speed (mph)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	6	62	30.08

Photo of Measurement Location

Measurement Report

Report Summary

Meter's File Name	LxT_Data.057.s	Computer's File Name	LxT_0006133-20230411 105411-LxT_Data.057.ldbin
Meter	LxT1 0006133	Firmware	2.404
User		Location	
Job Description			
Note			

Start Time	2023-04-11 10:54:11	Duration	0:15:00.0		
End Time	2023-04-11 11:09:11	Run Time	0:15:00.0	Pause Time	0:00:00.0
Pre-Calibration	2023-04-11 10:52:58	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA_{eq}	54.0 dB		
LAE	83.5 dB	SEA	--- dB
EA	25.1 µPa²h		
EA8	803.8 µPa²h		
EA40	4.0 mPa²h		
LZS_{peak}	90.3 dB	2023-04-11 11:07:33	
LAS_{max}	68.2 dB	2023-04-11 10:58:39	
LAS_{min}	50.3 dB	2023-04-11 11:08:16	
LA_{eq}	54.0 dB		
LC_{eq}	66.3 dB	LC_{eq} - LA_{eq}	12.3 dB
LAI_{eq}	55.4 dB	LAI_{eq} - LA_{eq}	1.4 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
54.0 dB	54.0 dB	0.0 dB

LDEN	LDay	LEve	LNight
54.0 dB	54.0 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	54.0 dB		--- dB		--- dB	
$Ls_{(max)}$	68.2 dB	2023-04-11 10:58:39	--- dB	None	--- dB	None
$LS_{(min)}$	50.3 dB	2023-04-11 11:08:16	--- dB	None	--- dB	None
$L_{Peak(max)}$	--- dB	None	--- dB	None	90.3 dB	2023-04-11 11:07:33

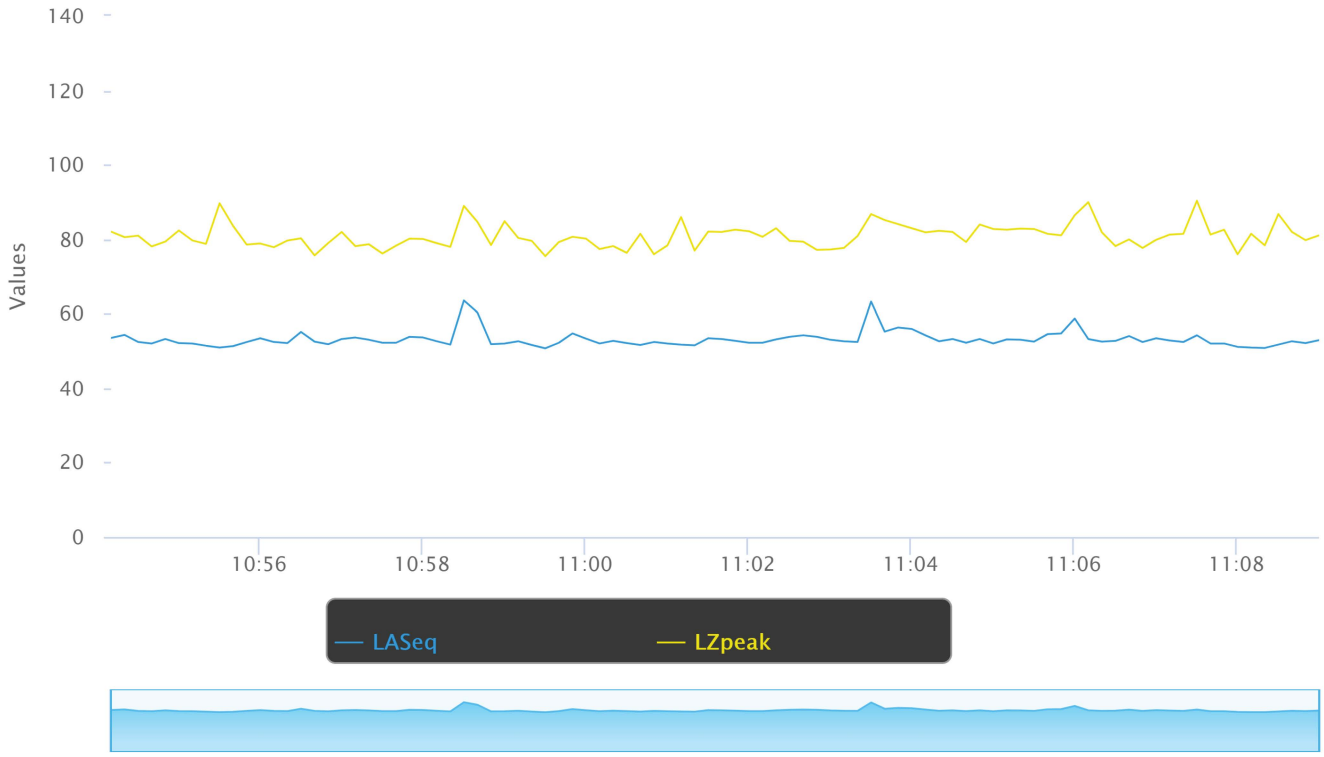
Overloads

Count	Duration
0	0:00:00.0

Statistics

LAS 5.0	56.1 dB
LAS 10.0	54.8 dB
LAS 33.3	53.1 dB
LAS 50.0	52.5 dB
LAS 66.6	52.1 dB
LAS 90.0	51.3 dB

Time History



Site Number: 2			
Recorded By: Rosey Worden			
Job Number: 2023-009			
Date: 4/11/2023			
Time: 11:39 a.m. – 11:54 a.m.			
Location: On La Verta Court adjacent to the Ashbury Court Apartments			
Source of Peak Noise: People talking and vehicles on La Verta Court			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Peak (dB)**
47.9	39.7	62.9	87.8

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Larson Davis**	**LxT SE**	**0006133**	**02/24/2021**	
	Microphone	**Larson Davis**	**377B02**	**315201**	**02/24/2021**	
	Preamp	**Larson Davis**	**PRMLxT1L**	**069947**	**02/24/2021**	
	Calibrator	**Larson Davis**	**CAL200**	**17325**	**02/25/2021**	

Weather Data			
Est.	**Duration:** 15 min		**Sky:** Clear
	Note: dBA Offset = 0.04		**Sensor Height (ft):** 4.5
	Wind Ave Speed (mph)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	6	62	30.08

Photo of Measurement Location

Measurement Report

Report Summary

Meter's File Name	LxT_Data.059.s	Computer's File Name	LxT_0006133-20230411 113946-LxT_Data.059.ldbin
Meter	LxT1 0006133	Firmware	2.404
User		Location	
Job Description			
Note			

Start Time	2023-04-11 11:39:46	Duration	0:15:00.0		
End Time	2023-04-11 11:54:46	Run Time	0:15:00.0	Pause Time	0:00:00.0
Pre-Calibration	2023-04-11 10:52:53	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA_{eq}	47.9 dB		
LAE	77.4 dB	SEA	--- dB
EA	6.2 µPa²h		
EA8	197.3 µPa²h		
EA40	986.6 µPa²h		
LZS_{peak}	87.8 dB	2023-04-11 11:53:20	
LAS_{max}	62.9 dB	2023-04-11 11:44:40	
LAS_{min}	39.7 dB	2023-04-11 11:53:13	
LA_{eq}	47.9 dB		
LC_{eq}	56.9 dB	LC_{eq} - LA_{eq}	9.0 dB
LAI_{eq}	51.1 dB	LAI_{eq} - LA_{eq}	3.2 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
47.9 dB	47.9 dB	0.0 dB

LDEN	LDay	LEve	LNight
47.9 dB	47.9 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	47.9 dB		--- dB		--- dB	
$Ls_{(max)}$	62.9 dB	2023-04-11 11:44:40	--- dB	None	--- dB	None
$LS_{(min)}$	39.7 dB	2023-04-11 11:53:13	--- dB	None	--- dB	None
$L_{Peak(max)}$	--- dB	None	--- dB	None	87.8 dB	2023-04-11 11:53:20

Overloads

Count	Duration
0	0:00:00.0

Statistics

LAS 5.0	52.5 dB
LAS 10.0	49.9 dB
LAS 33.3	46.7 dB
LAS 50.0	45.6 dB
LAS 66.6	44.5 dB
LAS 90.0	41.8 dB

Site Number: 3			
Recorded By: Rosey Worden			
Job Number: 2023-009			
Date: 4/11/2023			
Time: 11:16 a.m. – 11:31 a.m.			
Location: On La Loma Drive behind the Project Site adjacent to the Meadows Apartments			
Source of Peak Noise: Vehicles on La Loma Drive and Folsom Boulevard			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Peak (dB)**
61.8	44.9	74.4	98.8

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Larson Davis**	**LxT SE**	**0006133**	**02/24/2021**	
	Microphone	**Larson Davis**	**377B02**	**315201**	**02/24/2021**	
	Preamp	**Larson Davis**	**PRMLxT1L**	**069947**	**02/24/2021**	
	Calibrator	**Larson Davis**	**CAL200**	**17325**	**02/25/2021**	

Weather Data			
Est.	**Duration:** 15 min		**Sky:** Clear
	Note: dBA Offset = 0.04		**Sensor Height (ft):** 4.5
	Wind Ave Speed (mph)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	6	62	30.08

Photo of Measurement Location

Measurement Report

Report Summary

Meter's File Name	LxT_Data.058.s	Computer's File Name	LxT_0006133-20230411 111641-LxT_Data.058.ldbin
Meter	LxT1 0006133	Firmware	2.404
User		Location	
Job Description			
Note			

Start Time	2023-04-11 11:16:41	Duration	0:15:00.0		
End Time	2023-04-11 11:31:41	Run Time	0:15:00.0	Pause Time	0:00:00.0
Pre-Calibration	2023-04-11 10:52:53	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA_{eq}	61.8 dB		
LAE	91.3 dB	SEA	--- dB
EA	151.4 µPa²h		
EA8	4.8 mPa²h		
EA40	24.2 mPa²h		
LZS_{peak}	98.8 dB	2023-04-11 11:30:36	
LAS_{max}	74.4 dB	2023-04-11 11:30:36	
LAS_{min}	44.9 dB	2023-04-11 11:24:24	
LA_{eq}	61.8 dB		
LC_{eq}	66.2 dB	LC_{eq} - LA_{eq}	4.4 dB
LAI_{eq}	65.5 dB	LAI_{eq} - LA_{eq}	3.7 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
61.8 dB	61.8 dB	0.0 dB

LDEN	LDay	LEve	LNight
61.8 dB	61.8 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	61.8 dB		--- dB		--- dB	
$Ls_{(max)}$	74.4 dB	2023-04-11 11:30:36	--- dB	None	--- dB	None
$LS_{(min)}$	44.9 dB	2023-04-11 11:24:24	--- dB	None	--- dB	None
$L_{Peak(max)}$	--- dB	None	--- dB	None	98.8 dB	2023-04-11 11:30:36

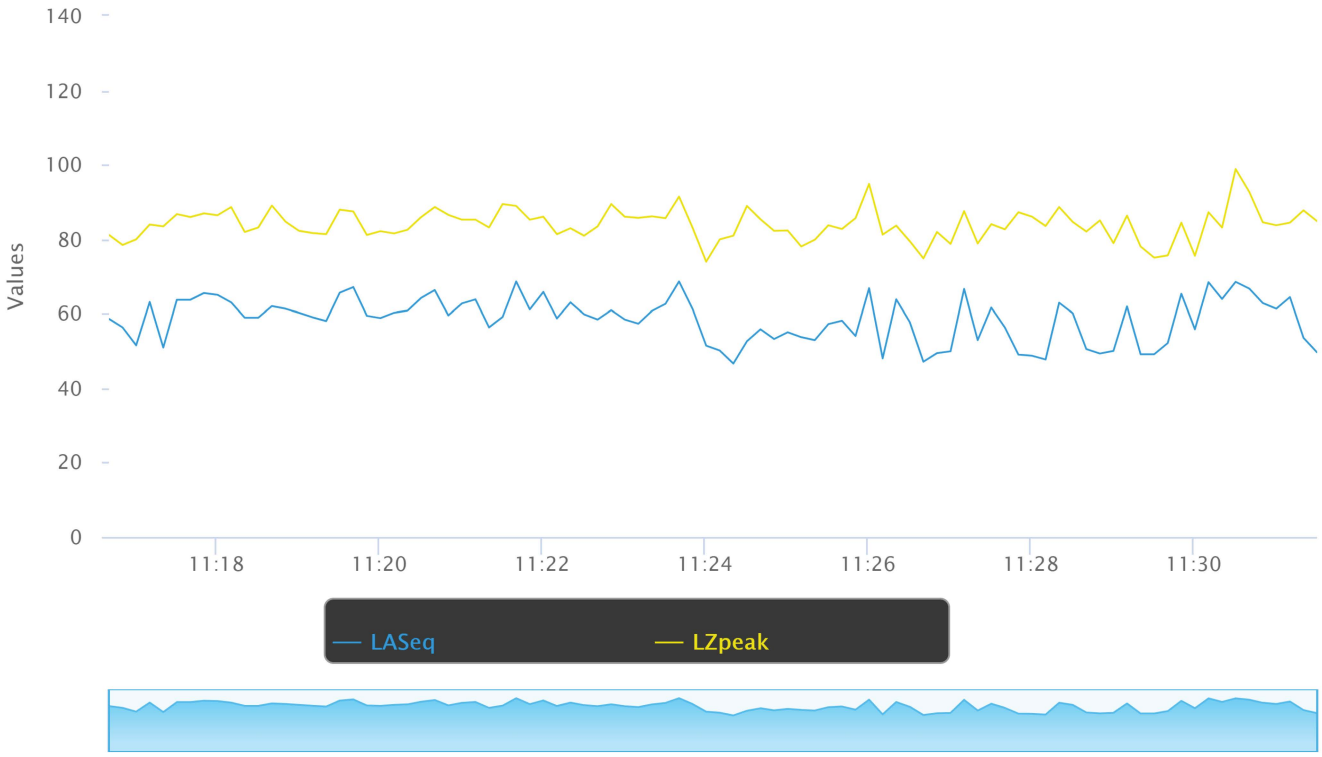
Overloads

Count	Duration
0	0:00:00.0

Statistics

LAS 5.0	68.3 dB
LAS 10.0	66.1 dB
LAS 33.3	60.1 dB
LAS 50.0	57.5 dB
LAS 66.6	54.0 dB
LAS 90.0	48.8 dB

Time History



Site Number: 24 hours			
Recorded By: Rosey Worden			
Job Number: 2023-009			
Date: 4/11/2023			
Time: 12:28 p.m. – 12:28 p.m.			
Location: North end of Project Site			
Source of Peak Noise: Vehicles on Folsom Boulevard			
Noise Data			
Leq (dB)	**Lmin (dB)**	**Lmax (dB)**	**Ldn (dB)**
57.1	38.3	83.2	60.9

Equipment						
Category	**Type**	**Vendor**	**Model**	**Serial No.**	**Cert. Date**	**Note**
Sound	Sound Level Meter	**Larson Davis**	**LxT SE**	**0006133**	**02/24/2021**	
	Microphone	**Larson Davis**	**377B02**	**315201**	**02/24/2021**	
	Preamp	**Larson Davis**	**PRMLxT1L**	**069947**	**02/24/2021**	
	Calibrator	**Larson Davis**	**CAL200**	**17325**	**02/25/2021**	

Weather Data			
Est.	**Duration:** 24 hours		**Sky:** Clear
	Note: dBA Offset = 0.04		**Sensor Height (ft):** 4.5
	Wind Ave Speed (mph)	**Temperature (degrees Fahrenheit)**	**Barometer Pressure (hPa)**
	6	62	30.08

Photo of Measurement Location

Measurement Report

Report Summary

Meter's File Name	LxT_Data.060.s	Computer's File Name	LxT_0006133-20230411 122828-LxT_Data.060.ldbin
Meter	LxT1 0006133	Firmware	2.404
User		Location	
Job Description			
Note			

Start Time	2023-04-11 12:28:28	Duration	24:00:00.0		
End Time	2023-04-12 12:28:28	Run Time	24:00:00.0	Pause Time	0:00:00.0
Pre-Calibration	2023-04-11 12:20:34	Post-Calibration	None	Calibration Deviation	---

Results

Overall Metrics

LA_{eq}	57.1 dB		
LAE	106.5 dB	SEA	--- dB
EA	4.9 mPa²h		
EA8	1.6 mPa²h		
EA40	8.2 mPa²h		
LZS_{peak}	101.3 dB	2023-04-12 12:15:25	
LAS_{max}	83.2 dB	2023-04-12 04:42:24	
LAS_{min}	38.3 dB	2023-04-12 02:04:42	
LA_{eq}	57.1 dB		
LC_{eq}	62.8 dB	LC_{eq} - LA_{eq}	5.7 dB
LAI_{eq}	58.7 dB	LAI_{eq} - LA_{eq}	1.6 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LZSpeak > 135.0 dB	0	0:00:00.0
LZSpeak > 137.0 dB	0	0:00:00.0
LZSpeak > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight
60.9 dB	58.5 dB	0.0 dB

LDEN	LDay	LEve	LNight
61.2 dB	59.1 dB	54.7 dB	53.2 dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L_{eq}	57.1 dB		--- dB		--- dB	
$Ls_{(max)}$	83.2 dB	2023-04-12 04:42:24	--- dB	None	--- dB	None
$LS_{(min)}$	38.3 dB	2023-04-12 02:04:42	--- dB	None	--- dB	None
$L_{Peak(max)}$	--- dB	None	--- dB	None	101.3 dB	2023-04-12 12:15:25

Overloads

Count	Duration
0	0:00:00.0

Statistics

LAS 5.0	61.2 dB
LAS 10.0	58.9 dB
LAS 33.3	54.5 dB
LAS 50.0	52.2 dB
LAS 66.6	50.2 dB
LAS 90.0	45.9 dB

ATTACHMENT B

Federal Highway Noise Prediction Model (FHWA-RD-77-108) Outputs – Project Traffic Noise

TRAFFIC NOISE LEVELS

Project Number: 2023-009
Project Name: Mills Crossing

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): **Existing**
Source of Traffic Volumes: DKS Associates 2023
Community Noise Descriptor: L_{dn}: x CNEL:

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix Medium Trucks	Vehicle Mix Heavy Trucks	Peak Hour dB(A) L_{eq}	24-Hour dB(A) Ldn
Folsom Boulevard													
West of Mather Field Road	Commercial	2	0		19,136	40	100	0.5	0	1.8%	0.7%	0.0	64.1
East of Mather Field Road	Commercial	2	0		28,052	40	100	0.5	0	1.8%	0.7%	0.0	65.7
Between La Loma Drive and Pasero Drive	Commercial	2	0		19,136	40	100	0.5	0	1.8%	0.7%	0.0	64.1
Routier Road													
South of Folsom Boulevard	Residential and Commercial	2	0		6,152	40	100	0.5	0	1.8%	0.7%	0.0	59.1
La Loma Drive													
North of Folsom Boulevard	Residential and Commercial	2	0		3,192	25	100	0.5	0	1.8%	0.7%	0.0	51.9
Paseo Drive													
North of Folsom Boulevard	Residential and Commercial	2	0		2,432	25	100	0.5	0	1.8%	0.7%	0.0	50.7
Mather Field Road													
South of Folsom Boulevard	Residential and Commercial	2	0		19,962	45	100	0.5	0	1.8%	0.7%	0.0	65.5

TRAFFIC NOISE LEVELS

Project Number: 2023-009
Project Name: Mills Crossing

Background Information

Model Description: FHWA Highway Noise Prediction Model (FHWA-RD-77-108) with California Vehicle Noise (CALVENO) Emission Levels.
Analysis Scenario(s): **Existing + Project**
Source of Traffic Volumes: DKS Associates 2023
Community Noise Descriptor: L_{dn}: x CNEL:

Assumed 24-Hour Traffic Distribution:	Day	Evening	Night
Total ADT Volumes	77.70%	12.70%	9.60%
Medium-Duty Trucks	87.43%	5.05%	7.52%
Heavy-Duty Trucks	89.10%	2.84%	8.06%

Traffic Noise Levels

Analysis Condition Roadway Segment	Land Use	Lanes	Median Width	Peak Hour Volume	ADT Volume	Design Speed (mph)	Dist. from Center to Receptor	Alpha Factor	Barrier Attn. dB(A)	Vehicle Mix: Medium Trucks	Vehicle Mix: Heavy Trucks	Peak Hour dB(A) L_{eq}	24-Hour dB(A) Ldn
Folsom Boulevard													
West of Mather Field Road	Commercial	2	0		20,956	40	100	0.5	0	1.8%	0.7%	0.0	64.5
East of Mather Field Road	Commercial	2	0		29,379	40	100	0.5	0	1.8%	0.7%	0.0	65.9
Between La Loma Drive and Paseo Drive	Commercial	2	0		21,366	40	100	0.5	0	1.8%	0.7%	0.0	64.5
Routier Road													
South of Folsom Boulevard	Residential and Commercial	2	0		6,552	40	100	0.5	0	1.8%	0.7%	0.0	59.4
La Loma Drive													
North of Folsom Boulevard	Residential and Commercial	2	0		6,118	25	100	0.5	0	1.8%	0.7%	0.0	54.7
Paseo Drive													
North of Folsom Boulevard	Residential and Commercial	2	0		3,738	25	100	0.5	0	1.8%	0.7%	0.0	52.6
Mather Field Road													
South of Folsom Boulevard	Residential and Commercial	2	0		21,047	45	100	0.5	0	1.8%	0.7%	0.0	65.8

ATTACHMENT C

Federal Highway Administration Roadway Construction Noise Model Outputs – Project Construction

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/23/2023
Case Description: Pavement Excavation (Demolition)

Description	**Land Use**
Pavement Excavation (Demolition)	Residential

Description	**Impact Device**	**Usage(%)**	**Equipment Spec Lmax (dBA)**	**Actual Lmax (dBA)**	**Receptor Distance (feet)**
Dozer	No	40		81.7	341
Dozer	No	40		81.7	341
Excavator	No	40		80.7	341
Excavator	No	40		80.7	341
Excavator	No	40		80.7	341
Concrete Saw	No	20		89.6	341

Calculated (dBA)

Equipment	***Lmax**	**Leq**
Dozer	65	61
Dozer	65	61
Excavator	64	60.1
Excavator	64	60.1
Excavator	64	60.1
Concrete Saw	72.9	65.9
Total	**72.9**	**69.8**

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/23/2023
Case Description: Site Preparation

Description	**Land Use**
Site Preparation	Residential

Description	**Impact Device**	**Usage(%)**	**Equipment Spec Lmax (dBA)**	**Actual Lmax (dBA)**	**Receptor Distance (feet)**
Dozer	No	40		81.7	341
Dozer	No	40		81.7	341
Dozer	No	40		81.7	341
Tractor	No	40	84		341
Tractor	No	40	84		341
Tractor	No	40	84		341
Tractor	No	40	84		341

Calculated (dBA)

Equipment		***Lmax**	**Leq**
Dozer		65	61
Dozer		65	61
Dozer		65	61
Tractor		67.3	63.3
Tractor		67.3	63.3
Tractor		67.3	63.3
Tractor		67.3	63.3
	Total	**67.3**	**70.9**

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/23/2023
Case Description: Grading

Description	**Land Use**
Grading	Residential

Description	**Impact Device**	**Usage(%)**	**Equipment Spec Lmax (dBA)**	**Actual Lmax (dBA)**	**Receptor Distance (feet)**
Grader	No	40	85		341
Excavator	No	40		80.7	341
Tractor	No	40	84		341
Tractor	No	40	84		341
Tractor	No	40	84		341

Calculated (dBA)

Equipment	***Lmax**	**Leq**
Grader	68.3	64.3
Excavator	64	60.1
Tractor	67.3	63.3
Tractor	67.3	63.3
Tractor	67.3	63.3
Total	**68.3**	**70.1**

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 6/23/2023
Case Description: Building construction, paving, and painting

Description	**Land Use**
Building construction, paving, and painting	Residential

Description	**Impact Device**	**Usage(%)**	**Equipment Spec Lmax (dBA)**	**Actual Lmax (dBA)**	**Receptor Distance (feet)**
Gradall	No	40		83.4	341
Gradall	No	40		83.4	341
Gradall	No	40		83.4	341
Generator	No	50		80.6	341
Crane	No	16		80.6	341
Welder / Torch	No	40		74	341
Tractor	No	40	84		341
Tractor	No	40	84		341
Tractor	No	40	84		341
Paver	No	50		77.2	341
Paver	No	50		77.2	341
Pavement Scarafier	No	20		89.5	341
Pavement Scarafier	No	20		89.5	341
Roller	No	20		80	341
Roller	No	20		80	341
Compressor (air)	No	40		77.7	341

	Calculated (dBA)	
Equipment	***Lmax**	**Leq**
Gradall	66.7	62.7
Gradall	66.7	62.7
Gradall	66.7	62.7
Generator	64	60.9
Crane	63.9	55.9
Welder / Torch	57.3	53.3
Tractor	67.3	63.3
Tractor	67.3	63.3
Tractor	67.3	63.3
Paver	60.5	57.5
Paver	60.5	57.5
Pavement Scarafier	72.8	65.8
Pavement Scarafier	72.8	65.8
Roller	63.3	56.3
Roller	63.3	56.3
Compressor (air)	61	57
Total	**72.8**	**73.8**

*Calculated Lmax is the Loudest value.

ATTACHMENT D

SoundPLAN 3-D Noise Model Outputs – Project Onsite Noise Propagation

SoundPLAN
Output Source Information

Number	Reciever Name	Floor	Level at Receiver
1	Apartments on Bettencourt Lane	Ground Floor	40.4 dBA
2	Apartments on La Loma Drive	Ground Floor	39.6 dBA
3	Apartments on La Loma Drive	Ground Floor	36.0 dBA
4	Auto Repair Shop on La Loma Drive	Ground Floor	47.3 dBA
5	Folsom Lake College	Ground Floor	39.4 dBA
6	Medical Clinic	Ground Floor	47.5 dBA
7	Residence on El Caprice Drive	Ground Floor	44.1 dBA
8	Residence on El Caprice Drive	Ground Floor	32.6 dBA
9	Residence on El Caprice Drive	Ground Floor	33.9 dBA

Number	Noise Source Information	Citation	Level at Source
1	City Playground/Park	ECORP Noise Measurements	59.0 dBA
2	Single-Family Housing	ECORP Noise Measurements	52.9 dBA
3	Downtown Parking Garage	ECORP Noise Measurements	62.6 dBA
4	Multi-Family Townhouse	ECORP Noise Measurements	59.0 dBA

Appendices

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