APPENDIX G/INITIAL STUDY FOR A MITIGATED NEGATIVE DECLARATION

Environmental Checklist Form for:

Development Permit and Environmental Assessment Application No. P21-03293

1.	**Project title:** **Development Permit and Environmental Assessment Application No. P21-03293**
2.	**Lead agency name and address:** City of Fresno Planning and Development Department 2600 Fresno Street Fresno, CA 93721
3.	**Contact person and phone number:** Thomas Veatch Planner City of Fresno Planning and Development Department (559) 621-8076
4.	**Project location:** ***North East Corner of S. East Avenue and E. Central Avenue and 3611 S. Northpointe Dr, Fresno, CA*** (APN: 330-02-131 and -82S)
5.	**Project sponsor's name and address:** G4 Enterprises LTD Attn: Susan Gladding 8570 S. Cedar

	Fresno, CA 93725
6.	**General & Community plan land use designation:** General Plan: Current, Heavy Industrial. Proposed, no change. Community Plan: Roosevelt Community Plan
7.	**Zoning:** Current: Heavy Industrial Proposed: no change.
8.	**Description of project:** Development Permit and Environmental Assessment No. P21-03293 was filed by G4 Enterprises, LTD (herein, "Project Applicant") and proposes to develop a truck trailer storage lot on an approximately 15-acre site located at the northeast corner of S. East Avenue and E. Central Avenue in Fresno, CA 93725, APN: 330-021-31. The proposed storage lot would provide truck trailer storage for the user of Building 31, located immediately north of the site at 3611 South NorthPointe Drive, Fresno, CA 93725, APN: 330-021-82S. The location of the proposed storage lot, immediately adjacent to Building 31, will provide operational efficiency for this industrial user. The storage lot is intended to supplement activities occurring at Building 31, and all truck trips utilizing the storage lot were considered when Building 31 was approved under Development Permit (D-17-175) and Major Revised Exhibit (P20-03406). The proposed storage lot and modifications to the existing Building 31 parking lot comprise the proposed Project. The proposed trailer storage lot would contain a total of 314 trailer parking spaces (12'x55'), including 10 future electric truck trailer parking stalls and would be constructed with asphalt concrete (ac). The site will have pole lighting to illuminate the parking area. There will also be site drain inlets and piping facilities to drain onsite rainfall to existing storm drain facilities. The Project is proposing to construct a 7-foot high security fence along the perimeter of the proposed site with vehicle swing access gates and two ±147 and ±279 square foot security buildings at points of ingress and egress. Other improvements include approximately 300 feet of curb, gutter, and sidewalk improvements along S. East Avenue and similar improvements along the property's frontage of E. Central Avenue. A water main will be installed along the

Project's frontage along Central Ave and landscaping will also be provided along the Project's frontage of Central and East Avenues.

The proposed modifications to the Building 31 parking lot include the addition of curb and two passenger parking stalls at the northeast entrance of the site; removal of the guard shack and truck entrance on the northwest corner of the site, and addition of 66 passenger car parking stalls to serve the existing employee force. An emergency access gate will be installed and the existing guard shack and truck exit on the southeast corner of the site will be removed. This exit will become emergency access only.

Operational times will be 24 hours a day, seven days a week. There will be one point of ingress off of S. East Avenue, and two points of egress at S. East Avenue and E. Central Avenue. Traffic utilizing the parking lot will include trucks making deliveries to Building 31 and minimal employee trips. The parking lot is intended to supplement activities occurring at Building 31, and all truck trips utilizing the parking lot were considered when Building 31 was approved. New employees generated by the Project will be limited to approximately six new employees at the new guard buildings.

9. **Surrounding land uses and setting:**

	Planned Land Use	Existing Zoning	Existing Land Use
North	Heavy Industrial	IH - Heavy Industrial	Vacant, Heavy Industrial
East	Open Space (Ponding Basin)	OS – Open Space	Ponding Basin
South	AE-20 (Fresno County)	AE-20 – Exclusive Agricultural, Fresno County	Agriculture
West	Light Industrial	IL – Light Industrial	Vacant

10.	**Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):** Planning and Development Department, Building and Safety Services Division, Department of Public Works, Department of Public Utilities, Fire Department, Fresno Metropolitan Flood Control District, County of Fresno Department of Community Health, County of Fresno Department of Public Works and Planning, and San Joaquin Valley Air Pollution Control District.
11.	**Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code (PRC) Section 21080.3.1? If so, has consultation begun?** The State requires lead agencies to consider the potential effects of proposed projects and consult with California Native American tribes during the local planning process for the purpose of protecting Traditional Tribal Cultural Resources through the California Environmental Quality Act (CEQA) Guidelines. Pursuant to PRC Section 21080.3.1, the lead agency shall begin consultation with the California Native American tribe that is traditionally and culturally affiliated with the geographical area of the proposed project. Such significant cultural resources are either sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a tribe which is either on or eligible for inclusion in the California Historic Register or local historic register, or, the lead agency, at its discretion, and support by substantial evidence, choose to treat the resources as a Tribal Cultural Resources (PRC Section 21074(a)(1-2)). According to the most recent census data, California is home to 109 currently recognized Indian tribes. Tribes in California currently have nearly 100 separate reservations or Rancherias. Fresno County has a number of Rancherias such as Table Mountain Rancheria, Millerton Rancheria, Big Sandy Rancheria, Cold Springs Rancheria, and Squaw Valley Rancheria. These Rancherias are not located within the city limits. Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See PRC Section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per PRC Section 5097.96 and the California Historical Resources Information System administered by the California Office of

	Historic Preservation. Please also note that PRC Section 21082.3(c) contains provisions specific to confidentiality. Pursuant to Assembly Bill 52 (AB 52), Native American tribes traditionally and culturally affiliated with the project area were invited to consult regarding the project based on a list of contacts provided by the Native American Heritage Commission (NAHC). The City of Fresno mailed notices of the proposed project to each of these tribes on December 23, 2021, which included the required 30-day time period for tribes to request consultation, which ended on January 24, 2022.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources
☐	Air Quality	☐	Biological Resources
☐	Cultural Resources	☐	Energy
☐	Geology/Soils	☐	Greenhouse Gas Emissions
☐	Hazards and Hazardous Materials	☐	Hydrology/Water Quality
☐	Land Use/Planning	☐	Mineral Resources
☐	Noise	☐	Population/Housing
☐	Public Services	☐	Recreation
☐	Transportation	☐	Tribal Cultural Resources
☐	Utilities/Service Systems	☐	Wildfire
☐	Mandatory Findings of Significance		

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

___	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
_X_	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
___	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.
___	I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An EIR is required, but it must analyze only the effects that remain to be addressed.
___	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Thomas Veatch April 8, 2022

Thomas Veatch, Planner Date

City of Fresno, Planning and Development Department

EVALUATION OF ADDITIONAL ENVIRONMENTAL IMPACTS NOT ASSESSED IN THE PROGRAM ENVIRONMENTAL IMPACT REPORT (PEIR):

1. For purposes of this Initial Study, the following answers have the corresponding meanings:

   a. “No Impact” means the subsequent project will not cause any additional significant effect related to the threshold under consideration which was not previously examined in the PEIR.

   b. “Less Than Significant Impact” means there is an impact related to the threshold under consideration that was not previously examined in the PEIR, but that impact is less than significant;

   c. “Less Than Significant with Mitigation Incorporation” means there is a potentially significant impact related to the threshold under consideration that was not previously examined in the PEIR, however, with the mitigation incorporated into the project, the impact is less than significant.

   d. “Potentially Significant Impact” means there is an additional potentially significant effect related to the threshold under consideration that was not previously examined in the PEIR. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4. "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from, "Earlier Analyses," as described in (6) below, may be cross-referenced).

5. Earlier analyses may be used where, pursuant to the tiering, program EIR, PEIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

    a. Earlier Analysis Used. Identify and state where they are available for review.

    b. Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in the PEIR or another earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

    c. Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9. The explanation of each issue should identify:

   a. The significance criteria or threshold, if any, used to evaluate each question; and

   b. The mitigation measure identified, if any, to reduce the impact to less than significance.

ENVIRONMENTAL ISSUES	**Potentially Significant Impact**	**Less Than Significant with Mitigation Incorporated**	**Less Than Significant Impact**	**No Impact**
I. AESTHETICS – Except as provided in PRC Section 21099, would the project:				
a) Have a substantial adverse effect on a scenic vista?				X
b) Substantially damage scenic resources, including, but not limited to, trees, rock out-croppings, and historic buildings within a state scenic highway?				X

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) In non-urbanized areas, substantially degrade the existing visual character or quality public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?			X	
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

No Impact. A scenic vista is defined as a viewpoint that provides expansive views of highly valued landscape for the benefit of the general public. The Sierra Nevada Mountains are the only natural and visual resource in the Project area. Views of these distant mountains are afforded only during clear conditions due to poor air quality in the valley. Distant views of these mountains would largely be unaffected by the development of the Project because of the nature of the Project, distance and limited visibility of these features. The City of Fresno does not identify views of these features as required to be “protected.”

The Project site is within an urbanized area of southern Fresno. There are no scenic vistas or other protected scenic resources on or near the site. Visual character of the site is addressed further in Response c) below.

There are no scenic highways near the proposed site, therefore, the Project has *no significant impact* on scenic vistas or designated scenic resources or highways.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. As discussed in Impact a) above, there are no protected scenic resources on or near the Project. There is *no impact*.

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Less Than Significant Impact. The proposed Project would alter the existing visual character of public views of the site from vacant land to fully developed with a trailer storage lot, including perimeter fencing, pole lighting, and two security buildings. Also, improvements will be made to the existing Building 31 parking lot. The Project design is subject to the City's Design Guidelines adopted for the City's General Plan which apply to site layout, building design, landscaping, interior street design, lighting, parking and signage. Detailed architectural plans, color palettes and building materials as well as landscaping plans will be submitted by the Project developer to the City of Fresno Planning and Development Department. The plans shall be required prior to issuance of any building permits.

The Project will require removal of minimal vegetation in the vacant lot. Curb and gutters, gates, electrical panels and pedestrian sidewalks are incorporated into the project design, along with site landscaping, which will provide visual screening of the Project site from vehicle passerbys.

The improvements such as those proposed by the Project are typical of large city urban areas and are generally expected from residents of the City. These improvements would not substantially degrade the visual character of the area and would not diminish the visual quality of the area, as they would be consistent with the existing visual setting. The Project itself is not visually imposing against the scale of the existing adjacent industrial buildings and nature of the surrounding area.

Therefore, the Project would have *less than significant impacts* on the visual character of the area.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The subject site currently has no on-site sources of lighting. The Project will introduce new lighting that will be typical of commercial or industrial developments, such as security lights, parking lot lights and vehicle lights. Additional night lighting sources on the Project site, especially any unshielded light, could result in spillover light that could impact surrounding adjacent residential uses. This would create new sources of light that could potentially have a significant impact on nighttime light levels in the area. During the entitlement process, staff will ensure that lights are located in areas that will minimize light sources to the neighboring properties. Further, Mitigation Measure (MM) AES-4.3 from the General Plan PEIR require lighting systems to be shielded to direct light to ground surfaces and orient light away from adjacent properties. In addition, MM AES-4.5 requires use of non-reflective building materials to reduce glare impacts.

In addition, a condition of approval will require that lighting, where provided for public streets, shall be hooded and so arranged and controlled so as not to cause a nuisance either to traffic or to the living environment. The amount of light shall be provided according to the standards of the Department of Public Works. As a result, the Project will implement the necessary mitigation measures and will have a *less than significant impact* with regards to light and glare.

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the aesthetic related mitigation measures as identified in the attached PEIR Mitigation Monitoring and Reporting Program dated April 8, 2022.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
II. AGRICULTURE AND FORESTRY RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				X
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?				X

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				X
d) Result in the loss of forest land or conversion of forest land to non-forest use?				X
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?				X

DISCUSSION

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The California Department of Conservation, Important Farmland Finder Program considers the Project site to be *Farmland of Local Importance*; however, the site is designated and zoned for urban uses. The PEIR recognizes that despite implementation of the objectives and policies of the Fresno General Plan, Project and cumulative impacts on agricultural resources will remain significant; and, that no feasible measures in addition to the objectives and policies of the Fresno General Plan are available for sites within the City limits.

In 2021, through passage of Council Resolution No. 2021-270, the City of Fresno adopted Findings of Fact related to Significant and Unavoidable Effects as well as Statements of Overriding Considerations in order to certify the Program Environmental Impact Report SCH No. 2019050005 for purposes of adoption of the Fresno General Plan. Section 15093 of the California Environmental Quality Act requires the lead agency to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project.

The adopted Statements of Overriding Considerations for the PEIR addressed Findings of Significant Unavoidable Impacts within the categories/areas of Agricultural Resources; citing specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers as project goals, each and all of which were deemed and considered by the Fresno City Council to be benefits, which outweighed the unavoidable adverse environmental effects attributed to development occurring within the City of Fresno Sphere of Influence (SOI), consistent with the land uses, densities, and intensities set forth in the Fresno General Plan. As such, there are *no new impacts* resulting from farmland conversion.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

No Impact. The site is not zoned for agriculture nor is it in a Williamson Act contract. There is *no impact.*

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. As the site is on the Valley floor, there is no forest or timberland on the proposed Project site. There is *no impact*.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. As described in Impact c) above, there is no forest land on the Project site. There is *no impact.*

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. As discussed in Impact a) above, agricultural impacts at this site have been previously analyzed and deemed significant and unavoidable and a Statement of Overriding Conditions was adopted by City Council. The proposed Project will not involve new other changes in the existing environment that could result in conversion of Farmland. There is *no impact.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan (*e.g.*, by having potential emissions of regulated criterion pollutants which exceed the San Joaquin Valley Air Pollution Control Districts (SJVAPCD) adopted thresholds for these pollutants)?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact. The analysis in the Air Quality Resource section is based off the Air Quality and Greenhouse Gas Analysis Technical Memorandum (Memo) prepared by Johnson Johnson and Miller Air Quality Consulting Services. The Memo is provided in its entirety in Appendix A**.**

Air Quality Plans (AQPs) are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. The proposed Project site is located within the jurisdictional boundaries of the SJVAPCD. To show attainment of the standards, the SJVAPCD analyzes the growth projections in the Valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures.

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed SJVAPCD regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable AQP.

Construction Emissions (Regional)

Construction emissions associated with the project are shown in Table 1. As shown in Table 1, the emissions are below the significance thresholds and, therefore, are less than significant on a project basis.

Table 1: Summary of Construction-Generated Emissions of Criteria Air Pollutants – Unmitigated

Emissions Source	Emissions (Tons/Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Site Preparation	0.016	0.167	0.101	0.000	0.053	0.030
Grading	0.055	0.585	0.444	0.001	0.089	0.048
Building Construction	0.015	0.106	0.136	0.000	0.026	0.010
Paving	0.031	0.115	0.150	0.000	0.007	0.006
Architectural Coating	0.140	0.005	0.010	0.000	0.002	0.001

Project Total	**0.258**	**0.977**	**0.841**	**0.002**	**0.177**	**0.094**
Significance Thresholds	10	10	100	27	15	15
Exceed Significance Thresholds?	No	No	No	No	No	No

Notes:
PM_{10} and $PM_{2.5}$ emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions.
Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A of Appendix A).
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed October 20, 2021.

Operational Emissions (Regional)

Operational emissions occur over the lifetime of the project. The SJVAPCD considers construction and operational emissions separately when making significance determinations. The emissions output for project operation at full buildout for 2022 are summarized in Table 2. As shown in Table 2, the operational emissions would be less than the thresholds of significance for all criteria air pollutants.

Table 2: Summary of Operational Emissions of Criteria Air Pollutants – Unmitigated

Source	Emissions (tons/year)					
	ROG	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area	0.059	<0.001	<0.001	<0.001	<0.001	<0.001
Energy	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mobile (Employee Trips)	0.004	0.004	0.042	<0.001	0.013	0.004
Yard Tractor	<0.001	0.027	<0.001	<0.001	0.002	0.002
Annual Total (2022)	**0.062**	**0.031**	**0.043**	**0.000**	**0.015**	**0.006**
Significance Thresholds	10	10	100	27	15	15
Exceed Significance Thresholds?	No	No	No	No	No	No

Notes:
Emissions were quantified using CalEEMod based on project details and estimated operating year for the proposed project. Totals may not sum exactly due to rounding.
Source: CalEEMod Output and Additional Supporting Information (Attachment A of Appendix A).

As shown above in Table 1 and Table 2, the project's construction and operational regional emissions would not exceed SJVAPCD's regional criteria pollutant emissions quantitative thresholds. Therefore, the proposed project would not be considered in conflict with or obstruct implementation of the applicable air quality plan. The impact would be *less than significant.*

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Less Than Significant Impact. To result in a less than significant impact, emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the SJVAPCD's in its GAMAQI. The primary pollutants of concern during project construction and operation are ROG, NO_X, PM_{10}, and $PM_{2.5}$. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO_X, ROG, SO_X, PM_{10}, and $PM_{2.5}$.

Localized Impacts

Emissions occurring at or near the project have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard. The pollutants of concern for localized impact in the SJVAB are NO_2, SO_x, and CO.

The SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.

Construction: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X

Local construction impacts would be short-term in nature lasting only during the duration of construction. As shown in Table 3 below, on-site construction emissions would be less than 100 pounds per day for each of the criteria pollutants. To present a conservative estimate, on-site emissions for on-road construction vehicles were included in the localized analysis. Based on the SJVAPCD's guidance, the construction emissions would not cause an ambient air quality standard violation.

Table 3: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X for Construction

Source	On-site Emissions (pounds per day)			
	NOx	CO	PM_{10}	$PM_{2.5}$
Site Preparation	33.13	19.86	10.46	6.03
Grading	38.87	29.20	5.78	3.15
Building Construction	9.40	12.49	0.58	0.45
Paving	11.21	14.74	0.57	0.52
Architectural Coating	1.46	2.24	0.10	0.09
Overlap of Building Construction and Paving	20.61	27.24	1.16	0.98
Overlap of Paving and Architectural Coating	12.67	16.98	0.67	0.61
Maximum Daily On-site Emissions	**38.87**	**29.20**	**10.46**	**6.03**
Significance Thresholds	100	100	100	100
Exceed Significance Thresholds?	No	No	No	No

Note: Overlap of construction activities is based on the construction schedule shown in Table 1 of the report.
Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A of Appendix A).
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed October 20, 2021.

Operation: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X

Localized impacts could occur in areas with a single large source of emissions such as a power plant or with multiple sources concentrated in a small area such as a distribution center. Since the project would be relocating where some truck emissions would occur compared to currently approved conditions, the analysis includes emissions from heavy-duty trucks from Building 31 in addition to the new sources of emissions from the proposed project. Consistent with information presented in the project-specific Traffic Impact Analysis, it was assumed that Building 31 generates 94 daily truck trips. For the purposes of estimating emissions, 100 percent of the truck fleet mix was assumed to be 4+-axle trucks.

As shown in Table 4 below, Operational modeling of on-site emissions for the project indicate that the project would not exceed 100 pounds per day for each of the criteria pollutants. Therefore, based on the SJVAPCD's guidance, the operational emissions would not cause an ambient air quality standard violation. As such, impacts would be less than significant.

Table 4: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X for Operations

Source	On-site Emissions (pounds per day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Area	<0.01	<0.01	<0.01	<0.01
Energy	<0.01	<0.01	<0.01	<0.01
Mobile - Passenger Vehicles Trips	0.01	0.09	<0.01	<0.01
Mobile - Building 31 Truck Trips	2.11	1.53	0.04	0.01
Yard Tractor	0.15	<0.01	0.01	0.01
Total	**2.27**	**1.63**	**0.05**	**0.02**
Significance Thresholds	100	100	100	100
Exceed Significance Thresholds?	No	No	No	No

Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A of Appendix A). Maximum daily emissions were highest for NO_X in the Summer scenario; emissions of CO, PM_{10}, and $PM_{2.5}$ were highest in the Winter scenario. Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed October 20, 2021.

Air pollutant emissions have both regional and localized effects. As shown in Table 3 and Table 4, the project's regional emissions would not exceed the applicable regional criteria pollutant emissions quantitative thresholds and impacts would be *less than significant.*

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact with Mitigation. Emissions occurring at or near the project have the potential to create a localized impact that could expose sensitive receptors to substantial pollutant concentrations. The SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The closest sensitive receptor is an existing residence located approximately 260 feet southeast site of the project site.

The SJVAPCD's GAMAQI includes screening thresholds for identifying projects that need detailed analysis for localized impacts. Projects with on-site emission increases from construction activities or operational activities that exceed the 100 pounds per

day screening level of any criteria pollutant after implementation of all enforceable mitigation measures would require additional analysis to determine if the preparation of an ambient air quality analysis is needed. The criteria pollutants of concern for localized impact in the Air Basin are PM_{10}, $PM_{2.5}$, NO_X, and CO. There is no localized emission standard for ROG.

As shown in Table 3, the project would not exceed the emission screening thresholds during project construction. Therefore, the project's localized criteria pollutant impacts from construction of the project would be less than significant.

As shown in Table 4, the project would not exceed SJVAPCD screening thresholds for localized criteria pollutant impacts; therefore, the project's localized criteria pollutant impacts from long-term operations would be less than significant.

Toxic Air Contaminants

Construction

As discussed above, criteria pollutant emissions during construction would not exceed the SJVAPCD's significance thresholds and would not be expected to result in concentrations that would exceed ambient standards or contribute substantially to an existing exceedance of an ambient air quality standard. Therefore, construction of the proposed project would not result in localized emissions that, if when combined with background emissions, would result in exceedance of any health-based air quality standard for any criteria pollutant. As such, health risk impacts related to criteria pollutants emitted during the construction period of the proposed project would be less than significant.

Construction-related activities would result in temporary, short-term project-generated emissions of diesel particulate matter (DPM) from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; application of architectural coatings; and other miscellaneous activities. For construction activity, DPM is the primary air toxic of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a toxic air contaminant (TAC) by the California Air Resources Board (CARB) in 1998. Due to proposed project's proximity to existing sensitive receptors, a health risk assessment was performed to assess impacts from DPM emissions resulting from construction of the project. The results of the health risk assessment are summarized below, while

the calculations used for the health risk assessment are provided as Attachment B of Appendix A.

The construction HRA evaluated DPM (represent as exhaust PM_{10}) emissions generated during construction of the proposed project and the related health risk impacts for sensitive receptors located within 1,000 feet of the project boundary. A project would result in a significant impact if it would individually expose sensitive receptors to TACs resulting in an increased cancer risk greater than 20 in one million or an increased non-cancer risk of greater than 1.0 on the hazard index. It should be noted that the SJVAPCD's latest threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in one million (formerly 10 in one million).

The project site is located within 1,000 feet from existing sensitive receptors that could be exposed to diesel emission exhaust during the construction period. The closest sensitive receptor is an existing residence located approximately 260 feet southeast site of the project site. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model (AERMOD) was used to translate an emission rate from the source location to concentrations at the receptor locations of interest (i.e., receptors at nearby residences). AERMOD provides a refined methodology for estimating localized impacts by utilizing long-term, measured representative meteorological data for the project site and a representative construction schedule.

Cancer Risk

The Office of Environmental Health Hazard Assessment (OEHHA) has developed guidance for estimating cancer risks that considers the increased sensitivity of infants and adults to TAC emissions, different breathing rates, and time spent at home. This guidance was applied in estimating cancer risks from the construction and operation of the proposed project.

The recommend method for the estimation of cancer risk is shown in the equations.

Cancer Risk = C_{DPM} x Inhalation Exposure Factor (EQ-1)

Where:

Cancer Risk = Total individual excess cancer risk defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for specified exposure durations; this risk is defined as an excess risk because it is above and beyond the background cancer risk to the population; cancer risk is expressed in terms of risk per million exposed individuals.

C_{DPM} = Period average DPM air concentration calculated from the air dispersion model in $\mu g/m^3$

Inhalation is the most important exposure pathway to impact human health from DPM and the inhalation exposure factor is defined as follows:

Inhalation Exposure Factor=CPF x EF x ED x DBR x AAF/AT (EQ-2)

Where:

CPF = Inhalation cancer potency factor for the TAC: 1.1 $(mg/kg\text{-}day)^{-1}$ for DPM

EF = Exposure frequency (days/year)

ED = Exposure duration (years of construction)

AAF = set of age-specific adjustment factors that include age sensitivity factors (ASF), daily breathing rates (DBR), and time at home factors (TAH)

AT = Averaging time period over which exposure is averaged (days)

Chronic Non-Cancer Hazard

Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer risk:

Hazard Quotient = Ci/RELi

Where:

Ci = Concentration in the air of substance i (annual average concentration in

		µg/m^3)
RELi	=	Chronic noncancer Reference Exposure Level for substance i (µg/m^3)

Construction Health Risk Assessment Results

The results of the HRA prepared for project construction for cancer risk and long-term chronic cancer risk are summarized below. Construction emissions were estimated assuming adherence to all applicable rules, regulations, and project design features. The construction emissions were assumed to be distributed over the project area with a working schedule of eight hours per day and five days per week. Emissions were adjusted by a factor of 4.2 to convert for use with a 24-hour-per-day, 365 day-per-year averaging period. Detailed parameters and complete calculations are included in Attachment B of Appendix A.

The estimated health and hazard impacts at the Maximally Exposed Receptor (MEI) from the project's construction emissions are provided in Table 5.

Table 5: Summary of the Health Impacts from Construction of the Proposed Project

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Chronic Non-Cancer Hazard Index
Risks and Hazards at the MEI: Infant (3rd Trimester)	0.81	0.013
Risks and Hazards at the MEI: Infant (Age Zero)	2.45	0.013
Risks and Hazards at the MEI: Child	0.50	0.013
Risks and Hazards at the MEI: Adult	0.05	0.013
Significance Threshold	20	1
Threshold Exceeded in Any Scenario?	**No**	**No**

Notes:
MEI = maximally exposed receptor
Source: Construction Health Risk Assessment (Attachment B of Appendix A).

As noted in Table 5, the proposed project's construction DPM emissions would not exceed the cancer risk significance threshold or non-cancer hazard index significance threshold at the MEI. Therefore, the proposed project would not result in a significant impact on nearby sensitive receptors from TACs during construction.

Operations

The proposed project would entail the operation of an approximately 15-acre parking lot and a minor reconfiguration of the existing Building 31 parking lot, and would be an inconsequential source of net new localized emissions. Specifically, traffic utilizing the proposed parking lot would include trucks making deliveries to Building 31 (currently under construction), minimal employee trips, and emissions from operations of a yard tractor used to move trailers. The parking lot is intended to supplement activities occurring at Building 31, and all truck trips utilizing the parking lot were considered when Building 31 was approved. New employees generated by the project would be limited to approximately six (6) new employees at the proposed guard buildings. As shown in Table 2 and Table 4, emissions during operations would not exceed the applicable SJVAPCD significance thresholds and would not be expected to result in concentrations that would exceed ambient standards or contribute substantially to an existing exceedance of an ambient air quality standard. As discussed in more detail above, the localized emission estimates provided in Table 4 include on-site emissions associated with 94 daily truck trips. Although these would not be new trips, these emissions would be occurring at a different location than what was analyzed for the approved Building 31 project. PM_{10} and $PM_{2.5}$ are commonly used as proxies for DPM emissions. As shown in Table 4, maximum daily on-site emissions of PM_{10} and $PM_{2.5}$ (including on-site emissions from the truck trips associated with Building 31) would not exceed the SJVAPCD's localized screening thresholds. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations during operation or result in localized emissions that, when combined with background emissions, would result in an exceedance of any health-based air quality standard. As such, health risk impacts related to criteria pollutants or DPM emitted during long-term operations of the proposed project would be *less than significant.*

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

Less Than Significant Impact. Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. The proposed project is of the first type only since it involves a potential new odor source and would not locate any new sensitive receptors.

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Although the project is less than one mile from the nearest sensitive receptor, the project is not expected to be a significant source of odors. The screening levels for these land use types are shown in Table 6.

Table 6: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Wastewater Treatment Facilities	2 miles
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 20, 2021.	

The proposed project is an approximately 15-acre parking lot and a minor reconfiguration of the existing Building 31 parking lot, that would support operations associated with Building 31. The proposed project would result in new construction emissions and an increase in operational emissions from the six new employees and daily yard tractor operation. The parking lot is intended to supplement activities occurring at Building 31, and all truck trips utilizing the parking lot were considered when Building 31 was approved. However, traffic accessing the proposed parking lot would include trucks making deliveries to Building 31. Although these emissions have been accounted for when considering regional air quality impacts, the proposed

project has the potential to move localized emissions closer to existing or proposed sensitive receptors. Therefore, emissions from these trucks are considered in the odor impact analysis for the proposed project. Impacts from construction and operations of the proposed project are discussed separately below.

Construction

During the anticipated 6-month construction, various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and intermittent, which would decrease the likelihood of the odors concentrating in a single area or lingering for any notable period of time. As such, these odors would likely not be noticeable for extended periods of time beyond the project's site boundaries. The potential for odor impacts from construction of the proposed project would, therefore, be less than significant.

Operations

The development of an additional parking lot would not substantially increase objectionable odors in the area and would not introduce any new sensitive receptors to the area that could be affected by any existing objectionable odor sources in the area. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump stations, composting facilities, asphalt batch plants, rendering plants, and other land uses outlined in Table 6. The proposed project would not engage in any of these activities. Specifically, the proposed project is an approximately 15-acre parking lot and a minor reconfiguration of the existing Building 31 parking lot, that would support operations of Building 31. Minor sources of odors that would be associated with typical trailer parking lot uses, such as exhaust from mobile sources, are known to have temporary and less concentrated odors. Considering the low intensity of potential odor emissions, the proposed project's operational activities would not expose receptors to objectionable odor emissions. Therefore, the proposed project would not be considered to be a generator of objectionable odors during operations. As such, impacts would be *less than significant.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IV. BIOLOGICAL RESOURCES – Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?			X	
b) 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?				X

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) 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?				X
d) 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?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X

DISCUSSION

a) **Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?**

Less than Significant Impact. The site is currently vacant land with minimal vegetation and was historically used for agricultural purposes. It has been regularly disked and cultivated. The immediate vicinity consists of land developed with for industrial purposes, roadways and agriculture. The highly disturbed nature of the area suggests that the vegetation on site is unlikely to follow natural vegetation patterns, and thus unlikely to support native wildlife.

The City of Fresno Program Environmental Impact Report defines the Project area as Irrigated Row and Field Crops; agricultural land is developed and considered to provide poor quality habitat for any special status species. No special status species are expected to occur in this area. No mitigation measures are recommended, and thus any impacts remain *less than significant*.

b) **Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?**

No Impact. There are no natural waterways or sensitive natural communities on the subject site. As such, there is *no impact.*

c) **Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

No Impact. There are no protected wetlands on the subject site. As such, there is *no impact.*

d) **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?

Less Than Significant Impact. There are no natural waterways or natural vegetation on the subject site, and the site is not used for movement of wildlife species or for a migratory wildlife corridor, nor is the site used for native wildlife nursery sites. The site has been developed previously and is highly disturbed. There would be a *less than significant impact* to native species movement.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact. The City's General Plan Parks, Open Space, and Schools Element contains several objectives and policies pertaining to the protection of biological resources. Most of the policies pertain to general long-term protection and preservation of biological resources including providing buffers for natural areas, implementing habitat restoration where applicable, protection/enhancement of the San Joaquin River area, and other similar policies. Since the Project is located in a highly disturbed area with minimal biological resources and does not include significant impacts to protected plant or animal species, the Project does not conflict with any adopted policies pertaining to biological resources. The Project is also required to implement Municipal Code Chapter 13 Article 3 – Street Trees and Parkways pertaining to tree removal and replacement. Therefore, there is a *less than significant impact.*

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The Project site is not subject to any adopted habitat conservation plan, natural community conservation plan or other conservation plan, as there are no adopted plans. Therefore, there is *no impact*.

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?		X		
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?		X		
c) Disturb any human remains, including those interred outside of formal cemeteries?		X		

DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Less Than Significant Impact with Mitigation. A prehistoric and historic site records and literature search was conducted for the Project area through the Southern San Joaquin Valley Archaeological Information Center of the California Historical Resources Information System on November 2, 2021 (File RS#21-423). Records indicated that there have been no previous cultural resources studies conducted within the Project area. There have been seven studies conducted within a one-half mile radius (see Appendix B). A review of the Sacred Lands Inventory by the Native American Heritage Commission (NAHC) was also performed and the results were negative.

There are no previously recorded cultural resources within the Project area. Furthermore, it is not known if any currently exist there. Three resources recorded within one-half mile radius are historical properties; P-10-004303, 004677 and 006349.

Although no cultural or archaeological resources, paleontological resources or human remains have been identified in the project area to date, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities. Mitigation Measures CUL – 1.1 from the General Plan PEIR requires construction activities to stop if unknown resources are encountered until a qualified historical resources specialist can make recommendations to the City. Adherence to this mitigation measure will result in a *less than significant impact.*

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Less Than Significant Impact with Mitigation. As discussed in Impact a) above, no surface or recorded evidence of sensitive cultural resources have been recorded. However, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities. Mitigation Measure CUL – 1.1 of the General Plan Program EIR will be implemented to ensure that Project will result in *less than significant impact.*

c) Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact with Mitigation. Although no cultural or archaeological resources, paleontological resources or human remains have been identified in the Project area yet, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities. As discussed above, Mitigation Measures CUL – 1.1 from the General Plan PEIR requires construction activities to stop if unknown resources are encountered until a qualified historical resources specialist can make recommendations to the City. Additionally, Mitigation Measure CUL – 3 from the General Plan PEIR requires construction activities to cease immediately after human remains are unearthed until

the County Coroner has made the necessary findings as to origin and disposition of the remains. Adherence to these mitigation measures will result in a *less than significant impact.*

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the cultural resource related mitigation measures as identified in the attached PEIR Mitigation Monitoring and Reporting Program dated April 8, 2022.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VI. ENERGY – Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?			X	
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?			X	

DISCUSSION

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Less Than Significant Impact. The energy requirements for the proposed project were determined using the construction and operational estimates generated from the Modeling Assumptions as noted in the Air Quality and Greenhouse Gas Analysis Technical Memorandum, performed on behalf of the Project by Johnson, Johnson & Miller Air Quality Consulting Services, report date November 8, 2021 (Appendix A).

Short-Term Construction

Off-Road Equipment

There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the state.

On-Road Vehicles

On-road vehicles for construction workers, vendors, and haulers would require fuel for travel to and from the site during construction. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Vehicles Trips

Anticipated construction-related vehicle trips, which are generated by CalEEMod, are provided in Table 7. CalEEMod default values were used to estimate the number of construction-related vehicle trips. Additional haul trips were added to each construction activity to account for the mobilization of off-road equipment. Additional vendor trips were included in the paving phase to account for delivery of materials.

The default values for hauling trips are based on the assumption that a truck can haul 20 tons (or 16 cubic yards) of material per load. If one load of material is delivered, CalEEMod assumes that one haul truck importing material will also have a return trip with an empty truck (e.g., 2 one-way trips).

The fleet mix for worker trips is light-duty passenger vehicles to light-duty trucks. The vendor trips fleet mix is composed of a mixture of medium and heavy-duty diesel trucks. The hauling trips were assumed to be 100 percent heavy-duty diesel truck

trips. CalEEMod default trip lengths for a project in Fresno County and an urban setting were used for the construction trips.

Table 7: Construction Vehicle Trips

Construction Task	Worker Trips per Day	Vendor Trips per Day	Total Haul Truck Trips
Site Preparation	18	0	14
Grading	20	0	16
Building Construction	278	108	12
Paving	15	4	12
Architectural Coating	56	0	2

Notes:
Additional truck trips were added to each phase for mobilization/demobilization of on-site equipment (two trips per piece of equipment).
Additional vendor trips added to the paving phase to account for delivery of materials.
Source: CalEEMod Output and Additional Supporting Information (Attachment A of Appendix A).

Other Construction Energy Consumption

Other equipment could include construction lighting, field services (office trailers), and electrically driven equipment such as pumps and other tools. As on-site construction activities would be restricted to permissible construction hours, it is anticipated that the use of construction lighting would be minimal. Singlewide mobile office trailers, which are commonly used in construction staging areas, generally range in size from 160 square feet to 720 square feet. The energy consumption estimated for a typical 720-square-foot trailer during construction is 9,553.

There are no unusual project characteristics that would necessitate the use of construction vehicles or equipment that would be less energy efficient than at comparable construction sites in other parts of the state. Therefore, it is expected that construction energy consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than at other construction sites in the region.

Long-term Operations

Transportation Energy Demand

As detailed in Table 8, the project is expected to generate 12 daily trips, which were applied to weekday, Saturday, and Sunday trips for the purpose of estimating.

Table 8: Project Trip Generation Calculations

Description	Employees	Daily Trips
Parking Lot Attendant	6	12
Source: Peters Engineering Group. 2021. Traffic Impact Study - Proposed Heck Parking Lot at 3740 South East Avenue, Fresno, California. September 17.		

Trip Lengths

The CalEEMod default round trip lengths for an urban setting in Fresno County were used in this analysis. Trip lengths are for primary trips. Trip purposes are primary, diverted, and pass-by trips. Diverted trips take a slightly different path than a primary trip. The CalEEMod default rates for percentages of primary, diverted, and pass-by trips were used.

Operational Energy Use

The emissions associated with the building electricity and natural gas usage (non-hearth) were estimated based on the land use type and size. CalEEMod default values for a project served by Pacific Gas and Electric (PG&E) were used in the analysis.

It would be expected that building energy consumption associated with the security buildings built for the parking lot would not be any more inefficient, wasteful, or unnecessary than for any other similar buildings in the region. Current state regulatory requirements for new building construction contained in the 2019 CALGreen and Title 24 standards would increase energy efficiency and reduce energy demand in comparison to existing commercial structures, and therefore would reduce actual environmental effects associated with energy use from the proposed project. Additionally, the CALGreen and Title 24 standards have increased efficiency standards through each update.

Therefore, while the proposed project would result in increased electricity demand, the electricity would be consumed more efficiently and would be typical of similar parking lot developments. Compliance with future building code standards would result in increased energy efficiency.

For the above reasons, energy impacts would be *less than significant.*

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The City of Fresno has adopted local plans that promote renewable energy and energy efficiency. Fresno Green—The City of Fresno's Strategy for Achieving Sustainability— was adopted in 2007 (Fresno Green). One strategy of Fresno Green is for Fresno to become a leader in renewable energy use and creation of related innovative technology and new business enterprises. Fresno Green was the City's first effort to improve sustainability. The City of Fresno General Plan Update and Greenhouse Gas Reduction Plan (GHG Plan) build on this initial effort.

The proposed project would comply with federal, State, and local regulations aimed at reducing energy consumption. Local regulations have been developed in accordance with federal and State energy regulations, such as the California Energy Code Building Energy Efficiency Standards (CCR Title 24, Part 6), the CALGreen Code (CCR Title 24, Part 11), and SB 743, which are also aimed at reducing energy consumption.

The proposed project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. The impact would be *less than significant.*

Mitigation Measures

None required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS – Would the project:				

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Directly or Indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.			X	
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?			X	

DISCUSSION

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

Less Than Significant Impact. The proposed Project site is not located in an earthquake fault zone as delineated by the 1972 Alquist-Priolo Earthquake Fault Zoning Map Act. No active faults have been mapped within the Project boundaries, the nearest known potentially active fault is the Clovis Fault, located approximately 14 miles northeast of the site. Any impacts would be *less than significant.*

ii. **Strong seismic ground shaking?**

Less Than Significant Impact. It is anticipated that the proposed Project site would be subject to some ground acceleration and ground shaking associated with seismic activity during its design life. The Project site would be engineered and constructed in strict accordance with the earthquake resistant design requirements contained in the latest edition of the California Building Code (CBC) for seismic zone III, as well as Title 24 of the California Administrative Code, and therefore would avoid potential seismically induced hazards on planned structures. The impact of strong seismic ground shaking on the Project would be *less than significant.*

iii. **Seismic-related ground failure, including liquefaction?**

Less Than Significant Impact. The potential for soil liquefaction within the City of Fresno ranges from very low to moderate due to the variable density of the subsurface soils and the presence of shallow groundwater (PEIR SCH No. 2019050005). The proposed Project will be subject to policies in the Fresno Municipal Code, including Sections 11-101, 12-1022 and 12-1023, which would reduce potential settlement and lateral spread impacts to *less than significant* levels.

iv. Landslides?

Less Than Significant Impact. The proposed Project site is not located in an earthquake fault zone as delineated by the 1972 Alquist-Priolo Earthquake Fault Zoning Map Act. The nearest known potentially active fault is the Clovis Fault, located approximately 14 miles northeast of the site. No active faults have been mapped within the Project boundaries, so there is no potential for fault rupture. It is anticipated that the proposed Project site would be subject to some ground acceleration and ground shaking associated with seismic activity during its design life. The Project site would be engineered and constructed in strict accordance with the earthquake resistant design requirements contained in the latest edition of the California Building Code (CBC) for seismic zone III, as well as Title 24 of the California Administrative Code, and therefore would avoid potential seismically induced hazards on planned structures. The impact of seismic hazards on the Project would be *less than significant.*

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Construction activities associated with the Project involves ground preparation work for the new trailer storage lot and the associated improvements. These activities could expose barren soils to sources of wind or water, resulting in the potential for erosion and sedimentation on and off the Project site. During construction, nuisance flow caused by minor rain could flow off-site. The City and/or contractor would be required to employ appropriate sediment and erosion control BMPs as part of a Stormwater Pollution Prevention Plan (SWPPP) that would be required in the California National Pollution Discharge Elimination System (NPDES). In addition, soil erosion and loss of topsoil would be minimized through implementation of the SVJAPCD fugitive dust control measures (See Section III). Once construction is complete, the Project would not result in soil erosion or loss of topsoil. Adherence to local and state requirements will ensure that any impacts are *less than significant*.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

Less Than Significant Impact. As discussed in Impact a) above, the site is not at significant risk from earthquakes, ground shaking, liquefaction, or landslide and is otherwise considered geologically stable. Subsidence is typically related to over-extraction of groundwater from certain types of geologic formations where the water is partly responsible for supporting the ground surface. however, the City of Fresno is not recognized by the U.S. Geological Service as being in an area of subsidence.[1] Impacts are considered *less than significant*.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

Less Than Significant Impact. The soil on the proposed Project site is comprised of Hesperia fine sandy loam, deep. This soil types are considered well drained with a low ability for water storage, which means they are unlikely to expand.[2] Any impacts are *less than significant.*

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The Project does not include the construction, replacement, or disturbance of septic tanks or alternative wastewater disposal systems. The Project will be required to tie into existing sewer services (See Utilities section for more details). Therefore, there is *no impact.*

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

1 U.S. Geological Service. Areas of Land Subsidence in California. https://ca.water.usgs.gov/land_subsidence/california-subsidence-areas.html. Accessed November 2021.

[2] USDA Natural Resources Conservation Service. Custom Soil Resource Report for Eastern Fresno Area, California.

Less Than Significant Impact. As discussed previously in this document, there are no known cultural or historical resources on or near the site. (See Section V. for more details). The General Plan PEIR includes mitigation measures that will protect unknown (buried) resources during construction, including paleontological resources. There are no unique geological features on site or in the area. Therefore, there is a *less than significant impact.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
VIII. GREENHOUSE GAS EMISSIONS – Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			X	

DISCUSSION

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The analysis in the Greenhouse Gas section is based off the Air Quality and Greenhouse Gas Analysis Technical Memorandum (Memo) prepared by Johnson Johnson and Miller Air Quality Consulting Services. The Memo is provided in its entirety in Appendix A**.**

The State's regulatory program implementing the 2008 Scoping Plan is now fully mature. All regulations envisioned in the Scoping Plan have been adopted, and the effectiveness of those regulations has been estimated by the agencies during the adoption process and then tracked to verify their effectiveness after implementation. The combined effect of this successful effort is that the State now projects that it will meet the 2020 target and achieve continued progress toward meeting post-2020 targets. Governor Brown, in the introduction to Executive Order B-30-15, stated "California is on track to meet or exceed the current target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32)."

The State's regulatory program is able to target both new and existing development because the two most important strategies, motor vehicle fuel efficiency and emissions from electricity generation, obtain reductions equally from existing sources and new sources. This is because all vehicle operators use cleaner low carbon fuels and buy vehicles subject to the fuel efficiency regulations and all building owners or operators purchase cleaner energy from the grid that is produced by increasing percentages of renewable fuels. This includes regulations on mobile sources such as the Pavley standards that apply to all vehicles purchased in California, the LCFS (Low Carbon Fuel Standard) that applies to all fuel sold in California, and the Renewable Portfolio Standard and Renewable Energy Standard under SB 100 that apply to utilities providing electricity to all California end users.

Moreover, the Scoping Plan strategy will achieve more than average reductions from energy and mobile source sectors that are the primary sources related to development projects and lower than average reductions from other sources such as agriculture. The proposed project's operational GHG emissions would principally be generated from electricity consumption (parking lot and security building lighting) and vehicle use, which are directly under the purview of the Scoping Plan strategy and have experienced reductions above the State average reduction. Considering this

information, the proposed project would be consistent with the State's AB 32 and SB 32 GHG reduction goals. As such, the proposed project's GHG impacts would be *less than significant.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
IX. HAZARDS AND HAZARDOUS MATERIAL – Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			X	
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?			X	
e) For a project located within 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 result in a safety hazard for people residing or working in the project area?			X	
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			X	
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?				X

DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. Construction of the Project would require the use and transport of hazardous materials, including fuels, oils, and other chemicals (e.g., paints, lead, adhesives, etc.) typically used during construction. It is likely that these hazardous materials and vehicles would be stored by the contractor(s) on-site during construction activities. Improper use and transportation of hazardous materials could result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. However, all materials used during construction would be contained, stored, and handled in compliance with applicable standards and regulations established by the Department of Toxic Substances Control (DTSC), the U.S. Environmental Protection Agency (EPA) and the Occupational Safety and Health Administration (OSHA). In addition, as discussed previously, a Storm Water Pollution Prevention Plan (SWPPP) is required for the Project and shall include emergency procedures for incidental hazardous materials releases. The SWPPP also includes Best Management Practices which includes requirements for hazardous materials storage.

The use of hazardous materials would mostly be confined to the Project construction period. Any impacts are *less than significant.*

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less Than Significant. The proposed Project includes the development of a new trailer storage lot, including perimeter fencing, pole lighting and two security buildings. As discussed in Impact a) above, the use of hazardous materials would be primarily confined to the Project construction period and those materials would be contained, stored, and handled in compliance with applicable standards and regulations. As such, there are *less than significant impacts* regarding the release of hazardous materials into the environment.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

Less Than Significant Impact. No schools are located within 0.25 mile of the Project site. This condition precludes the possibility of activities associated with the proposed project exposing schools within a 0.25-mile radius of the project site to hazardous materials. The area surrounding the Project site is primarily comprised of industrial and agricultural purposes. Any impacts would be *less than significant*.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Less Than Significant Impact. The proposed project site is not located on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 (Geotracker[3] and Envirostor[4] databases – accessed in November 2021). There are no hazardous materials sites in the vicinity that impact the project. As such, any impacts would remain *less than significant.*

e) For a project located within 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 result in a safety hazard for people residing or working in the project area?

Less than Significant Impact. The nearest airport to the Project site is Fresno-Chandler Executive Airport, which lies approximately 4.3 miles to the north west; however, the proposed Project site is outside of the Fresno-Chandler Executive Airport Influence Area. Any impacts are considered *less than significant*.

3 California State Water Resources Control Board, GeoTracker Database https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=n+maple+and+e+behymer%2C+fresno. Accessed November 2021.

4 Department of Toxic Substances Control, EnviroStor Database. https://www.envirostor.dtsc.ca.gov/public/map/. Accessed November 2021.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant. The City of Fresno has consulted with its police, fire and ambulance service providers to determine that the proposed project provides adequate emergency access to the Project site and surrounding areas. The City will also provide specific construction schedules and pertinent Project information so that adequate access is maintained at all times. Therefore, the project will have *a less than significant impact.*

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

No Impact. Implementation of the project would not change the degree of exposure to wildfires because there are no wildlands in the Project vicinity, thus precluding the possibility of wildfires. Therefore, there is *no impact.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
X. HYDROLOGY AND WATER QUALITY – Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?			X	
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:			X	
i) Result in a substantial erosion or siltation on- or off-site;			X	
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site:			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or			X	
iv) impede or redirect flood flows?			X	
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?			X	
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?			X	

DISCUSSION

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. The Project has the potential to impact water quality standards and/or waste discharge requirements during construction (temporary impacts) and operation. Impacts are discussed below.

Construction

Although the proposed Project site is relatively small in scale, grading, excavation and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

Three general sources of potential short-term construction-related stormwater pollution associated with the proposed Project are: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Generally, routine safety precautions for handling and storing construction materials may effectively mitigate the potential pollution of stormwater by these materials. These same types of common sense, “good housekeeping” procedures can be extended to non-hazardous stormwater pollutants such as sawdust and other solid wastes.

Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other fluids on the construction site are also common sources of stormwater pollution and soil contamination. In addition, grading activities can greatly increase erosion processes. Two general strategies are recommended to prevent construction silt from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed. Secondly, the area should be secured to control offsite migration of pollutants. These Best Management Practices (BMPs) would be required in the Stormwater Pollution Prevention Plan (SWPPP) to be prepared prior to commencement of Project construction. When properly designed and implemented, these “good-housekeeping” practices are expected to reduce short-term construction-related impacts to less than significant.

In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, the Project will be required to comply with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB) has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and are an existing regulatory requirement.

Therefore, any impacts are *less than significant.*

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less Than Significant Impact. The proposed Project includes the installation of an asphalt concrete parking lot and two security buildings at the parking lots ingress and egress points. Each security building will be equipped with restroom facilities. Water service would be provided to the Project by the City of Fresno. Based on the assumptions in the City's UWMP, the Project would not negatively impact water supplies or otherwise deplete groundwater supplies. Moreover, the proposed Project is not anticipated to interfere with groundwater recharge efforts being implemented by the City. The City's UWMP contains a detailed evaluation of existing sources of water supply, anticipated future water demand, extensive conservation measures, and the development of new water supplies (recycled water, increased recharge, surface water treatment, etc.). Measures contained in the UWMP as well as the City's General Plan are intended to reduce demands on groundwater resources by augmenting supply and introducing conservation measures and other mitigation strategies. Implementation of PEIR Mitigation Measure HYD – 2.1, which states that the City shall continue to be an active participant in the North Kings Groundwater Sustainability Agency to ensure that the Kings Subbasin has balanced levels of pumping and recharge will ensure that any impacts remain *less than significant.*

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. The Project includes changes to the existing stormwater drainage pattern of the area through the installation of asphalt concrete, security buildings, driveways, curb, gutter and sidewalks. The Project has been reviewed by the Fresno Metropolitan Flood Control District and conditions and requirements of the Project pertaining to storm drain facilities have been provided to the Project developer. Additionally, a drainage and grading plan will be required as part of the submittal package to the City of

Fresno, which will ensure stormwater will drain to the appropriate drainage inlet. As such, the Project will have a *less than significant impact.*

ii. Substantially increase the rate or amount of surface runoff in a manner, which would result in flooding on- or off-site?

Less Than Significant Impact. As discussed in Impact c)i. above, the proposed Project developer will be required to prepare a drainage/grading plan as part of the permit process. Potential impacts resulting from surface runoff will be *less than significant.*

iii. Create or contribute runoff water, which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. The proposed Project will connect to the City of Fresno's existing storm-drain system and pay drainage fees pursuant to the Drainage Fee Ordinance. Impacts resulting from polluted runoff will be *less than significant*.

iv. Impede or redirect flood flows?

Less Than Significant Impact. As described in Impact c)ii and c)iii above, the proposed Project developer will be required to prepare a drainage/grading plan and will connect to the City of Fresno's existing storm-drain system. Both of those items will ensure that the proposed Project will have *less than significant impacts* regarding impeding or redirecting flood flows.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Less Than Significant Impact. The Project is outside of any Special Flood Hazard Areas, as identified by the Federal Emergency Management Agency, Flood Map 06019C2125H, effective 2/18/2009. There are no bodies of water near the site that would create a potential risk of hazards from seiche, tsunami or mudflow. The Project

will not conflict with any water quality control plans or sustainable groundwater management plan. As mentioned in Impact c) above, all new development within the City of Fresno Planning Area must conform to standards and plans detailed by the Fresno Metropolitan Flood Control District. By conforming to all standards and policies as outlined, any impacts will remain *less than significant.*

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less Than Significant Impact. The proposed Project will be in compliance with all water quality control plans and other hydrological requirements set forth by the City of Fresno. Any impacts are *less than significant.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XI. LAND USE AND PLANNING – Would the project:				
a) Physically divide an established community?			X	
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?			X	

DISCUSSION

a) Physically divide an established community?

Less Than Significant Impact. The immediate vicinity of the proposed project site is comprised of industrial businesses, agriculture and roadways. The proposed Project includes the development of a new trailer storage lot and the associated improvements and will not divide an existing community. Any impacts are *less than significant.*

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Less Than Significant Impact. Based upon compliance with the goals, objectives and policies referenced herein below, the proposed Project is determined to be consistent with the Fresno General Plan goals and objectives related to land use and the urban form:

Goal No. 1 of the Fresno General Plan: Increase opportunity, economic development, business and job creation.

The Project will provide temporary construction jobs and will ultimately provide approximately six long-term jobs for the growing local work force via the security needs of the parking lot.

Goal No. 7 of the Fresno General Plan: Provide for a diversity of districts, neighborhoods, housing types (including affordable housing), residential densities, job opportunities, recreation, open space, and educational venues that appeal to a broad range of people throughout the City.

This Goal contributes to the establishment of a comprehensive city-wide land use planning strategy to meet economic development objectives, achieve efficient and equitable use of resources and infrastructure, and create an attractive living environment in accordance with Objective LU-1 of the Fresno General Plan.

Goal No. 12 of the Fresno General Plan: Resolve existing public infrastructure and service deficiencies, make full use of existing infrastructure, and invest in improvements to increase competitiveness and promote economic growth.

The Project will tie into existing infrastructure as necessary (water, sewer and storm water) located in the Project vicinity.

Implementing Policies LU-1-a and LU-2-a of the Fresno General Plan: promote development of vacant, underdeveloped, and re-developable land within the Existing City Limits as of December 31, 2012 where urban services are available.

The proposed Project will be constructed in an area planned for heavy industrial development where existing infrastructure is available.

The Project will not conflict with any conservation plans since it is not located within any conservation plan areas.

Fresno County Airport Land Use Compatibility Plan: On December 3, 2018, the Airport Land Use Commission (ALUC) adopted the Fresno County Airport Land Use Compatibility Plan. The proposed Project is not within the Airport Influence Area of the nearest airport, Fresno-Chandler Executive Airport. As such, no impacts related to airport and land use is anticipated.

Therefore, it is determined that the proposed Project is consistent with respective general plan objectives and policies and will not significantly conflict with applicable land use plans, policies or regulations of the City of Fresno. Furthermore, the proposed Project, including the design and improvement of the subject property, is found; (1) To be consistent with the goals, objectives and policies of the applicable Fresno General Plan; (2) To be suitable for the type and density of development; (3) To be safe from potential cause or introduction of serious public health problems; and, (4) To not conflict with any public interests in the subject property or adjacent lands. The authorization request for the proposed plan amendments regarding re-zoning is expected to be approved.

There are no aspects of this Project that will result in impacts to land use and planning beyond those analyzed in the PEIR SCH No. 2012111015 for the Fresno General Plan.

The Project would have a *less than significant impact.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XII. MINERAL RESOURCES – Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X

DISCUSSION

a) **Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

No Impact. There are no known mineral resources in the proposed Project area and none are identified in the City's General Plan near the Project site. Therefore, there is *no impact.*

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

No Impact. As discussed in Impact a) above, there are no known mineral resources identified in the City's General Plan in the proposed Project area. There is *no impact.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIII. NOISE – Would the project result in:				
a) 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?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) 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?			X	

DISCUSSION

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 in other applicable local, state, or federal standards?**

   Less Than Significant Impact.

   Short-term (Construction) Noise Impacts

   Proposed Project construction related activities will involve temporary noise sources. Typical construction related equipment includes graders, trenchers, small tractors, and excavators. During the proposed Project construction, noise from construction related activities will contribute to the noise environment in the immediate vicinity. Activities involved in construction will generate maximum noise levels, as indicated in Table 8, ranging from 79 to 91 dBA at a distance of 50 feet, without feasible noise control (e.g., mufflers) and ranging from 75 to 80 dBA at a distance of 50 feet, with feasible noise controls.

Table 8: Typical Construction Noise Levels

Type of Equipment	dBA at 50 ft	
	Without Feasible Noise Control	With Feasible Noise Control
Dozer or Tractor	80	75
Excavator	88	80
Scraper	88	80
Front End Loader	79	75
Backhoe	85	75
Grader	85	75
Truck	91	75

The distinction between short-term construction noise impacts and long-term operational noise impacts is a typical one in both CEQA documents and local noise ordinances, which generally recognize the reality that short-term noise from construction is inevitable and cannot be mitigated beyond a certain level. Thus, local agencies frequently tolerate short-term noise at levels that they would not accept for permanent noise sources. A more severe approach would be impractical and might preclude the kind of construction activities that are to be expected from time to time in urban environments. Most residents of urban areas recognize this reality and expect to hear construction activities on occasion.

Construction activities would not occur between the hours of 10:00 PM and 7:00 AM, Monday through Saturday, and not at all on Sundays, in accordance with Fresno Municipal Code Section 10-109, which limits work hours “to between the hours of 7 AM and 10 PM on any day except Sunday.”

Long-term (Operational) Noise Impacts

Project Traffic Noise Impacts on Existing Noise-Sensitive Land Uses

The primary source of on-going noise from the Project will be from vehicles traveling to and from the site and from traffic traveling along S. East Avenue and E. Central Avenue. The Project site will also be subject to industrial-related noise due to proximity with nearby industrial businesses. The Project will generate noise associated with hitching and unhitching trailers and generate an increase in traffic on some roadways in the Project area. However, the relatively low number of new trips associated with the Project is not likely to increase the ambient noise levels by a significant amount.

Policy H-1-b of the City's Noise Element addresses significant Project- related increases in ambient noise levels for evaluation of noise impacts. A significant increase is assumed to occur if a project causes the ambient noise level to increase by the following amounts:

Where ambient noise levels are <60 dB: an increase of 5 dB or more

Where ambient noise levels are 60-65 dB: an increase of 3 dB or more

Where ambient noise levels are >65 dB: an increase of 1.5 dB or more

Given the amount of existing vehicular activity in the Project area, the extremely low increase in traffic associated with the new trailer storage lot (12 daily trips, 4 a.m. peak hour trips and 4 p.m. peak hour trips), is not expected to increase ambient noise levels by more than 1 dB. The area is active with vehicles, industrial businesses and agriculture and the proposed Project will not introduce a new significant source of noise that isn't already occurring in the area. Therefore, the impact is considered *less than significant.*

2. **Generation of excessive groundborne vibration or groundborne noise levels?**

Less Than Significant Impact. The dominant sources of man-made vibration are sonic booms, blasting, pile driving, pavement breaking, demolition, diesel locomotives, and rail-car coupling. None of these activities are anticipated to occur with construction or operation of the proposed project. Vibration from construction activities could be detected at the closest sensitive land uses, especially during movements by heavy equipment or loaded trucks and during some paving activities (if they were to occur). Typical vibration levels at distances of 100 feet and 300 feet are summarized by Table 12. These levels would not be expected to exceed any significant threshold levels for annoyance or damage.

Table 12: Typical Vibration Levels During Construction

Equipment	PPV (in/sec)	
	@100'	@300'

Bulldozer (Large)	0.011	0.006
Bulldozer (Small)	0.0004	0.00019
Loaded Truck	0.01	0.005
Jackhammer	0.005	0.002
Vibratory Roller	0.03	0.013
Caisson Drilling	0.01	0.006
Source: Caltrans		

After full project build out, it is not expected that ongoing operational activities will result in any vibration impacts at nearby sensitive uses. Additional mitigation is not required. There are no aspects of construction or daily operations that would create groundborne vibration. As such, any impacts would be *less than significant.*

3. **For a project located within 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?**

Less Than Significant Impact. There are no private airstrips in the Project vicinity. The Project site is located within the boundaries of the Fresno County *Airport Land Use Compatibility Plan* (ALUCP); however, it is not inside any Airport Influence Areas within the region. As such, impacts will remain *less than significant.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIV. POPULATION AND HOUSING – Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?			X	
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?				X

DISCUSSION

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Less Than Significant Impact. There are no new homes associated with the proposed Project and there are no residential structures currently on-site. The proposed Project includes construction of a new trailer storage lot, including perimeter fencing, pole lighting and two security buildings. The Project would temporarily provide construction jobs in the City of Fresno area, which could be readily filled by the existing employment base. At full build-out, the security buildings will require six full-time employees during operation, which will provide some long-term employment opportunities. The proposed Project will not affect any regional population, housing or

employment projections anticipated by City policy documents. There is a *less than significant* impact.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

No Impact. There are currently no residential units on-site, thus no people or existing housing will be displaced. There is *no impact*.

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XV. PUBLIC SERVICES – Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Fire protection?			X	
Police protection?			X	
Schools?			X	
Parks?			X	
Other public facilities?			X	

DISCUSSION

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

i. Fire protection?

Less Than Significant. The Project includes construction of a new trailer storage lot, including perimeter fencing, pole lighting and two security buildings.

The City of Fresno Fire Department (Fire Department) offers a full range of services including fire prevention, suppression, emergency medical care, hazardous materials, urban search and rescue response, as well as emergency preparedness planning and public education coordination within the Fresno City limit, in addition to having mutual aid agreements with the Fresno County

Fire Protection District, and the City of Clovis Fire Departments.

The City of Fresno Fire Department operates its facilities under the guidance set by the National Fire Protection Association in NFPA 1710, the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operation to the Public by Career Fire Departments. NFPA 1710 sets standards for turnout time, travel time, and total response time for fire and emergency medical incidents, as well as other standards for operation and fire service. The Fire Department has established the objectives set forth in NFPA 1710 as department objectives to ensure the public health, safety, and welfare.

The proposed Project would be served by the current Fire Station 7, which is located at 2571 S. Cherry Avenue, approximately 2.1 miles northwest of the Project site. After reviewing the Project, the Fire Department has determined that the Project can be adequately serviced by the current local Fire Facilities and Personnel, consistent with National Fire Protection Association 1710 Objectives.

The Fresno General Plan contains the following objectives and policies:

Objective PU-3: Enhance the level of fire protection to meet the increasing demand for services from an increasing population.

Implementing Policies:

- **PU-3-a** Fire Prevention Inspections. Develop strategies to Fire Prevention Inspections. Enable the performance of annual fire and life safety inspection of all industrial, commercial, institutional, and multi-family residential buildings, in accordance with nationally recognized standards for the level of service necessary for a large Metropolitan Area, including a self-certification program.

- **PU-3-b** Reduction Strategies. Develop community risk Reduction Strategies, such as strategies that target high service demand areas, vulnerable populations (e.g. young children, older adults, non-English speaking residents, persons with disabilities, etc.), and high life hazard occupancies.

- **PU-3-c** Public Education Strategies. Develop strategies to Public Education Strategies. re-establish and enhance routine public education outreach to all sectors of the community.

- **PU-3-d** Review Development Application Review Development Application Applications. Continue Fire Department review of development applications, provide comments and recommend conditions of approval that will ensure adequate on-site and off-site fire protection systems and features are provided.

- **PU-3-e** Building Codes. Adopt and enforce amendments to construction and fire codes, as determined appropriate, to systematically reduce the level of risk to life and property from fire, commensurate with the City's fire suppression capabilities.

- **PU-3-f** Adequate Infrastructure. Continue to pursue the provision of adequate water supplies, hydrants, and appropriate property access to allow for adequate fire suppression throughout the City.

- **PU-3-g** Cost Recovery. Continue to evaluate appropriate codes, policies, and methods to generate fees or other sources of revenue to offset the ongoing personnel and maintenance costs of providing fire prevention and response services.

- **PU-3-h** Annexations. Develop annexation strategies to include the appropriate rights-of-way and easements necessary to provide cost effective emergency services.

- **PU-3-i** New Fire Station Locations. Consideration will be given to co-locating new Fire Station facilities with other public property including, but not limited to, police substations, schools, parks, playgrounds, and community centers to create a synergy of participation in the neighborhood with the potential result of less vandalism and promotion of a better sense of security for the citizens using these facilities.

The Project would be required to comply with all applicable fire and building safety codes (California Building Code and Uniform Fire Code) to ensure fire safety elements are incorporated into final Project design. As a result,

appropriate fire safety considerations will be included as part of the final design of the Project. Project implementation will result in *less than significant impacts.*

ii. Police protection?

Less Than Significant. The Project includes construction of a new trailer storage lot, including perimeter fencing, pole lighting and two security buildings. Protection services would be provided to the Project site from the existing Southeast Police District, approximately 3.3 miles to the north at 1617 S. Cedar Avenue. The Fresno Police Department provides a full range of police services including uniformed patrol response to calls for service, crime prevention, tactical crime and enforcement (including gang and violent crime suppression), and traffic enforcement/accident prevention. The Project site is located in an area currently served by the Police Department; the Department would not need to expand its existing service area or construct a new facility to serve the Project site. Any impacts are considered *less than significant.*

iii. Schools?

Less Than Significant. The Project includes construction of a new trailer storage lot, including perimeter fencing, pole lighting and two security buildings. The proposed Project does not contain any residential uses. The proposed Project, therefore, would not result in an influx of new students in the Project area and is not expected to result in an increased demand upon District resources and would not require the construction of new facilities. Any impacts are considered *less than significant.*

iv. Parks?

Less Than Significant. The Project includes construction of a new trailer storage lot, including perimeter fencing, pole lighting and two security buildings. The Project would not result in an increase in demand for parks and recreation facilities because it would not result in an increase in population. Impacts are considered *less than significant.*

v. Other public facilities?

Less Than Significant. The Project includes construction of a new trailer storage lot, including perimeter fencing, pole lighting and two security buildings.

The Project does not include any residences and, therefore, would not result in increased demand for, or impacts on, other public facilities such as library services. Development of the Project will not require construction of additional facilities. Impacts are *less than significant.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVI. RECREATION - Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			X	
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?			X	

DISCUSSION

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Less Than Significant. The Project includes construction of a new trailer storage lot, including perimeter fencing, pole lighting and two security buildings. The Project does not include the construction of residential uses and would not directly or indirectly induce population growth. Therefore, the proposed Project would not cause physical deterioration of existing recreational facilities from increased usage. Impacts are *less than significant.*

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

Less Than Significant. As discussed above, the Project includes construction of a new trailer storage lot, including perimeter fencing, pole lighting and two security buildings. Additionally, the Project does not include development of residential uses and therefore, the proposed Project would not result in the need for new or expanded recreational facilities. Impacts are *less than significant.*

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION – Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
d) Result in inadequate emergency access?			X	

DISCUSSION

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Less Than Significant. A Traffic Impact Study (Study) was performed on behalf of the Project by Peters Engineering Group, report date September 17, 2021. The report's analysis focuses on the anticipated number of vehicle trips resulting from the project and the associated vehicle miles traveled (VMT). The Study is provided in Appendix C. It should be noted that potential impacts resulting from Heavy-duty truck traffic is addressed in other sections of CEQA document (air quality, greenhouse gas, and noise) and are subject to regulation in a separate collection of rules under CARB jurisdiction.

Worst-case trip generation characteristics for new trips (six employees) is expected to be 12 daily trips, 4a.m. peak hour trips and 4 p.m. peak hour trips. Although 66 new

parking spaces will be created as a result of the Building 31 parking lot modifications, those spaces will serve the existing workforce. Traffic generation (and associated VMT) impacts were analyzed in the Northpoint Building 31 Trip Generation and Impact Assessment report dated November 20,2020 and approved under Development Permit No. P20-03406. That Assessment is included in Appendix C of this document.

The Project was also analyzed based on current zoning. As it is zoned for Heavy Industrial, the lot could be potentially developed with industrial park-type uses, with approximately 313,600 square feet of building area. Hypothetical Heavy Industrial Project trip generation is expected to be 1,058 daily trips, 107 a.m. peak hour trips and 107 p.m. peak hour trips. The results of the trip generation analyses suggest that the proposed Project will result in substantially fewer trips than would be expected based on the planned Heavy Industrial zoning. The impact would be *less than significant.*

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Less Than Significant Impact. Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto our roads, the project may cause a significant transportation impact.

The State CEQA Guidelines were amended to implement SB 743, by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS measures of impacts on traffic facilities is no longer a relevant CEQA criteria for transportation impacts.

CEQA Guidelines Section 15064.3(b)(4) states that "[a] lead agency has discretion to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate used to estimate vehicle miles traveled and any revision

to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."

On June 25, 2020, the City of Fresno adopted CEQA Guidelines for Vehicle Miles Traveled Thresholds, dated June 25, 2020, pursuant to Senate Bill 743 to be effective of July 1, 2020. The thresholds described therein are referred to herein as the City of Fresno VMT Thresholds. The City of Fresno VMT Thresholds document was prepared and adopted consistent with the requirements of CEQA Guidelines Sections 15064.3 and 15064.7. The December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) published by the Governor's Office of Planning and Research (OPR), was utilized as a reference and guidance document in the preparation of the Fresno VMT Thresholds.

The City of Fresno VMT Thresholds adopted a screening standard and criteria that can be used to screen out qualified projects that meet the adopted criteria from needing to prepare a detailed VMT analysis.

The City of Fresno VMT Thresholds Section 3.0 regarding Project Screening discusses a variety of projects that may be screened out of a VMT analysis including specific development and transportation projects. For development projects, conditions may exist that would presume that a development project has a less than significant impact. These may be size, location, proximity to transit, or trip-making potential. For transportation projects, the primary attribute to consider with transportation projects is the potential to increase vehicle travel, sometimes referred to as "induced travel."

The proposed project is eligible to screen out because the project will generate less than 500 trips per day as the proposed project is estimated to generate 12 trips per day. In conclusion, the Project will result in a *less than significant* VMT impact and is consistent with CEQA Guidelines section 15064.3(b).

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Less Than Significant Impact. The proposed Project has been designed for ease

of access, adequate circulation/movement, and is typical of mixed-use developments in the City of Fresno. On-site circulation patterns do not involve high speeds, sharp curves or dangerous intersections. Although there will be slight increase in the volume of vehicles accessing the site and surrounding areas, the proposed Project will not present a substantial increase in hazards. Any impacts are considered *less than significant.*

d) Result in inadequate emergency access?

Less Than Significant Impact. The proposed Project does not involve a change to any emergency response plan. Access points to the Project site will remain accessible to emergency vehicles of all sizes. As such, potential impacts are *less than significant.*

Mitigation Measures:

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XVII. TRIBAL CULTURAL RESOURCES – Would the project:				

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a tribal cultural resource, defined in PRC section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in PRC section 5020.1(k), or,			X	
ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of PRC section 5024.1. In applying the criteria set forth in subdivision (c) of PRC section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.			X	

DISCUSSION

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

Less Than Significant Impact. As discussed in Section V, Cultural Resources, Impact c), a prehistoric and historic site records and literature search was conducted for the Project area through the Southern San Joaquin Valley Archaeological Information Center of the California Historical Resources Information System on November 2, 2021 (File RS#21-423). Records indicated that there have been no previous cultural resources studies conducted within the Project area. There have been seven studies conducted within a one-half mile radius (see Appendix B). A review of the Sacred Lands Inventory by the Native American Heritage Commission (NAHC) was also performed and the results were negative.

There are no previously recorded cultural resources within the Project area. Furthermore, it is not known if any currently exist there. There have been three resources recorded within the one-half mile radius, P-10-004303, 004677, 006349; all of which are historic properties. The recommendation of the Southern San Joaquin Valley Archaeological Information Center of the California Historical Resources Information System is that the Project should be surveyed by a qualified, professional consultant prior to ground disturbance activities in order to more assuredly demonstrate that no cultural resources are present. Any impacts will remain *less than significant.*

ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in

subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less Than Significant Impact. In accordance with Assembly Bill (AB) 52, potentially affected Tribes were formally notified of this Project and were given the opportunity to request consultation on the Project. The City contacted the Native American Heritage Commission, requesting a contact list of applicable Native American Tribes, which was provided to the City. The City provided letters to the listed Tribes on December 23, 2021, notifying them of the Project and requesting consultation, if desired. The City did not receive any responses from the tribes contacted. Therefore, there is a *less than significant impact*.

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effect?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?			X	
c) Result in a determination by the waste water treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?			X	
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?			X	

DISCUSSION

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Less Than Significant Impact. Wastewater service, electric power, natural gas and telecommunications facilities would all provide service to the proposed Project from their respective existing facilities and as such, would not be required to construct new or expanded facilities. As part of the proposed Project, a water main will be installed along the Central Ave frontage and the impacts of that installation are analyzed in this document. The Project will have a *less than significant impact* to this analysis area.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Less Than Significant Impact. Water service would be provided to the Project by the City of Fresno. The site is currently zoned Heavy Industrial, and as such, the site's water demand has been anticipated by the City's adopted planning documents.

While the Project would increase demand for water resources beyond current levels, however, the proposed usage has been planned for in the 2015 UWMP and the site is zoned and designated appropriately. Based on the assumptions in the City's UWMP, the Project would not negatively impact water supplies or otherwise deplete groundwater supplies. Moreover, the proposed Project is not anticipated to interfere with groundwater recharge efforts being implemented by the City. The City's UWMP contains a detailed evaluation of existing sources of water supply, anticipated future water demand, extensive conservation measures, and the development of new water supplies (recycled water, increased recharge, surface water treatment, etc.). Measures contained in the UWMP as well as the City's General Plan are intended to reduce demands on groundwater resources by augmenting supply and introducing conservation measures and other mitigation strategies.

In addition to adequate water supply, the Project is also subject to minimum water pressure requirements. The Fire Protection Water Demand shall be added to the overall Project water demands at 1,500 gallons per minute. The sum of the Peak Hour Water Demands and Fire Protection Demands (in gpm) shall establish the total instantaneous water supply flow required for the Project, inclusive of fire protection.

The Project Applicant will be required to adhere to these standards and maintain them in perpetuity.

The proposed Project would not require new or expanded water entitlements and there is sufficient water supply for the Project. Therefore, the impact is *less than significant.*

c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Less Than Significant Impact. The Project will result in wastewater from parking lot faucets and/or security building restroom facilities that will be discharged into the City's existing wastewater treatment system. The wastewater will be typical of other urban development consisting of a bathrooms and other similar features. The City of Fresno Public Works Department has reviewed the Project and determined that it can accommodate the wastewater generated from the Project. Therefore, the impact of the Project on wastewater treatment is *less than significant.*

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Less Than Significant Impact. The Project will be served by the City's contracted waste hauler. The project proposes truck trailer parking stalls and two small guard shacks. The Department of Public Utilities determined that the existing trash compactor being utilized for the existing building would be adequate to accommodate any additional solid waste that could be generated by the new parking lot, and that the new parking lot did not require construction of additional trash enclosures. The Project would be required to comply with the Fresno Municipal Code which outlines requirements and specifications for solid waste collection, including construction recycling. The existing building is estimated to generate 63 cubic yards of solid waste bi-weekly per Waste Development Guidelines. Regarding City of Fresno capacity for solid waste, the City of Fresno currently produces approximately 4,600 tons of material each week. The City of Fresno's solid waste is primarily landfilled at the American Avenue Landfill in Tranquility. The landfill is permitted to accept 2,200 tons per day and has a permitted capacity of 29.3 million cubic yards. The original closure

date was 2031; however, due to enhanced recycling efforts, particularly on the part of the City of Fresno, the closure date has been extended to 2050. Therefore, Project compliance with applicable measures would promote regular collection and encourage the recycling of materials in accordance with the City's current capacity. The proposed Project's impact on solid waste will be *less than significant.*

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less Than Significant Impact. The proposed Project will be in compliance with federal, state and local management and reduction statutes related to solid waste. Any impacts are *less than significant.*

Mitigation Measures

1. The proposed project shall implement and incorporate, as applicable, the utilities and service systems related mitigation measures as identified in the attached PEIR Mitigation Monitoring and Reporting Program dated November 2021.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XX. WILDFIRE – If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?				X

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wldfire?			X	
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?				X
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?				X

DISCUSSION

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed Project will be required to be in compliance with any adopted emergency response plan as part of the building permit process. There is *no impact.*

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Less Than Significant Impact. The proposed Project is located in a flat area developed with industrial and agricultural land uses, which precludes the risk of wildfire. The area is flat in nature which would limit the risk of downslope flooding and landslides, and limit any wildfire spread. As such, any wildfire risk to the project structures or people would be *less than significant.*

c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

No Impact. The proposed Project is located in an area developed with urban uses. There are no aspects of this Project that would exacerbate fire risk. There is *no impact.*

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

No Impact. As discussed in Impact b) above, the proposed Project is located in an area dominated by urban uses and is relatively flat, which precludes the risk of downslope or downstream flooding. There is *no impact*.

Mitigation Measures

None are required.

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
XIX. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?			X	

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X	

DISCUSSION

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact. The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. The applicable PEIR mitigation measures have been incorporated as described in each impact area to reduce all potentially significant impacts to ***less than significant***.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

Less than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and

whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. All Project- related impacts were determined to be either less than significant, or less than significant after mitigation. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc.). Due to buildout of the area and existing land constraints, it is not anticipated that further substantial commercial or residential development will occur in the area in the foreseeable future. As such, Project impacts are not considered to be cumulatively considerable given the lack of proposed new development in the area and the insignificance of Project-induced impacts. The impact is therefore *less than significant.*

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact. The analyses of environmental issues contained in this Initial Study indicate that the Project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures from the PEIR have been incorporated as described in each specific impact area which will reduce all potentially significant impacts to *less than significant*

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Proposed Heck Parking Lot

Date: November 8, 2021

Subject: Air Quality and Greenhouse Gas Analysis Technical Memorandum

This Air Quality and Greenhouse Gas Analysis Technical Memorandum was prepared to evaluate whether the estimated criteria air pollutant, ozone precursor, toxic air contaminant (TAC), and/or greenhouse gas (GHG) emissions generated from construction and/or operation of the Proposed Heck Parking Lot Project (proposed project or project) would cause significant impacts to air or GHG resources. The methodology follows the Guidance for Assessing and Mitigating Air Quality Impacts (GAMAQI) prepared by the San Joaquin Valley Air Pollution Control District (SJVAPCD) for the quantification of emissions and evaluation of potential impacts to air resources[1] and the SJVAPCD's Guidance for Valley Land-Use Agencies in Addressing GHG Emission Impacts for New Projects under the California Environmental Quality Act (CEQA).[2]

Project Location and Description

The project site is located at 3740 South East Avenue in Fresno, California, which is northeast of the intersection of East and Central Avenues. The site covers approximately 15 acres zoned Heavy Industrial. The project consists of development of a parking lot with up to 315 truck trailer parking stalls. Associated amenities and improvements that are part of the proposed project include site pole lighting, security fencing, and 2 security buildings (guard shacks). Other improvements include approximately 300 feet of curb, gutter, and sidewalk improvements along S. East Avenue.

Traffic utilizing the proposed parking lot would include trucks making deliveries to Building 31 and minimal employee trips. The parking lot is intended to supplement activities occurring at Building 31, and all truck trips utilizing the parking lot were considered when Building 31 was approved. New employees generated by the project would be limited to approximately six new employees at the proposed guard shacks. Project operational times would be typical of other distribution/logistics projects, which are typically 24 hours a day, seven days a week.

The project's location is shown in Attachment A.

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[1] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed October 20, 2021.

[2] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2009. Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA. December 17. Website: https://www.valleyair.org/Programs/CCAP/12-17-09/3%20CCAP%20-%20FINAL%20LU%20Guidance%20-%20Dec%2017%202009.pdf. Accessed September 20, 2021.

Modeling Parameters and Assumptions

The following modeling parameters and assumptions were used to generate criteria air pollutant and greenhouse gas (GHG) emissions for the proposed project.

Air Pollutants and GHGs Assessed

Criteria Pollutants Assessed

The following criteria air pollutants were assessed in this analysis: reactive organic gases (ROG), oxides of nitrogen (NO_X), particulate matter less than 10 microns in diameter (PM_{10}), and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$). Note that the proposed project would emit ozone precursors ROG and NO_X. However, the proposed project would not directly emit ozone since it is formed in the atmosphere during the photochemical reaction of ozone precursors.

GHGs Assessed

This analysis was restricted to GHGs identified by AB 32, which include carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF_6), and nitrogen trifluoride (NF_3). The proposed project would generate a variety of GHGs, including several defined by AB 32 such as CO_2, CH_4, and N_2O.

Certain GHGs defined by AB 32 would not be emitted by the project. HFCs, PFCs, SF_6, and NF_3 are typically used in industrial applications, none of which would be used for typical warehouse operations. Therefore, it is not anticipated that the proposed project would emit those GHGs.

GHG emissions associated with the proposed project construction as well as future operations were estimated using CO_2 equivalent (CO_2e) emissions as a proxy for all GHG emissions. In order to obtain the CO_2e, an individual GHG is multiplied by its Global Warming Potential (GWP). The GWP designates on a pound for pound basis the potency of the GHG compared to CO_2.

Model Selection

Criteria Pollutants and GHG Emissions

The California Emissions Estimator Model (CalEEMod) is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. CalEEMod quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from energy use, solid waste disposal, vegetation planting and/or removal, and water use. Further, CalEEMod identifies mitigation measures to reduce criteria pollutant and GHG emissions along with calculating the benefits achieved from measures chosen by the user.

CalEEMod was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California Air Districts. Default data (e.g., emission factors, trip lengths, meteorology, source inventory, etc.) have been provided by the various California Air Districts to account for local requirements and conditions.

CalEEMod is a comprehensive tool for quantifying air quality impacts from land use projects located throughout California. The model can be used for a variety of situations where an air quality analysis is necessary or desirable such as preparing CEQA or National Environmental Policy Act documents, conducting pre-project planning, and, verifying compliance with local air quality rules and regulations, etc.

CalEEMod version CalEEMod.2020.4.0 was used to estimate construction and operational impacts of the proposed project. CalEEMod version was the most recent version of CalEEMod at the time emissions were estimated (November 7, 2021). Furthermore, the SJVAPCD is currently accepting the use of CalEEMod version CalEEMod.2020.4.0.

Assumptions

Construction Modeling Assumptions

Schedule

The proposed project would require construction activities, including site preparation, grading, and paving for the approximately 15-acre parking lot. In addition, building construction and architectural coating activities were included to account for emissions associated with the construction of proposed guard shacks. Table 1 shows the anticipated construction schedule. The construction start date (January 6, 2022), the overall construction duration (approximately 12 weeks), and the amount of import/export (cut and fill to be balanced on-site) were provided by the project applicant. The construction schedule utilized in the analysis represents a "worst-case" analysis scenario since emission factors for construction equipment decrease as the analysis year increases, due to improvements in technology and more stringent regulatory requirements. Therefore, construction emissions would decrease if the construction schedule moved to later years. The duration of construction activity and associated equipment represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. The site-specific construction fleet may vary due to specific project needs at the time of construction.

Table 1: Project Construction Schedule

Construction Task	Start Date	End Date	Workdays	Notes
Site Preparation	1/6/2022	1/19/2022	10	CalEEMod default duration
Grading	1/20/2022	3/2/2022	30	CalEEMod default duration
Building Construction	3/3/2022	3/23/2022	15	Adjusted to reflect project-specific information
Paving	3/3/2022	3/30/2022	20	CalEEMod default duration
Architectural Coating	3/24/2022	3/31/2022	6	Adjusted to reflect project-specific information
Source: CalEEMod Output and Additional Supporting Information (Attachment A).				

Equipment

Construction equipment for each construction activity is shown in Table 2.

Table 2: Project Construction Equipment

Construction Task	Equipment Type	Pieces of Equipment	Usage (hours/day)	Horsepower	Load Factor	Fuel Type
Site Preparation	Rubber Tired Dozers	3	8	247	0.40	Diesel
	Tractors/Loaders/Backhoes	4	8	97	0.37	Diesel
Grading	Excavators	2	8	158	0.38	Diesel
	Graders	1	8	187	0.41	Diesel

Construction Task	Equipment Type	Pieces of Equipment	Usage (hours/day)	Horsepower	Load Factor	Fuel Type
	Rubber Tired Dozers	1	8	247	0.40	Diesel
	Scrapers	2	8	367	0.48	Diesel
	Tractors/Loaders/Backhoes	2	8	97	0.37	Diesel
Building Construction	Forklifts	3	8	89	0.20	Diesel
	Tractors/Loaders/Backhoes	3	7	97	0.37	Diesel
Paving	Pavers	2	8	130	0.42	Diesel
	Paving Equipment	2	8	132	0.36	Diesel
	Rollers	2	8	80	0.38	Diesel
Architectural Coating	Air Compressors	1	6	78	0.48	Diesel
Source: CalEEMod Output and Additional Supporting Information (Attachment A)						

Vehicles Trips

Table 3 provides a summary of the construction-related vehicle trips. CalEEMod default values were used to estimate the number of construction-related vehicle trips. Additional haul trips were added to each construction activity to account for the mobilization of off-road equipment. Additional vendor trips were included in the paving phase to account for delivery of materials.

The default values for hauling trips are based on the assumption that a truck can haul 20 tons (or 16 cubic yards) of material per load. If one load of material is delivered, CalEEMod assumes that one haul truck importing material will also have a return trip with an empty truck (e.g., 2 one-way trips).

The fleet mix for worker trips is light-duty passenger vehicles to light-duty trucks. The vendor trips fleet mix is composed of a mixture of medium and heavy-duty diesel trucks. The hauling trips were assumed to be 100 percent heavy-duty diesel truck trips. CalEEMod default trip lengths for a project in Fresno County and an urban setting were used for the construction trips.

Table 3: Construction Vehicle Trips

Construction Task	Worker Trips per Day	Vendor Trips per Day	Total Haul Truck Trips
Site Preparation	18	0	14
Grading	20	0	16
Building Construction	278	108	12
Paving	15	4	12
Architectural Coating	56	0	2
Notes: Additional truck trips were added to each phase for mobilization/demobilization of on-site equipment (two trips per piece of equipment). Additional vendor trips added to the paving phase to account for delivery of materials. Source: CalEEMod Output and Additional Supporting Information (Attachment A).			

Operational Modeling Assumptions

Operational emissions are those emissions that occur during long-term operations of the proposed project.

Motor Vehicles

Motor vehicle emissions refer to exhaust and road dust emissions from the automobiles that would travel to and from the proposed project site. Project trips for the regional analysis were based on the project-specific project trip generation provided in the Traffic Impact Study for the proposed project dated September 17, 2021. Table 4 presents worst-case trip generation characteristics for new trips (six employees) expected to be generated by the project. Twelve daily trips were applied to weekday, Saturday, and Sunday trips for the purpose of estimating emissions.

Table 4: Project Trip Generation Calculations

Description	Employees	Daily Trips
Parking Lot Attendant	6	12
Source: Peters Engineering Group. 2021. Traffic Impact Study - Proposed Heck Parking Lot at 3740 South East Avenue, Fresno, California. September 17.		

As noted in the Traffic Impact Study for the proposed project, trip generation characteristics for Building 31 were studied in a Northpoint Building 31 Trip Generation and Impact Assessment report dated November 20, 2020. The truck trips expected to be generated by Building 31 that would utilize the proposed parking lot are summarized in Table 5.

Table 5: Building 31 Truck Trips

Description	Daily Trips
Building 31 Truck Trips	94
Source: Peters Engineering Group. 2021. Traffic Impact Study - Proposed Heck Parking Lot at 3740 South East Avenue, Fresno, California. September 17.	

As the trips in Table 5 are not new trips, these truck trips are not included in regional estimates. However, truck emissions were included the localized assessment of the air quality analysis. Truck emissions in the localized operational assessment were estimated based on the daily trips presented in Table 5.

Trip Lengths

The CalEEMod default round trip lengths for an urban setting in Fresno County were used in this analysis. Trip lengths are for primary trips. Trip purposes are primary, diverted, and pass-by trips. Diverted trips take a slightly different path than a primary trip. The CalEEMod default rates for percentages of primary, diverted, and pass-by trips were used.

Vehicle Fleet Mix

The vehicle fleet mix is defined as the mix of motor vehicle classes active during the operation of the proposed project. Emission factors are assigned to the expected vehicle mix as a function of vehicle class, speed, and fuel use (gasoline- and diesel-powered vehicles). The fleet mix was adjusted to reflect passenger vehicles only for the employee trips that would be generated by the proposed project. The

adjusted fleet mix used the CalEEMod default fleet mix as the basis; the calculations for the adjusted fleet mix are included as part of Attachment A.

Area Sources

Consumer Products

Consumer products are various solvents used in non-industrial applications, which emit VOCs during their product use. “Consumer Product” means a chemically formulated product used by household and institutional consumers, including but not limited to: detergents; cleaning compounds; polishes; floor finishes; cosmetics; personal care products; home, lawn, and garden products; disinfectants; sanitizers; aerosol paints; and automotive specialty products. It does not include other paint products, furniture coatings, or architectural coatings. CalEEMod includes default consumer product use rates based on building square footage. The default emission factors developed for CalEEMod were used for consumer products associated with parking uses and the general consumer product category.

Architectural Coatings (Painting)

Paints release VOC emissions. The parking lot lines and buildings (guard shacks) may be repainted on occasion. CalEEMod defaults were used to estimate emissions from architectural coatings.

Landscaping Emissions

CalEEMod estimates a total of 180 days for which landscaping equipment would be used to estimate potential emissions for the proposed project.

Indirect Emissions

For GHG emissions, CalEEMod contains calculations to estimate indirect GHG emissions. Indirect emissions are emissions where the location of consumption or activity is different from where actual emissions are generated. For example, electricity would be consumed at the proposed project site; however, emissions associated with producing that electricity are generated off-site at a power plant. Since the electricity can vary greatly based on locations, the user should override these values if they have more specific information regarding their specific water supply and treatment.

Energy Use

The emissions associated with the building electricity and natural gas usage (non-hearth) were estimated based on the land use type and size. CalEEMod default values for a project served by Pacific Gas and Electric (PG&E) were used in the analysis.

Other Indirect Emissions (Water Use, Wastewater Use, and Solid Waste)

CalEEMod includes calculations for indirect GHG emissions for electricity consumption, water consumption, and solid waste disposal. For water consumption, CalEEMod calculates embedded energy (e.g., treatment, conveyance, distribution) associated with providing each gallon of potable water to the project. For solid waste disposal, GHG emissions are associated with the disposal of solid waste generated by the proposed project into landfills. CalEEMod default data were used for inputs associated with solid waste.

Yard Tractor

It is anticipated that a yard tractor would be used to move trailers for four (4) to six (6) hours per day. Emissions from the on-site use of a yard tractor were estimated using emission factors from CARB Offroad 2017. For the purposes of providing a conservative estimate, it was assumed that the yard tractor

would be used for six (6) hours per day and seven (7) days a week. The calculations used to estimate emissions from the use of an on-site yard tractor are included as part of Attachment A.

Thresholds

Air pollutant emissions have regional effects and localized effects. This analysis assesses the regional effects of the project's criteria pollutant emissions in comparison to SJVAPCD thresholds of significance for short-term construction activities and long-term operation of the project. Localized emissions from project construction and operation are also assessed using concentration-based thresholds that determine if the project would result in a localized exceedance of any ambient air quality standards or would make a cumulatively considerable contribution to an existing exceedance.

The primary pollutants of concern during project construction and operation are ROG, NO_X, PM_{10}, and $PM_{2.5}$. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for ROG and NO_X; SO_X, CO, PM_{10}, and $PM_{2.5}$.

Ozone is a secondary pollutant that can be formed miles away from the source of emissions through reactions of ROG and NO_X emissions in the presence of sunlight. Therefore, ROG and NO_X are termed ozone precursors. The SJVAB often exceeds the state and national ozone standards. Therefore, if the project emits a substantial quantity of ozone precursors, the project may contribute to an exceedance of the ozone standard. The SJVAB also exceeds air quality standards for PM_{10}, and $PM_{2.5}$; therefore, substantial project emissions may contribute to an exceedance for these pollutants.

The SJVAPCD adopted significance thresholds for construction-related and operational ROG, NO_X, PM, CO, and SO_X, these thresholds are included in Table 6.

Table 6: SJVAPCD Proposed Project-Level Air Quality CEQA Thresholds of Significance

Pollutant	Significance Threshold	
	Construction Emissions (tons/year)	Operational Emission (tons/year)
CO	100	100
NO_X	10	10
ROG	10	10
SO_X	27	27
PM_{10}	15	15
$PM_{2.5}$	15	15

Source: SJVAPCD. 2015. Guidance for Assessing and Mitigating Air Quality Impacts. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed October 20, 2021.

Fugitive Dust

Construction

Fugitive dust would be generated from site grading and other earth-moving activities. Most of this fugitive dust would remain localized and would be deposited near the project site. However, the potential for impacts from fugitive dust exists unless control measures are implemented to reduce the emissions from the project site. Therefore, adherence to Regulation VIII would be required during construction of the proposed project. Regulation VIII would require fugitive dust control measures that are consistent with

best management practices (BMPs) established by the SJVAPCD to reduce the proposed project's construction-generated fugitive dust impacts to a less than significant level.

The SJVAPCD (SJVAPCD or District) adopted Regulation VIII in 1993 and its most recent amendments became effective on October 1, 2004. This is a basic summary of the regulation's requirements as they apply to construction sites. These regulations affect all workers at a regulated construction site, including everyone from the landowner to the subcontractors. Violations of Regulation VIII are subject to enforcement action including fines.[3]

Visible Dust Emissions may not exceed 20 percent opacity during periods when soil is being disturbed by equipment or by wind at any time. Visible Dust Emissions opacity of 20 percent means dust that would obstruct an observer's view of an object by 20 percent. District inspectors are state certified to evaluate visible emissions. Dust control may be achieved by applying water before/during earthwork and onto unpaved traffic areas, phasing work to limit dust, and setting up wind fences to limit windblown dust.

Soil Stabilization is required at regulated construction sites after normal working hours and on weekends and holidays. This requirement also applies to inactive construction areas such as phased projects where disturbed land is left unattended. Applying water to form a visible crust on the soil and restricting vehicle access are often effective for short-term stabilization of disturbed surface areas. Long-term methods including applying dust suppressants and establishing vegetative cover.

Carryout and Trackout occur when materials from emptied or loaded vehicles falls onto a paved surface or shoulder of a public road or when materials adhere to vehicle tires and are deposited onto a paved surface or shoulder of a public road. Should either occur, the material must be cleaned up at least daily, and immediately if it extends more than 50 feet from the exit point onto a paved road. The appropriate clean-up methods require the complete removal and cleanup of mud and dirt from the paved surface and shoulder. Using a blower device or dry sweeping with any mechanical device other than a PM10-efficient street sweeper is a violation. Larger construction sites, or sites with a high amount of traffic on one or more days, must prevent carryout and trackout from occurring by installing gravel pads, grizzlies, wheel washers, paved interior roads, or a combination thereof at each exit point from the site. In many cases, cleaning up trackout with water is also prohibited as it may lead to plugged storm drains. Prevention is the best method.

Unpaved Access and Haul Roads, as well as unpaved vehicle and equipment traffic areas at construction sites must have dust control. Speed limit signs limiting vehicle speed to 15 mph or less at construction sites must be posted every 500 feet on uncontrolled and unpaved roads.

Storage Piles and Bulk Materials have handling, storage, and transportation requirements that include applying water when handling materials, wetting or covering stored materials, and installing wind barriers to limit visible dust emissions. Also, limiting vehicle speeds, loading haul trucks with a freeboard of six inches or greater along with applying water to the top of the load, and covering the cargo compartments are effective measures for reducing visible dust emissions and carryout from vehicles transporting bulk materials.

Dust Control Plans identify the dust sources and describe the dust control measures that will be implemented before, during, and after any dust generating activity for the duration of the project. Owners or operators are required to submit plans to the SJVAPCD at least 30 days prior to commencing the work for the following:

- Residential developments of ten or more acres of disturbed surface area.

[3] San Joaquin Valley Air Pollution Control District (SJVAPCD). 2007. Compliance Assistance Bulletin. Website: http://www.valleyair.org/busind/comply/pm10/forms/RegVIIICAB.pdf. Accessed May 29, 2021.

• Non-residential developments of five or more acres of disturbed surface area.

• The relocation of more than 2,500 cubic yards per day of materials on at least three days.

Operations may not commence until the SJAVPCD has approved the Dust Control Plan. A copy of the plan must be on site and available to workers and District employees. All work on the site is subject to the requirements of the approved dust control plan. A failure to abide by the plan by anyone on site may be subject to enforcement action. Owners or operators of construction projects that are at least one acre in size and where a Dust Control Plan is not required, must provide written notification to the SJVAPCD at least 48 hours in advance of any earthmoving activity.

Record Keeping is required to document compliance with the rules and must be kept for each day any dust control measure is used. The SJVAPCD has developed record forms for water application, street sweeping, and "permanent" controls such as applying long term dust palliatives, vegetation, ground cover materials, paving, or other durable materials. Records must be kept for one year after the end of dust generating activities (Title V sources must keep records for five years).

Exemptions exist for several activities. Those occurring above 3,000 feet in elevation are exempt from all Regulation VIII requirements. Further, Rule 8021 – Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities exempts the following construction and earthmoving activities:

• Blasting activities permitted by California Division of Industrial Safety.

• Maintenance or remodeling of existing buildings provided the addition is less than 50% of the size of the existing building or less than 10,000 square feet (due to asbestos concerns, contact the SJVAPCD at least two weeks ahead of time).

• Additions to single family dwellings.

• The disking of weeds and vegetation for fire prevention on sites smaller than ½ acre.

• Spreading of daily landfill cover to preserve public health and safety and to comply with California Integrated Waste Management Board requirements.

Nuisances are prohibited at all times because District Rule 4102 – Nuisance applies to all construction sources of fugitive dust, whether or not they are exempt from Regulation VIII. It is important to monitor dust-generating activities and implement appropriate dust control measures to limit the public's exposure to fugitive dust.

Criteria Pollutant Emission Estimates

Construction Emissions (Regional)

Construction emissions associated with the project are shown in Table 7. As shown in Table 7, the emissions are below the significance thresholds and, therefore, are less than significant on a project basis.

Table 7: Summary of Construction-Generated Emissions of Criteria Air Pollutants – Unmitigated

Emissions Source	Emissions (Tons/Year)					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Site Preparation	0.016	0.167	0.101	0.000	0.053	0.030
Grading	0.055	0.585	0.444	0.001	0.089	0.048

Building Construction	0.015	0.106	0.136	0.000	0.026	0.010
Paving	0.031	0.115	0.150	0.000	0.007	0.006
Architectural Coating	0.140	0.005	0.010	0.000	0.002	0.001
Project Total	**0.258**	**0.977**	**0.841**	**0.002**	**0.177**	**0.094**
Significance Thresholds	10	10	100	27	15	15
Exceed Significance Thresholds?	No	No	No	No	No	No

Notes:
PM_{10} and $PM_{2.5}$ emissions are from the mitigated output to reflect compliance with Regulation VIII—Fugitive PM_{10} Prohibitions.
Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A).
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed October 20, 2021.

Operational Emissions (Regional)

Operational emissions occur over the lifetime of the project. Operational emissions are shown in Table 8. The SJVAPCD considers construction and operational emissions separately when making significance determinations.

The emissions output for project operation at full buildout for 2022 are summarized in Table 8. As shown in Table 8, the operational emissions would be less than the thresholds of significance for all criteria air pollutants.

Table 8: Summary of Operational Emissions of Criteria Air Pollutants – Unmitigated

Source	Emissions (tons/year)					
	ROG	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
Area	0.059	<0.001	<0.001	<0.001	<0.001	<0.001
Energy	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mobile (Employee Trips)	0.004	0.004	0.042	<0.001	0.013	0.004
Yard Tractor	<0.001	0.027	<0.001	<0.001	0.002	0.002
Annual Total (2022)	**0.062**	**0.031**	**0.043**	**0.000**	**0.015**	**0.006**
Significance Thresholds	10	10	100	27	15	15
Exceed Significance Thresholds?	No	No	No	No	No	No

Notes:
Emissions were quantified using CalEEMod based on project details and estimated operating year for the proposed project. Totals may not sum exactly due to rounding.
Source: CalEEMod Output and Additional Supporting Information (Attachment A).

Localized Impacts

Emissions occurring at or near the project have the potential to create a localized impact also referred to as an air pollutant hotspot. Localized emissions are considered significant if when combined with background emissions, they would result in exceedance of any health-based air quality standard. In locations that already exceed standards for these pollutants, significance is based on a significant impact level (SIL) that represents the amount that is considered a cumulatively considerable contribution to an existing violation of an air quality standard. The pollutants of concern for localized impact in the SJVAB are NO_2, SO_x, and CO.

The SJVAPCD has provided guidance for screening localized impacts in the GAMAQI that establishes a screening threshold of 100 pounds per day of any criteria pollutant. If a project exceeds 100 pounds per day of any criteria pollutant, then ambient air quality modeling would be necessary. If the project does not exceed 100 pounds per day of any criteria pollutant, then it can be assumed that it would not cause a violation of an ambient air quality standard.

Construction: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X

Local construction impacts would be short-term in nature lasting only during the duration of construction. As shown in Table 9 below, on-site construction emissions would be less than 100 pounds per day for each of the criteria pollutants. To present a conservative estimate, on-site emissions for on-road construction vehicles were included in the localized analysis. Based on the SJVAPCD's guidance, the construction emissions would not cause an ambient air quality standard violation.

Table 9: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X for Construction

Source	On-site Emissions (pounds per day)			
	NOx	CO	PM_{10}	$PM_{2.5}$
Site Preparation	33.13	19.86	10.46	6.03
Grading	38.87	29.20	5.78	3.15
Building Construction	9.40	12.49	0.58	0.45
Paving	11.21	14.74	0.57	0.52
Architectural Coating	1.46	2.24	0.10	0.09
Overlap of Building Construction and Paving	20.61	27.24	1.16	0.98
Overlap of Paving and Architectural Coating	12.67	16.98	0.67	0.61
Maximum Daily On-site Emissions	**38.87**	**29.20**	**10.46**	**6.03**
Significance Thresholds	100	100	100	100
Exceed Significance Thresholds?	No	No	No	No

Note: Overlap of construction activities is based on the construction schedule shown in Table 1.
Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A).
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed October 20, 2021.

Operation: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X

Localized impacts could occur in areas with a single large source of emissions such as a power plant or with multiple sources concentrated in a small area such as a distribution center. Since the project would be relocating where some truck emissions would occur compared to currently approved conditions, the analysis includes emissions from heavy-duty trucks from Building 31 in addition to the new sources of emissions from the proposed project. Consistent with information presented in the project-specific Traffic Impact Analysis, it was assumed that Building 31 generates 94 daily truck trips. For the purposes of estimating emissions, 100 percent of the truck fleet mix was assumed to be 4+-axle trucks.

As shown in Table 10 below, Operational modeling of on-site emissions for the project indicate that the project would not exceed 100 pounds per day for each of the criteria pollutants. Therefore, based on the SJVAPCD's guidance, the operational emissions would not cause an ambient air quality standard violation. As such, impacts would be less than significant.

Table 10: Localized Concentrations of PM_{10}, $PM_{2.5}$, CO, and NO_X for Operations

Source	On-site Emissions (pounds per day)			
	NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
Area	<0.01	<0.01	<0.01	<0.01
Energy	<0.01	<0.01	<0.01	<0.01
Mobile - Passenger Vehicles Trips	0.01	0.09	<0.01	<0.01
Mobile - Building 31 Truck Trips	2.11	1.53	0.04	0.01
Yard Tractor	0.15	<0.01	0.01	0.01
Total	**2.27**	**1.63**	**0.05**	**0.02**
Significance Thresholds	100	100	100	100
Exceed Significance Thresholds?	No	No	No	No

Source of Emissions: CalEEMod Output and Additional Supporting Information (Attachment A). Maximum daily emissions were highest for NO_X in the Summer scenario; emissions of CO, PM_{10}, and $PM_{2.5}$ were highest in the Winter scenario.
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed October 20, 2021.

Addressing Air Quality CEQA Impact Questions

Table 11: Summary of Air Quality Impact Analysis

Air Quality *Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations.*	
Would the project:	**Significance Finding**
a) Conflict with or obstruct implementation of the applicable air quality plan?	Less than Significant Impact
b) 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?	Less than Significant Impact
c) Expose sensitive receptors to substantial pollutant concentrations?	Less than Significant Impact
d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?	Less than Significant Impact

a) Conflict with or obstruct implementation of the applicable air quality plan?

Less Than Significant Impact.

Air Quality Plans (AQPs) are plans for reaching attainment of air quality standards. The assumptions, inputs, and control measures are analyzed to determine if the Air Basin can reach attainment for the ambient air quality standards. The proposed Project site is located within the jurisdictional boundaries of the SJVAPCD. To show attainment of the standards, the SJVAPCD analyzes the growth projections in the Valley, contributing factors in air pollutant emissions and formations, and existing and adopted emissions controls. The SJVAPCD then formulates a control strategy to reach attainment that includes both State and SJVAPCD regulations and other local programs and measures.

The CEQA Guidelines indicate that a significant impact would occur if the project would conflict with or obstruct implementation of the applicable air quality plan. The GAMAQI indicates that projects that do not exceed SJVAPCD regional criteria pollutant emissions quantitative thresholds would not conflict with or obstruct the applicable AQP.

As shown above in Table 7 and Table 8, the project's construction and operational regional emissions would not exceed SJVAPCD's regional criteria pollutant emissions quantitative thresholds. Therefore, the proposed project would not be considered in conflict with or obstruct implementation of the applicable air quality plan.

b) 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?

Less Than Significant Impact.

To result in a less than significant impact, emissions of nonattainment pollutants must be below the SJVAPCD's regional significance thresholds. This is an approach recommended by the SJVAPCD's in its GAMAQI. The primary pollutants of concern during project construction and operation are ROG, NO_X, PM_{10}, and $PM_{2.5}$. The SJVAPCD GAMAQI adopted in 2015 contains thresholds for CO, NO_X, ROG, SO_X, PM_{10}, and $PM_{2.5}$.

Air pollutant emissions have both regional and localized effects. As shown in Table 9 and Table 10, the project's regional emissions would not exceed the applicable regional criteria pollutant emissions quantitative thresholds.

c) Expose sensitive receptors to substantial pollutant concentrations?

Less Than Significant Impact.

Emissions occurring at or near the project have the potential to create a localized impact that could expose sensitive receptors to substantial pollutant concentrations. The SJVAPCD considers a sensitive receptor to be a location that houses or attracts children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants. Examples of sensitive receptors include hospitals, residences, convalescent facilities, and schools. The closest sensitive receptor is an existing residence located approximately 260 feet southeast site of the project site.

The SJVAPCD's GAMAQI includes screening thresholds for identifying projects that need detailed analysis for localized impacts. Projects with on-site emission increases from construction activities or operational activities that exceed the 100 pounds per day screening level of any criteria pollutant after implementation of all enforceable mitigation measures would require additional analysis to determine if the preparation of an ambient air quality analysis is needed. The criteria pollutants of concern for localized impact in the Air Basin are PM_{10}, $PM_{2.5}$, NO_X, and CO. There is no localized emission standard for ROG.

As shown in Table 9, the project would not exceed the emission screening thresholds during project construction. Therefore, the project's localized criteria pollutant impacts from construction of the project would be less than significant.

As shown in Table 10, the project would not exceed SJVAPCD screening thresholds for localized criteria pollutant impacts; therefore, the project's localized criteria pollutant impacts from long-term operations would be less than significant.

Toxic Air Contaminants

Construction

As discussed above, criteria pollutant emissions during construction would not exceed the SJVAPCD's significance thresholds and would not be expected to result in concentrations that would exceed ambient standards or contribute substantially to an existing exceedance of an ambient air quality standard. Therefore, construction of the proposed project would not result in localized emissions that, if when combined with background emissions, would result in exceedance of any health-based air quality standard for any criteria pollutant. As such, health risk impacts related to criteria pollutants emitted during the construction period of the proposed project would be less than significant.

Construction-related activities would result in temporary, short-term project-generated emissions of diesel particulate matter (DPM) from the exhaust of off-road, heavy-duty diesel equipment for site preparation (e.g., clearing, grading); soil hauling truck traffic; paving; application of architectural coatings; and other miscellaneous activities. For construction activity, DPM is the primary air toxic of concern. Particulate exhaust emissions from diesel-fueled engines (i.e., DPM) were identified as a toxic air contaminant (TAC) by the California Air Resources Board (CARB) in 1998. Due to proposed project's proximity to existing sensitive receptors, a health risk assessment was performed to assess impacts from DPM emissions resulting from construction of the project. The results of the health risk assessment are summarized below, while the calculations used for the health risk assessment are provided as Attachment B.

The construction HRA evaluated DPM (represent as exhaust PM_{10}) emissions generated during construction of the proposed project and the related health risk impacts for sensitive receptors located within 1,000 feet of the project boundary. A project would result in a significant impact if it would individually expose sensitive receptors to TACs resulting in an increased cancer risk greater than 20 in one million or an increased non-cancer risk of greater than 1.0 on the hazard index. It should be noted that the SJVAPCD's latest threshold of significance for TAC emissions is an increase in cancer risk for the maximally exposed individual of 20 in one million (formerly 10 in one million).

The project site is located within 1,000 feet from existing sensitive receptors that could be exposed to diesel emission exhaust during the construction period. The closest sensitive receptor is an existing residence located approximately 260 feet southeast site of the project site. To estimate the potential cancer risk associated with construction of the proposed project from equipment exhaust (including DPM), a dispersion model[4] (AERMOD) was used to translate an emission rate from the source location to concentrations at the receptor locations of interest (i.e., receptors at nearby residences). AERMOD provides a refined methodology for estimating localized impacts by utilizing long-term, measured representative meteorological data for the project site and a representative construction schedule.

Cancer Risk

The Office of Environmental Health Hazard Assessment (OEHHA) has developed guidance for estimating cancer risks that considers the increased sensitivity of infants and adults to TAC emissions, different breathing rates, and time spent at home. This guidance was applied in estimating cancer risks from the construction and operation of the proposed project.

The recommend method for the estimation of cancer risk is shown in the equations.

$$\text{Cancer Risk} = C_{DPM} \times \text{Inhalation Exposure Factor} \qquad \text{(EQ-1)}$$

Where:

Cancer Risk = Total individual excess cancer risk defined as the cancer risk a hypothetical individual faces if exposed to carcinogenic emissions from a particular source for specified exposure durations; this risk is defined as an excess risk because it is above and beyond the background cancer risk to the population; cancer risk is expressed in terms of risk per million exposed individuals.

C_{DPM} = Period average DPM air concentration calculated from the air dispersion model in $\mu g/m^3$

Inhalation is the most important exposure pathway to impact human health from DPM and the inhalation exposure factor is defined as follows:

$$\text{Inhalation Exposure Factor} = CPF \times EF \times ED \times DBR \times AAF/AT \qquad \text{(EQ-2)}$$

Where:

CPF = Inhalation cancer potency factor for the TAC: 1.1 $(mg/kg\text{-}day)^{-1}$ for DPM
EF = Exposure frequency (days/year)

[4] An air dispersion model is a mathematical formulation used to estimate air quality impacts at specific locations (receptors) surrounding a source of emissions given the rate of emissions and prevailing meteorological conditions. The air dispersion model applied in this assessment was the EPA American Meteorological Society Regulatory Model (AERMOD), Version 19191, which is approved by the SJVAPCD for air dispersion assessments.

ED = Exposure duration (years of construction)
AAF = set of age-specific adjustment factors that include age sensitivity factors (ASF), daily breathing rates (DBR), and time at home factors (TAH)
AT = Averaging time period over which exposure is averaged (days)

Chronic Non-Cancer Hazard

Non-cancer chronic impacts are calculated by dividing the annual average concentration by the Reference Exposure Level (REL) for that substance. The REL is defined as the concentration at which no adverse non-cancer health effects are anticipated. The following equation was used to determine the non-cancer risk:

Hazard Quotient = Ci/RELi

Where:

Ci	=	Concentration in the air of substance i (annual average concentration in $\mu g/m^3$)
RELi	=	Chronic noncancer Reference Exposure Level for substance i ($\mu g/m^3$)

Construction Health Risk Assessment Results

The results of the HRA prepared for project construction for cancer risk and long-term chronic cancer risk are summarized below. Construction emissions were estimated assuming adherence to all applicable rules, regulations, and project design features. The construction emissions were assumed to be distributed over the project area with a working schedule of eight hours per day and five days per week. Emissions were adjusted by a factor of 4.2 to convert for use with a 24-hour-per-day, 365 day-per-year averaging period. Detailed parameters and complete calculations are included in Attachment B.

The estimated health and hazard impacts at the Maximally Exposed Receptor (MEI) from the project's construction emissions are provided in Table 12.

Table 12: Summary of the Health Impacts from Construction of the Proposed Project

Exposure Scenario	Maximum Cancer Risk (Risk per Million)	Chronic Non-Cancer Hazard Index
Risks and Hazards at the MEI: Infant (3rd Trimester)	0.81	0.013
Risks and Hazards at the MEI: Infant (Age Zero)	2.45	0.013
Risks and Hazards at the MEI: Child	0.50	0.013
Risks and Hazards at the MEI: Adult	0.05	0.013
Significance Threshold	20	1
Threshold Exceeded in Any Scenario?	**No**	**No**

Notes:
MEI = maximally exposed receptor
Source: Construction Health Risk Assessment (Attachment B).

As noted in Table 12, the proposed project's construction DPM emissions would not exceed the cancer risk significance threshold or non-cancer hazard index significance threshold at the MEI. Therefore, the proposed project would not result in a significant impact on nearby sensitive receptors from TACs during construction.

Operations

The proposed project would entail the operation of an approximately 15-acre parking lot and would be an inconsequential source of net new localized emissions. Specifically, traffic utilizing the proposed parking lot would include trucks making deliveries to Building 31 (currently under construction), minimal employee trips, and emissions from operations of a yard tractor used to move trailers. The parking lot is intended to supplement activities occurring at Building 31, and all truck trips utilizing the parking lot were considered when Building 31 was approved. New employees generated by the project would be limited to approximately six (6) new employees at the proposed guard shacks. As shown in Table 8 and Table 10, emissions during operations would not exceed the applicable SJVAPCD significance thresholds and would not be expected to result in concentrations that would exceed ambient standards or contribute substantially to an existing exceedance of an ambient air quality standard. As discussed in more detail above, the localized emission estimates provided in Table 10 include on-site emissions associated with 94 daily truck trips. Although these would not be new trips, these emissions would be occurring at a different location than what was analyzed for the approved Building 31 project. PM_{10} and $PM_{2.5}$ are commonly used as proxies for DPM emissions. As shown in Table 10, maximum daily on-site emissions of PM_{10} and $PM_{2.5}$ (including on-site emissions from the truck trips associated with Building 31) would not exceed the SJVAPCD's localized screening thresholds. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations during operation or result in localized emissions that, when combined with background emissions, would result in an exceedance of any health-based air quality standard. As such, health risk impacts related to criteria pollutants or DPM emitted during long-term operations of the proposed project would be less than significant.

d) Result in other emissions (such as those leading to odors or) adversely affecting a substantial number of people?

Less Than Significant Impact.

Two situations create a potential for odor impact. The first occurs when a new odor source is located near an existing sensitive receptor. The second occurs when a new sensitive receptor locates near an existing source of odor. The proposed project is of the first type only since it involves a potential new odor source and would not locate any new sensitive receptors.

Odor impacts on residential areas and other sensitive receptors, such as hospitals, day-care centers, schools, etc. warrant the closest scrutiny, but consideration should also be given to other land uses where people may congregate, such as recreational facilities, worksites, and commercial areas.

Although the project is less than one mile from the nearest sensitive receptor, the project is not expected to be a significant source of odors. The screening levels for these land use types are shown in Table 13.

Table 13: Screening Levels for Potential Odor Sources

Odor Generator	Screening Distance
Wastewater Treatment Facilities	2 miles
Sanitary Landfill	1 mile
Transfer Station	1 mile
Composting Facility	1 mile
Petroleum Refinery	2 miles
Asphalt Batch Plant	1 mile
Chemical Manufacturing	1 mile
Fiberglass Manufacturing	1 mile
Painting/Coating Operations (e.g., auto body shop)	1 mile
Food Processing Facility	1 mile
Feed Lot/Dairy	1 mile
Rendering Plant	1 mile
Wastewater Treatment Facilities	2 miles
Source of Thresholds: San Joaquin Valley Air Pollution Control District (SJVAPCD). 2015. Guidance for Assessing and Mitigating Air Quality Impacts. February 19. Website: https://www.valleyair.org/transportation/GAMAQI-2015/FINAL-DRAFT-GAMAQI.PDF. Accessed September 20, 2021.	

The proposed project is an approximately 15-acre parking lot that would support operations associated with Building 31. The proposed project would result in new construction emissions and an increase in operational emissions from the six new employees and daily yard tractor operation. The parking lot is intended to supplement activities occurring at Building 31, and all truck trips utilizing the parking lot were considered when Building 31 was approved. However, traffic accessing the proposed parking lot would include trucks making deliveries to Building 31. Although these emissions have been accounted for when considering regional air quality impacts, the proposed project has the potential to move localized emissions closer to existing or proposed sensitive receptors. Therefore, emissions from these trucks are considered in the odor impact analysis for the proposed project. Impacts from construction and operations of the proposed project are discussed separately below.

Construction

During construction, various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and intermittent, which would decrease the likelihood of the odors concentrating in a single area or lingering for any notable period of time. As such, these odors would likely not be noticeable for extended periods of time beyond the project's site boundaries. The potential for odor impacts from construction of the proposed project would, therefore, be less than significant.

Operations

The development of an additional parking lot would not substantially increase objectionable odors in the area and would not introduce any new sensitive receptors to the area that could be affected by any existing objectionable odor sources in the area. Land uses that are typically identified as sources of objectionable odors include landfills, transfer stations, sewage treatment plants, wastewater pump

stations, composting facilities, asphalt batch plants, rendering plants, and other land uses outlined in Table 13. The proposed project would not engage in any of these activities. Specifically, the proposed project is an approximately 15-acre parking lot that would support operations of Building 31. Minor sources of odors that would be associated with typical trailer parking lot uses, such as exhaust from mobile sources, are known to have temporary and less concentrated odors. Considering the low intensity of potential odor emissions, the proposed project's operational activities would not expose receptors to objectionable odor emissions. Therefore, the proposed project would not be considered to be a generator of objectionable odors during operations. As such, impacts would be less than significant.

Greenhouse Gas Emissions Estimation Summary and Greenhouse Gas Impact Analysis

Thresholds of Significance

San Joaquin Valley Air Pollution Control District

The SJVAPCD's Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA presents a tiered approach to analyzing project significance with respect to GHG emissions. Project GHG emissions are considered less than significant if they can meet any of the following conditions, evaluated in the order presented:

- Project is exempt from CEQA requirements;
- Project complies with an approved GHG emission reduction plan or GHG mitigation program;
- Project implements Best Performance Standards (BPS); or
- Project demonstrates that specific GHG emissions would be reduced or mitigated by at least 29 percent compared to Business-as-Usual (BAU), including GHG emission reductions achieved since the 2002-2004 baseline period.

Project-level Thresholds

Section 15064.4(b) of the CEQA Guidelines' amendments for GHG emissions states that a lead agency may take into account the following three considerations in assessing the significance of impacts from GHG emissions.

- Consideration #1: The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Consideration #2: Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.
- Consideration #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. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of GHG emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an Environmental Impact Report (EIR) must be prepared for the project.

Quantification of Greenhouse Gas Emissions

Construction Emissions

GHG emissions generated during all phases of construction were combined and are shown in Table 14. The SJVAPCD does not have a recommendation for assessing the significance of construction related emissions, however, other jurisdictions such as the Sacramento Metropolitan Air Quality Management District (SMAQMD) have concluded that construction emissions should be included since they may remain in the atmosphere for years after construction is complete. The SMAQMD has established quantitative significance thresholds of 1,100 MT CO_2e per year for the construction phases of land use projects. As such, annual construction emissions below the 1,100 MT CO_2e would have a less than significant cumulative impact on GHGs.

Table 14: Summary of Construction-Generated Greenhouse Gas Emissions

Emissions Source	MT CO_{2e} per Year
Site Preparation	18
Grading	85
Building Construction	39
Paving	22
Architectural Coating	2
Total Construction Duration (2022)	
Total	**166**
Significance Threshold	1,100
Threshold Exceeded?	No
Notes: MT CO2e = metric tons of carbon dioxide equivalent Totals may not appear to sum exactly due to rounding. Source: CalEEMod Output and Additional Supporting Information (Attachment A).	

Operational GHG Emissions

Operational or long-term GHG emissions occur over the life of the project. Operational emissions were estimated using CalEEMod for informational purposes. As modeled, the proposed project is expected to generate 142 MT CO2e per year, as shown below in Table 15.

Table 15: Summary of Project-Generated Greenhouse Gas Emissions During Operations

Emissions Source	MT CO_{2e} per Year
Area	<0.1
Energy	22
Mobile (Employee Trips)	11
Yard Tractor	108
Waste	0.2
Water	0.2
Annual Total (2022)	**142**
Notes: MT CO2e = metric tons of carbon dioxide equivalent Totals may not appear to sum exactly due to rounding. Sources: CalEEMod Output and Additional Supporting Information.	

Addressing Greenhouse Gas CEQA Impact Questions

Table 16: Summary of Greenhouse Gas Impact Analysis

Greenhouse Gas Emissions	
Would the project:	**Significance Finding**
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	Less than Significant Impact
b) Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	Less than Significant Impact

a-b) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact.

The State's regulatory program implementing the 2008 Scoping Plan is now fully mature. All regulations envisioned in the Scoping Plan have been adopted, and the effectiveness of those regulations has been estimated by the agencies during the adoption process and then tracked to verify their effectiveness after implementation. The combined effect of this successful effort is that the State now projects that it will meet the 2020 target and achieve continued progress toward meeting post-2020 targets. Governor Brown, in the introduction to Executive Order B-30-15, stated "California is on track to meet or exceed the current target of reducing greenhouse gas emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (AB 32)."

The State's regulatory program is able to target both new and existing development because the two most important strategies, motor vehicle fuel efficiency and emissions from electricity generation, obtain reductions equally from existing sources and new sources. This is because all vehicle operators use cleaner low carbon fuels and buy vehicles subject to the fuel efficiency regulations and all building owners or operators purchase cleaner energy from the grid that is produced by increasing percentages of renewable fuels. This includes regulations on mobile sources such as the Pavley standards that apply to all vehicles purchased in California, the LCFS (Low Carbon Fuel Standard) that applies to all fuel sold in California, and the Renewable Portfolio Standard and Renewable Energy Standard under SB 100 that apply to utilities providing electricity to all California end users.

Moreover, the Scoping Plan strategy will achieve more than average reductions from energy and mobile source sectors that are the primary sources related to development projects and lower than average reductions from other sources such as agriculture. The proposed project's operational GHG emissions would principally be generated from electricity consumption (parking lot and guard shack lighting) and vehicle use, which are directly under the purview of the Scoping Plan strategy and have experienced reductions above the State average reduction. Considering this information, the proposed project would be consistent with the State's AB 32 and SB 32 GHG reduction goals. As such, the proposed project's GHG impacts would be less than significant.

Attachments

Attachment A – CalEEMod Output and Additional Supporting Information

Attachment B – Construction Health Risk Assessment

ATTACHMENT A
CalEEMod Output and Additional Supporting Information

CalEEMod Results

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Proposed Heck Parking Lot - Construction and 2022 Operations

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	0.48	1000sqft	0.01	475.00	0
Other Non-Asphalt Surfaces	3.00	1000sqft	0.07	3,000.00	0
Parking Lot	15.10	Acre	15.10	657,756.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2022
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Unmitigated Construction and 2022 Operations
New guard shack and passenger vehicle employee trips

Land Use - Parking lot on approximately 15 acres
2 guard shacks totaling 475 square feet
Associated gutter and sidewalk improvements

Construction Phase - Project construction schedule
01/06/22 - 03/31/22
No demolition

Off-road Equipment - Adjusted to reflect project-specific equipment usage estimates
No cranes, generators, or welders required for guard shack construction

Trips and VMT - Additional truck trips were added to each phase for mobilization/demobilization of on-site equipment (two trips per piece of equipment).
Additional vendor trips added to the paving phase to account for delivery of materials

Grading - Cut/fill to balance on-site

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Architectural Coating - Compliance with SJVAPCD Rule 4601 - Architectural Coatings

Vehicle Trips - 12 daily passenger vehicle trips (project-specific trip generation)

Area Coating - Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII

Area Mitigation - SJVAPCD Rule 4601 - Architectural Coatings

Fleet Mix - Passenger vehicle fleet mix (LDA, LDT1, LDT2, and MDV)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	15.00
tblConstructionPhase	NumDays	20.00	6.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.50	0.56
tblFleetMix	LDT1	0.05	0.06
tblFleetMix	LDT2	0.18	0.20
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.1760e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.17	0.19
tblFleetMix	MH	3.2120e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	7.4100e-004	0.00
tblFleetMix	SBUS	1.5660e-003	0.00
tblFleetMix	UBUS	2.9200e-004	0.00
tblLandUse	LandUseSquareFeet	480.00	475.00

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tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripNumber	0.00	14.00
tblTripsAndVMT	HaulingTripNumber	0.00	16.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblVehicleTrips	ST_TR	1.74	25.00
tblVehicleTrips	SU_TR	1.74	25.00
tblVehicleTrips	WD_TR	1.74	25.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2576	0.9768	0.8413	1.8500e-003	0.2648	0.0425	0.3073	0.1130	0.0392	0.1522	0.0000	164.4827	164.4827	0.0418	3.3700e-003	166.5337
Maximum	**0.2576**	**0.9768**	**0.8413**	**1.8500e-003**	**0.2648**	**0.0425**	**0.3073**	**0.1130**	**0.0392**	**0.1522**	**0.0000**	**164.4827**	**164.4827**	**0.0418**	**3.3700e-003**	**166.5337**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.2576	0.9768	0.8413	1.8500e-003	0.1348	0.0425	0.1773	0.0551	0.0392	0.0942	0.0000	164.4825	164.4825	0.0418	3.3700e-003	166.5335
Maximum	**0.2576**	**0.9768**	**0.8413**	**1.8500e-003**	**0.1348**	**0.0425**	**0.1773**	**0.0551**	**0.0392**	**0.0942**	**0.0000**	**164.4825**	**164.4825**	**0.0418**	**3.3700e-003**	**166.5335**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**49.09**	**0.00**	**42.30**	**51.25**	**0.00**	**38.07**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-6-2022	4-5-2022	1.2294	1.2294
		Highest	1.2294	1.2294

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0585	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Energy	5.0000e-005	4.2000e-004	3.5000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	22.1622	22.1622	3.5200e-003	4.3000e-004	22.3795
Mobile	3.8100e-003	3.8400e-003	0.0423	1.2000e-004	0.0130	6.0000e-005	0.0130	3.4400e-003	6.0000e-005	3.5000e-003	0.0000	11.0507	11.0507	4.1000e-004	3.5000e-004	11.1665
Waste						0.0000	0.0000		0.0000	0.0000	0.0914	0.0000	0.0914	5.4000e-003	0.0000	0.2263
Water						0.0000	0.0000		0.0000	0.0000	0.0352	0.0556	0.0908	3.6300e-003	9.0000e-005	0.2072
Total	**0.0623**	**4.2600e-003**	**0.0428**	**1.2000e-004**	**0.0130**	**9.0000e-005**	**0.0130**	**3.4400e-003**	**9.0000e-005**	**3.5300e-003**	**0.1266**	**33.2687**	**33.3953**	**0.0130**	**8.7000e-004**	**33.9798**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0585	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Energy	5.0000e-005	4.2000e-004	3.5000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	22.1622	22.1622	3.5200e-003	4.3000e-004	22.3795
Mobile	3.8100e-003	3.8400e-003	0.0423	1.2000e-004	0.0130	6.0000e-005	0.0130	3.4400e-003	6.0000e-005	3.5000e-003	0.0000	11.0507	11.0507	4.1000e-004	3.5000e-004	11.1665
Waste						0.0000	0.0000		0.0000	0.0000	0.0914	0.0000	0.0914	5.4000e-003	0.0000	0.2263
Water						0.0000	0.0000		0.0000	0.0000	0.0352	0.0556	0.0908	3.6300e-003	9.0000e-005	0.2072
Total	**0.0623**	**4.2600e-003**	**0.0428**	**1.2000e-004**	**0.0130**	**9.0000e-005**	**0.0130**	**3.4400e-003**	**9.0000e-005**	**3.5300e-003**	**0.1266**	**33.2687**	**33.3953**	**0.0130**	**8.7000e-004**	**33.9798**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2022	1/19/2022	5	10	Default duration
2	Grading	Grading	1/20/2022	3/2/2022	5	30	Default duration
3	Building Construction	Building Construction	3/3/2022	3/23/2022	5	15	Adjusted to reflect project-specific information

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4	Paving	Paving	3/3/2022	3/30/2022	5	20	Default duration
5	Architectural Coating	Architectural Coating	3/24/2022	3/31/2022	5	6	Adjusted to reflect project-specific information

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 15.17

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 713; Non-Residential Outdoor: 238; Striped Parking Area: 39,645 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	14.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	16.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	6	278.00	108.00	12.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	12.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	56.00	0.00	2.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	**0.0159**	**0.1654**	**0.0985**	**1.9000e-004**	**0.0983**	**8.0600e-003**	**0.1064**	**0.0505**	**7.4200e-003**	**0.0579**	**0.0000**	**16.7197**	**16.7197**	**5.4100e-003**	**0.0000**	**16.8549**

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3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.0700e-003	2.0000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4134	0.4134	0.0000	7.0000e-005	0.4329
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.1000e-004	2.3200e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5845	0.5845	2.0000e-005	2.0000e-005	0.5903
Total	**3.3000e-004**	**1.2800e-003**	**2.5200e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.5000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.9979**	**0.9979**	**2.0000e-005**	**9.0000e-005**	**1.0232**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0442	0.0000	0.0442	0.0227	0.0000	0.0227	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	**0.0159**	**0.1654**	**0.0985**	**1.9000e-004**	**0.0442**	**8.0600e-003**	**0.0523**	**0.0227**	**7.4200e-003**	**0.0302**	**0.0000**	**16.7197**	**16.7197**	**5.4100e-003**	**0.0000**	**16.8549**

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3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.0700e-003	2.0000e-004	0.0000	1.2000e-004	1.0000e-005	1.3000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.4134	0.4134	0.0000	7.0000e-005	0.4329
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.1000e-004	2.3200e-003	1.0000e-005	7.2000e-004	0.0000	7.2000e-004	1.9000e-004	0.0000	1.9000e-004	0.0000	0.5845	0.5845	2.0000e-005	2.0000e-005	0.5903
Total	**3.3000e-004**	**1.2800e-003**	**2.5200e-003**	**1.0000e-005**	**8.4000e-004**	**1.0000e-005**	**8.5000e-004**	**2.2000e-004**	**1.0000e-005**	**2.3000e-004**	**0.0000**	**0.9979**	**0.9979**	**2.0000e-005**	**9.0000e-005**	**1.0232**

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
Total	**0.0544**	**0.5827**	**0.4356**	**9.3000e-004**	**0.1381**	**0.0245**	**0.1626**	**0.0548**	**0.0226**	**0.0774**	**0.0000**	**81.8019**	**81.8019**	**0.0265**	**0.0000**	**82.4633**

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3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.2200e-003	2.3000e-004	0.0000	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4725	0.4725	0.0000	7.0000e-005	0.4947
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e-003	6.9000e-004	7.7400e-003	2.0000e-005	2.4000e-003	1.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9483	1.9483	6.0000e-005	6.0000e-005	1.9676
Total	**1.0400e-003**	**1.9100e-003**	**7.9700e-003**	**2.0000e-005**	**2.5400e-003**	**2.0000e-005**	**2.5600e-003**	**6.8000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.4208**	**2.4208**	**6.0000e-005**	**1.3000e-004**	**2.4624**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0621	0.0000	0.0621	0.0247	0.0000	0.0247	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
Total	**0.0544**	**0.5827**	**0.4356**	**9.3000e-004**	**0.0621**	**0.0245**	**0.0866**	**0.0247**	**0.0226**	**0.0472**	**0.0000**	**81.8018**	**81.8018**	**0.0265**	**0.0000**	**82.4632**

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3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	3.0000e-005	1.2200e-003	2.3000e-004	0.0000	1.4000e-004	1.0000e-005	1.5000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4725	0.4725	0.0000	7.0000e-005	0.4947
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0100e-003	6.9000e-004	7.7400e-003	2.0000e-005	2.4000e-003	1.0000e-005	2.4100e-003	6.4000e-004	1.0000e-005	6.5000e-004	0.0000	1.9483	1.9483	6.0000e-005	6.0000e-005	1.9676
Total	**1.0400e-003**	**1.9100e-003**	**7.9700e-003**	**2.0000e-005**	**2.5400e-003**	**2.0000e-005**	**2.5600e-003**	**6.8000e-004**	**2.0000e-005**	**7.0000e-004**	**0.0000**	**2.4208**	**2.4208**	**6.0000e-005**	**1.3000e-004**	**2.4624**

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.8000e-003	0.0567	0.0700	1.0000e-004		3.3500e-003	3.3500e-003		3.0800e-003	3.0800e-003	0.0000	8.4017	8.4017	2.7200e-003	0.0000	8.4697
Total	**5.8000e-003**	**0.0567**	**0.0700**	**1.0000e-004**		**3.3500e-003**	**3.3500e-003**		**3.0800e-003**	**3.0800e-003**	**0.0000**	**8.4017**	**8.4017**	**2.7200e-003**	**0.0000**	**8.4697**

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3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	9.2000e-004	1.7000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3544	0.3544	0.0000	6.0000e-005	0.3710
Vendor	1.6700e-003	0.0437	0.0124	1.7000e-004	5.3700e-003	4.7000e-004	5.8400e-003	1.5500e-003	4.5000e-004	2.0000e-003	0.0000	16.1748	16.1748	1.2000e-004	2.4400e-003	16.9042
Worker	7.0100e-003	4.7800e-003	0.0538	1.5000e-004	0.0167	9.0000e-005	0.0168	4.4300e-003	8.0000e-005	4.5100e-003	0.0000	13.5406	13.5406	4.4000e-004	4.1000e-004	13.6750
Total	**8.7000e-003**	**0.0494**	**0.0664**	**3.2000e-004**	**0.0221**	**5.7000e-004**	**0.0227**	**6.0100e-003**	**5.4000e-004**	**6.5500e-003**	**0.0000**	**30.0698**	**30.0698**	**5.6000e-004**	**2.9100e-003**	**30.9502**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.8000e-003	0.0567	0.0700	1.0000e-004		3.3500e-003	3.3500e-003		3.0800e-003	3.0800e-003	0.0000	8.4017	8.4017	2.7200e-003	0.0000	8.4697
Total	**5.8000e-003**	**0.0567**	**0.0700**	**1.0000e-004**		**3.3500e-003**	**3.3500e-003**		**3.0800e-003**	**3.0800e-003**	**0.0000**	**8.4017**	**8.4017**	**2.7200e-003**	**0.0000**	**8.4697**

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3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	9.2000e-004	1.7000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3544	0.3544	0.0000	6.0000e-005	0.3710
Vendor	1.6700e-003	0.0437	0.0124	1.7000e-004	5.3700e-003	4.7000e-004	5.8400e-003	1.5500e-003	4.5000e-004	2.0000e-003	0.0000	16.1748	16.1748	1.2000e-004	2.4400e-003	16.9042
Worker	7.0100e-003	4.7800e-003	0.0538	1.5000e-004	0.0167	9.0000e-005	0.0168	4.4300e-003	8.0000e-005	4.5100e-003	0.0000	13.5406	13.5406	4.4000e-004	4.1000e-004	13.6750
Total	**8.7000e-003**	**0.0494**	**0.0664**	**3.2000e-004**	**0.0221**	**5.7000e-004**	**0.0227**	**6.0100e-003**	**5.4000e-004**	**6.5500e-003**	**0.0000**	**30.0698**	**30.0698**	**5.6000e-004**	**2.9100e-003**	**30.9502**

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0276	20.0276	6.4800e-003	0.0000	20.1895
Paving	0.0198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0308**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0276**	**20.0276**	**6.4800e-003**	**0.0000**	**20.1895**

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3.5 Paving - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	9.2000e-004	1.7000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3544	0.3544	0.0000	6.0000e-005	0.3710
Vendor	8.0000e-005	2.1600e-003	6.1000e-004	1.0000e-005	2.7000e-004	2.0000e-005	2.9000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	0.7988	0.7988	1.0000e-005	1.2000e-004	0.8348
Worker	5.0000e-004	3.4000e-004	3.8700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9741	0.9741	3.0000e-005	3.0000e-005	0.9838
Total	**6.0000e-004**	**3.4200e-003**	**4.6500e-003**	**2.0000e-005**	**1.5700e-003**	**4.0000e-005**	**1.6100e-003**	**4.3000e-004**	**4.0000e-005**	**4.6000e-004**	**0.0000**	**2.1273**	**2.1273**	**4.0000e-005**	**2.1000e-004**	**2.1896**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0110	0.1113	0.1458	2.3000e-004		5.6800e-003	5.6800e-003		5.2200e-003	5.2200e-003	0.0000	20.0275	20.0275	6.4800e-003	0.0000	20.1895
Paving	0.0198					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0308**	**0.1113**	**0.1458**	**2.3000e-004**		**5.6800e-003**	**5.6800e-003**		**5.2200e-003**	**5.2200e-003**	**0.0000**	**20.0275**	**20.0275**	**6.4800e-003**	**0.0000**	**20.1895**

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3.5 Paving - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.0000e-005	9.2000e-004	1.7000e-004	0.0000	1.0000e-004	1.0000e-005	1.1000e-004	3.0000e-005	1.0000e-005	4.0000e-005	0.0000	0.3544	0.3544	0.0000	6.0000e-005	0.3710
Vendor	8.0000e-005	2.1600e-003	6.1000e-004	1.0000e-005	2.7000e-004	2.0000e-005	2.9000e-004	8.0000e-005	2.0000e-005	1.0000e-004	0.0000	0.7988	0.7988	1.0000e-005	1.2000e-004	0.8348
Worker	5.0000e-004	3.4000e-004	3.8700e-003	1.0000e-005	1.2000e-003	1.0000e-005	1.2100e-003	3.2000e-004	1.0000e-005	3.2000e-004	0.0000	0.9741	0.9741	3.0000e-005	3.0000e-005	0.9838
Total	**6.0000e-004**	**3.4200e-003**	**4.6500e-003**	**2.0000e-005**	**1.5700e-003**	**4.0000e-005**	**1.6100e-003**	**4.3000e-004**	**4.0000e-005**	**4.6000e-004**	**0.0000**	**2.1273**	**2.1273**	**4.0000e-005**	**2.1000e-004**	**2.1896**

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1389					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1000e-004	4.2300e-003	5.4400e-003	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.7660	0.7660	5.0000e-005	0.0000	0.7672
Total	**0.1395**	**4.2300e-003**	**5.4400e-003**	**1.0000e-005**		**2.5000e-004**	**2.5000e-004**		**2.5000e-004**	**2.5000e-004**	**0.0000**	**0.7660**	**0.7660**	**5.0000e-005**	**0.0000**	**0.7672**

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3.6 Architectural Coating - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.5000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0591	0.0591	0.0000	1.0000e-005	0.0618
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	3.9000e-004	4.3400e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.6000e-004	0.0000	1.0910	1.0910	4.0000e-005	3.0000e-005	1.1019
Total	**5.6000e-004**	**5.4000e-004**	**4.3700e-003**	**1.0000e-005**	**1.3600e-003**	**1.0000e-005**	**1.3700e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.1501**	**1.1501**	**4.0000e-005**	**4.0000e-005**	**1.1637**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1389					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1000e-004	4.2300e-003	5.4400e-003	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.0000	0.7660	0.7660	5.0000e-005	0.0000	0.7672
Total	**0.1395**	**4.2300e-003**	**5.4400e-003**	**1.0000e-005**		**2.5000e-004**	**2.5000e-004**		**2.5000e-004**	**2.5000e-004**	**0.0000**	**0.7660**	**0.7660**	**5.0000e-005**	**0.0000**	**0.7672**

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3.6 Architectural Coating - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	1.5000e-004	3.0000e-005	0.0000	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	1.0000e-005	0.0000	0.0591	0.0591	0.0000	1.0000e-005	0.0618
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.6000e-004	3.9000e-004	4.3400e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.6000e-004	0.0000	1.0910	1.0910	4.0000e-005	3.0000e-005	1.1019
Total	**5.6000e-004**	**5.4000e-004**	**4.3700e-003**	**1.0000e-005**	**1.3600e-003**	**1.0000e-005**	**1.3700e-003**	**3.6000e-004**	**1.0000e-005**	**3.7000e-004**	**0.0000**	**1.1501**	**1.1501**	**4.0000e-005**	**4.0000e-005**	**1.1637**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.8100e-003	3.8400e-003	0.0423	1.2000e-004	0.0130	6.0000e-005	0.0130	3.4400e-003	6.0000e-005	3.5000e-003	0.0000	11.0507	11.0507	4.1000e-004	3.5000e-004	11.1665
Unmitigated	3.8100e-003	3.8400e-003	0.0423	1.2000e-004	0.0130	6.0000e-005	0.0130	3.4400e-003	6.0000e-005	3.5000e-003	0.0000	11.0507	11.0507	4.1000e-004	3.5000e-004	11.1665

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	12.00	12.00	12.00	35,034	35,034
Total	12.00	12.00	12.00	35,034	35,034

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.503307	0.052913	0.176057	0.166236	0.027694	0.007176	0.014144	0.022141	0.000741	0.000292	0.024521	0.001566	0.003212
Parking Lot	0.503307	0.052913	0.176057	0.166236	0.027694	0.007176	0.014144	0.022141	0.000741	0.000292	0.024521	0.001566	0.003212

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Unrefrigerated Warehouse-No Rail	0.560160	0.058890	0.195940	0.185010	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	21.7082	21.7082	3.5100e-003	4.3000e-004	21.9228
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	21.7082	21.7082	3.5100e-003	4.3000e-004	21.9228
NaturalGas Mitigated	5.0000e-005	4.2000e-004	3.5000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4540	0.4540	1.0000e-005	1.0000e-005	0.4567
NaturalGas Unmitigated	5.0000e-005	4.2000e-004	3.5000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4540	0.4540	1.0000e-005	1.0000e-005	0.4567

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	8507.25	5.0000e-005	4.2000e-004	3.5000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4540	0.4540	1.0000e-005	1.0000e-005	0.4567
Total		**5.0000e-005**	**4.2000e-004**	**3.5000e-004**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.4540**	**0.4540**	**1.0000e-005**	**1.0000e-005**	**0.4567**

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	8507.25	5.0000e-005	4.2000e-004	3.5000e-004	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.4540	0.4540	1.0000e-005	1.0000e-005	0.4567
Total		**5.0000e-005**	**4.2000e-004**	**3.5000e-004**	**0.0000**		**3.0000e-005**	**3.0000e-005**		**3.0000e-005**	**3.0000e-005**	**0.0000**	**0.4540**	**0.4540**	**1.0000e-005**	**1.0000e-005**	**0.4567**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	230215	21.3003	3.4500e-003	4.2000e-004	21.5110
Unrefrigerated Warehouse-No Rail	4408	0.4078	7.0000e-005	1.0000e-005	0.4119
Total		**21.7082**	**3.5200e-003**	**4.3000e-004**	**21.9228**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	230215	21.3003	3.4500e-003	4.2000e-004	21.5110
Unrefrigerated Warehouse-No Rail	4408	0.4078	7.0000e-005	1.0000e-005	0.4119
Total		**21.7082**	**3.5200e-003**	**4.3000e-004**	**21.9228**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0585	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Unmitigated	0.0585	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0446					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Total	**0.0585**	**0.0000**	**1.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.0000**	**3.5000e-004**

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0139					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0446					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	1.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	3.3000e-004	3.3000e-004	0.0000	0.0000	3.5000e-004
Total	**0.0585**	**0.0000**	**1.7000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.0000**	**3.5000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

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	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0908	3.6300e-003	9.0000e-005	0.2072
Unmitigated	0.0908	3.6300e-003	9.0000e-005	0.2072

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.111 / 0	0.0908	3.6300e-003	9.0000e-005	0.2072
Total		**0.0908**	**3.6300e-003**	**9.0000e-005**	**0.2072**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.111 / 0	0.0908	3.6300e-003	9.0000e-005	0.2072
Total		**0.0908**	**3.6300e-003**	**9.0000e-005**	**0.2072**

8.0 Waste Detail

8.1 Mitigation Measures Waste

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0914	5.4000e-003	0.0000	0.2263
Unmitigated	0.0914	5.4000e-003	0.0000	0.2263

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.45	0.0914	5.4000e-003	0.0000	0.2263
Total		**0.0914**	**5.4000e-003**	**0.0000**	**0.2263**

Proposed Heck Parking Lot - Construction and 2022 Operations - Fresno County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.45	0.0914	5.4000e-003	0.0000	0.2263
Total		**0.0914**	**5.4000e-003**	**0.0000**	**0.2263**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment

Fresno County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	0.48	1000sqft	0.01	475.00	0
Other Non-Asphalt Surfaces	3.00	1000sqft	0.07	3,000.00	0
Parking Lot	15.10	Acre	15.10	657,756.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2022
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Localized Screening Analysis - On-site Emissions - Unmitigated Construction and 2022 Operations (increase in operations only)
New guard shack and passenger vehicle employee trips

Land Use - Parking lot on approximately 15 acres
2 guard shacks totaling 475 square feet
Associated gutter and sidewalk improvements

Construction Phase - Project construction schedule
01/06/22 - 03/31/22
No demolition

Off-road Equipment - Adjusted to reflect project-specific equipment usage estimates
No cranes, generators, or welders required for guard shack construction

Trips and VMT - Trip lengths updated to 0.4 mile to account for on-site emissions from mobile sources.

Grading - Cut/fill to balance on-site

Architectural Coating - Compliance with SJVAPCD Rule 4601 - Architectural Coatings

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Vehicle Trips - 12 daily passenger vehicle trips (project-specific trip generation)
Trip lengths updated to 0.4 mile to account for on-site emissions from mobile sources.

Area Coating - Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII

Area Mitigation - SJVAPCD Rule 4601 - Architectural Coatings

Fleet Mix - Passenger vehicle fleet mix (LDA, LDT1, LDT2, and MDV)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	15.00
tblConstructionPhase	NumDays	20.00	6.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.50	0.56
tblFleetMix	LDT1	0.05	0.06
tblFleetMix	LDT2	0.18	0.20
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.1760e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.17	0.19
tblFleetMix	MH	3.2120e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	7.4100e-004	0.00
tblFleetMix	SBUS	1.5660e-003	0.00
tblFleetMix	UBUS	2.9200e-004	0.00
tblLandUse	LandUseSquareFeet	480.00	475.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.40
tblTripsAndVMT	HaulingTripLength	20.00	0.40
tblTripsAndVMT	HaulingTripLength	20.00	0.40
tblTripsAndVMT	HaulingTripLength	20.00	0.40
tblTripsAndVMT	HaulingTripLength	20.00	0.40
tblTripsAndVMT	HaulingTripNumber	0.00	14.00
tblTripsAndVMT	HaulingTripNumber	0.00	16.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripLength	7.30	0.40
tblTripsAndVMT	VendorTripLength	7.30	0.40
tblTripsAndVMT	VendorTripLength	7.30	0.40
tblTripsAndVMT	VendorTripLength	7.30	0.40
tblTripsAndVMT	VendorTripLength	7.30	0.40
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripLength	10.80	0.40
tblTripsAndVMT	WorkerTripLength	10.80	0.40
tblTripsAndVMT	WorkerTripLength	10.80	0.40
tblTripsAndVMT	WorkerTripLength	10.80	0.40
tblTripsAndVMT	WorkerTripLength	10.80	0.40
tblVehicleTrips	CC_TL	7.30	0.40
tblVehicleTrips	CNW_TL	7.30	0.40
tblVehicleTrips	CW_TL	9.50	0.40

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	25.00
tblVehicleTrips	SU_TR	1.74	25.00
tblVehicleTrips	WD_TR	1.74	25.00

2.0 Emissions Summary

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	49.7452	38.8670	29.1633	0.0622	19.6632	1.6350	21.2759	10.1041	1.5042	11.5879	0.0000	6,023.4204	6,023.4204	1.9468	0.0709	6,072.6093
Maximum	**49.7452**	**38.8670**	**29.1633**	**0.0622**	**19.6632**	**1.6350**	**21.2759**	**10.1041**	**1.5042**	**11.5879**	**0.0000**	**6,023.4204**	**6,023.4204**	**1.9468**	**0.0709**	**6,072.6093**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	49.7452	38.8670	29.1633	0.0622	8.8518	1.6350	10.4646	4.5478	1.5042	6.0315	0.0000	6,023.4204	6,023.4204	1.9468	0.0709	6,072.6093
Maximum	**49.7452**	**38.8670**	**29.1633**	**0.0622**	**8.8518**	**1.6350**	**10.4646**	**4.5478**	**1.5042**	**6.0315**	**0.0000**	**6,023.4204**	**6,023.4204**	**1.9468**	**0.0709**	**6,072.6093**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.98**	**0.00**	**50.82**	**54.99**	**0.00**	**47.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3205	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Energy	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584
Mobile	0.0232	7.2300e-003	0.0672	5.0000e-005	3.6500e-003	7.0000e-005	3.7100e-003	9.7000e-004	6.0000e-005	1.0300e-003		5.2282	5.2282	1.5300e-003	8.3000e-004	5.5136
Total	**0.3440**	**9.5400e-003**	**0.0711**	**6.0000e-005**	**3.6500e-003**	**2.5000e-004**	**3.8900e-003**	**9.7000e-004**	**2.4000e-004**	**1.2100e-003**		**7.9743**	**7.9743**	**1.5900e-003**	**8.8000e-004**	**8.2763**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3205	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Energy	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584
Mobile	0.0232	7.2300e-003	0.0672	5.0000e-005	3.6500e-003	7.0000e-005	3.7100e-003	9.7000e-004	6.0000e-005	1.0300e-003		5.2282	5.2282	1.5300e-003	8.3000e-004	5.5136
Total	**0.3440**	**9.5400e-003**	**0.0711**	**6.0000e-005**	**3.6500e-003**	**2.5000e-004**	**3.8900e-003**	**9.7000e-004**	**2.4000e-004**	**1.2100e-003**		**7.9743**	**7.9743**	**1.5900e-003**	**8.8000e-004**	**8.2763**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2022	1/19/2022	5	10	Default duration
2	Grading	Grading	1/20/2022	3/2/2022	5	30	Default duration
3	Building Construction	Building Construction	3/3/2022	3/23/2022	5	15	Adjusted to reflect project-specific information
4	Paving	Paving	3/3/2022	3/30/2022	5	20	Default duration
5	Architectural Coating	Architectural Coating	3/24/2022	3/31/2022	5	6	Adjusted to reflect project-specific information

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 15.17

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 713; Non-Residential Outdoor: 238; Striped Parking Area: 39,645 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	14.00	0.40	0.40	0.40	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	16.00	0.40	0.40	0.40	LD_Mix	HDT_Mix	HHDT
Building Construction	6	278.00	108.00	12.00	0.40	0.40	0.40	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	12.00	0.40	0.40	0.40	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	56.00	0.00	2.00	0.40	0.40	0.40	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7400e-003	0.0303	0.0219	6.0000e-005	5.2000e-004	6.0000e-005	5.8000e-004	1.5000e-004	6.0000e-005	2.0000e-004		6.0636	6.0636	9.0000e-005	9.5000e-004	6.3501
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0379	0.0108	0.1021	9.0000e-005	5.6500e-003	1.1000e-004	5.7600e-003	1.5200e-003	1.1000e-004	1.6300e-003		8.7300	8.7300	2.3100e-003	1.2400e-003	9.1569
Total	**0.0396**	**0.0411**	**0.1241**	**1.5000e-004**	**6.1700e-003**	**1.7000e-004**	**6.3400e-003**	**1.6700e-003**	**1.7000e-004**	**1.8300e-003**		**14.7935**	**14.7935**	**2.4000e-003**	**2.1900e-003**	**15.5070**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**8.8457**	**1.6126**	**10.4582**	**4.5461**	**1.4836**	**6.0297**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.7400e-003	0.0303	0.0219	6.0000e-005	5.2000e-004	6.0000e-005	5.8000e-004	1.5000e-004	6.0000e-005	2.0000e-004		6.0636	6.0636	9.0000e-005	9.5000e-004	6.3501
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0379	0.0108	0.1021	9.0000e-005	5.6500e-003	1.1000e-004	5.7600e-003	1.5200e-003	1.1000e-004	1.6300e-003		8.7300	8.7300	2.3100e-003	1.2400e-003	9.1569
Total	**0.0396**	**0.0411**	**0.1241**	**1.5000e-004**	**6.1700e-003**	**1.7000e-004**	**6.3400e-003**	**1.6700e-003**	**1.7000e-004**	**1.8300e-003**		**14.7935**	**14.7935**	**2.4000e-003**	**2.1900e-003**	**15.5070**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.2036**	**1.6349**	**10.8385**	**3.6538**	**1.5041**	**5.1579**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.6000e-004	0.0115	8.3600e-003	2.0000e-005	2.0000e-004	2.0000e-005	2.2000e-004	6.0000e-005	2.0000e-005	8.0000e-005		2.3099	2.3099	4.0000e-005	3.6000e-004	2.4191
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0421	0.0120	0.1135	1.0000e-004	6.2800e-003	1.3000e-004	6.4000e-003	1.6900e-003	1.2000e-004	1.8100e-003		9.7000	9.7000	2.5700e-003	1.3800e-003	10.1744
Total	**0.0428**	**0.0235**	**0.1218**	**1.2000e-004**	**6.4800e-003**	**1.5000e-004**	**6.6200e-003**	**1.7500e-003**	**1.4000e-004**	**1.8900e-003**		**12.0099**	**12.0099**	**2.6100e-003**	**1.7400e-003**	**12.5935**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**4.1416**	**1.6349**	**5.7765**	**1.6442**	**1.5041**	**3.1483**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.6000e-004	0.0115	8.3600e-003	2.0000e-005	2.0000e-004	2.0000e-005	2.2000e-004	6.0000e-005	2.0000e-005	8.0000e-005		2.3099	2.3099	4.0000e-005	3.6000e-004	2.4191
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0421	0.0120	0.1135	1.0000e-004	6.2800e-003	1.3000e-004	6.4000e-003	1.6900e-003	1.2000e-004	1.8100e-003		9.7000	9.7000	2.5700e-003	1.3800e-003	10.1744
Total	**0.0428**	**0.0235**	**0.1218**	**1.2000e-004**	**6.4800e-003**	**1.5000e-004**	**6.6200e-003**	**1.7500e-003**	**1.4000e-004**	**1.8900e-003**		**12.0099**	**12.0099**	**2.6100e-003**	**1.7400e-003**	**12.5935**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7732	7.5633	9.3358	0.0128		0.4462	0.4462		0.4105	0.4105		1,234.8447	1,234.8447	0.3994		1,244.8291
Total	**0.7732**	**7.5633**	**9.3358**	**0.0128**		**0.4462**	**0.4462**		**0.4105**	**0.4105**		**1,234.8447**	**1,234.8447**	**0.3994**		**1,244.8291**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	9.9000e-004	0.0173	0.0125	3.0000e-005	3.0000e-004	4.0000e-005	3.3000e-004	8.0000e-005	3.0000e-005	1.2000e-004		3.4649	3.4649	5.0000e-005	5.4000e-004	3.6286
Vendor	0.0832	1.5374	0.9996	2.9300e-003	0.0428	4.7000e-003	0.0475	0.0126	4.4900e-003	0.0171		309.9443	309.9443	5.0300e-003	0.0480	324.3739
Worker	0.5854	0.1664	1.5772	1.3300e-003	0.0872	1.7700e-003	0.0890	0.0235	1.6200e-003	0.0251		134.8294	134.8294	0.0358	0.0191	141.4239
Total	**0.6697**	**1.7210**	**2.5893**	**4.2900e-003**	**0.1303**	**6.5100e-003**	**0.1368**	**0.0362**	**6.1400e-003**	**0.0423**		**448.2386**	**448.2386**	**0.0408**	**0.0677**	**469.4263**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7732	7.5633	9.3358	0.0128		0.4462	0.4462		0.4105	0.4105	0.0000	1,234.8447	1,234.8447	0.3994		1,244.8291
Total	**0.7732**	**7.5633**	**9.3358**	**0.0128**		**0.4462**	**0.4462**		**0.4105**	**0.4105**	**0.0000**	**1,234.8447**	**1,234.8447**	**0.3994**		**1,244.8291**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	9.9000e-004	0.0173	0.0125	3.0000e-005	3.0000e-004	4.0000e-005	3.3000e-004	8.0000e-005	3.0000e-005	1.2000e-004		3.4649	3.4649	5.0000e-005	5.4000e-004	3.6286
Vendor	0.0832	1.5374	0.9996	2.9300e-003	0.0428	4.7000e-003	0.0475	0.0126	4.4900e-003	0.0171		309.9443	309.9443	5.0300e-003	0.0480	324.3739
Worker	0.5854	0.1664	1.5772	1.3300e-003	0.0872	1.7700e-003	0.0890	0.0235	1.6200e-003	0.0251		134.8294	134.8294	0.0358	0.0191	141.4239
Total	**0.6697**	**1.7210**	**2.5893**	**4.2900e-003**	**0.1303**	**6.5100e-003**	**0.1368**	**0.0362**	**6.1400e-003**	**0.0423**		**448.2386**	**448.2386**	**0.0408**	**0.0677**	**469.4263**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.0809**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.5000e-004	0.0130	9.4000e-003	2.0000e-005	2.2000e-004	3.0000e-005	2.5000e-004	6.0000e-005	3.0000e-005	9.0000e-005		2.5987	2.5987	4.0000e-005	4.1000e-004	2.7215
Vendor	3.0800e-003	0.0569	0.0370	1.1000e-004	1.5900e-003	1.7000e-004	1.7600e-003	4.7000e-004	1.7000e-004	6.3000e-004		11.4794	11.4794	1.9000e-004	1.7800e-003	12.0139
Worker	0.0316	8.9800e-003	0.0851	7.0000e-005	4.7100e-003	1.0000e-004	4.8000e-003	1.2700e-003	9.0000e-005	1.3500e-003		7.2750	7.2750	1.9300e-003	1.0300e-003	7.6308
Total	**0.0354**	**0.0789**	**0.1315**	**2.0000e-004**	**6.5200e-003**	**3.0000e-004**	**6.8100e-003**	**1.8000e-003**	**2.9000e-004**	**2.0700e-003**		**21.3531**	**21.3531**	**2.1600e-003**	**3.2200e-003**	**22.3661**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.0809**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	7.5000e-004	0.0130	9.4000e-003	2.0000e-005	2.2000e-004	3.0000e-005	2.5000e-004	6.0000e-005	3.0000e-005	9.0000e-005		2.5987	2.5987	4.0000e-005	4.1000e-004	2.7215
Vendor	3.0800e-003	0.0569	0.0370	1.1000e-004	1.5900e-003	1.7000e-004	1.7600e-003	4.7000e-004	1.7000e-004	6.3000e-004		11.4794	11.4794	1.9000e-004	1.7800e-003	12.0139
Worker	0.0316	8.9800e-003	0.0851	7.0000e-005	4.7100e-003	1.0000e-004	4.8000e-003	1.2700e-003	9.0000e-005	1.3500e-003		7.2750	7.2750	1.9300e-003	1.0300e-003	7.6308
Total	**0.0354**	**0.0789**	**0.1315**	**2.0000e-004**	**6.5200e-003**	**3.0000e-004**	**6.8100e-003**	**1.8000e-003**	**2.9000e-004**	**2.0700e-003**		**21.3531**	**21.3531**	**2.1600e-003**	**3.2200e-003**	**22.3661**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	46.3060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**46.5105**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1000e-004	7.2100e-003	5.2200e-003	1.0000e-005	1.2000e-004	1.0000e-005	1.4000e-004	3.0000e-005	1.0000e-005	5.0000e-005		1.4437	1.4437	2.0000e-005	2.3000e-004	1.5119
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1179	0.0335	0.3177	2.7000e-004	0.0176	3.6000e-004	0.0179	4.7300e-003	3.3000e-004	5.0600e-003		27.1599	27.1599	7.2000e-003	3.8500e-003	28.4883
Total	**0.1183**	**0.0407**	**0.3229**	**2.8000e-004**	**0.0177**	**3.7000e-004**	**0.0181**	**4.7600e-003**	**3.4000e-004**	**5.1100e-003**		**28.6036**	**28.6036**	**7.2200e-003**	**4.0800e-003**	**30.0002**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	46.3060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**46.5105**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1000e-004	7.2100e-003	5.2200e-003	1.0000e-005	1.2000e-004	1.0000e-005	1.4000e-004	3.0000e-005	1.0000e-005	5.0000e-005		1.4437	1.4437	2.0000e-005	2.3000e-004	1.5119
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1179	0.0335	0.3177	2.7000e-004	0.0176	3.6000e-004	0.0179	4.7300e-003	3.3000e-004	5.0600e-003		27.1599	27.1599	7.2000e-003	3.8500e-003	28.4883
Total	**0.1183**	**0.0407**	**0.3229**	**2.8000e-004**	**0.0177**	**3.7000e-004**	**0.0181**	**4.7600e-003**	**3.4000e-004**	**5.1100e-003**		**28.6036**	**28.6036**	**7.2200e-003**	**4.0800e-003**	**30.0002**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0232	7.2300e-003	0.0672	5.0000e-005	3.6500e-003	7.0000e-005	3.7100e-003	9.7000e-004	6.0000e-005	1.0300e-003		5.2282	5.2282	1.5300e-003	8.3000e-004	5.5136
Unmitigated	0.0232	7.2300e-003	0.0672	5.0000e-005	3.6500e-003	7.0000e-005	3.7100e-003	9.7000e-004	6.0000e-005	1.0300e-003		5.2282	5.2282	1.5300e-003	8.3000e-004	5.5136

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	12.00	12.00	12.00	1,747	1,747
Total	12.00	12.00	12.00	1,747	1,747

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.40	0.40	0.40	59.00	0.00	41.00	100	0	0

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.503307	0.052913	0.176057	0.166236	0.027694	0.007176	0.014144	0.022141	0.000741	0.000292	0.024521	0.001566	0.003212
Parking Lot	0.503307	0.052913	0.176057	0.166236	0.027694	0.007176	0.014144	0.022141	0.000741	0.000292	0.024521	0.001566	0.003212
Unrefrigerated Warehouse-No Rail	0.560160	0.058890	0.195940	0.185010	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584
NaturalGas Unmitigated	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.3075	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584
Total		**2.5000e-004**	**2.2900e-003**	**1.9200e-003**	**1.0000e-005**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**2.7421**	**2.7421**	**5.0000e-005**	**5.0000e-005**	**2.7584**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0233075	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584
Total		**2.5000e-004**	**2.2900e-003**	**1.9200e-003**	**1.0000e-005**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**2.7421**	**2.7421**	**5.0000e-005**	**5.0000e-005**	**2.7584**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3205	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Unmitigated	0.3205	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Total	**0.3205**	**2.0000e-005**	**1.9000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.0700e-003**	**4.0700e-003**	**1.0000e-005**		**4.3300e-003**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Total	**0.3205**	**2.0000e-005**	**1.9000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.0700e-003**	**4.0700e-003**	**1.0000e-005**		**4.3300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment

Fresno County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	0.48	1000sqft	0.01	475.00	0
Other Non-Asphalt Surfaces	3.00	1000sqft	0.07	3,000.00	0
Parking Lot	15.10	Acre	15.10	657,756.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2022
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Localized Screening Analysis - On-site Emissions - Unmitigated Construction and 2022 Operations (increase in operations only)
New guard shack and passenger vehicle employee trips

Land Use - Parking lot on approximately 15 acres
2 guard shacks totaling 475 square feet
Associated gutter and sidewalk improvements

Construction Phase - Project construction schedule
01/06/22 - 03/31/22
No demolition

Off-road Equipment - Adjusted to reflect project-specific equipment usage estimates
No cranes, generators, or welders required for guard shack construction

Trips and VMT - Trip lengths updated to 0.4 mile to account for on-site emissions from mobile sources.

Grading - Cut/fill to balance on-site

Architectural Coating - Compliance with SJVAPCD Rule 4601 - Architectural Coatings

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Vehicle Trips - 12 daily passenger vehicle trips (project-specific trip generation)
Trip lengths updated to 0.4 mile to account for on-site emissions from mobile sources.

Area Coating - Rule 4601 Architectural Coatings

Construction Off-road Equipment Mitigation - Compliance with SJVAPCD Regulation VIII

Area Mitigation - SJVAPCD Rule 4601 - Architectural Coatings

Fleet Mix - Passenger vehicle fleet mix (LDA, LDT1, LDT2, and MDV)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	150	50
tblAreaCoating	Area_EF_Nonresidential_Interior	150	50
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	300.00	15.00
tblConstructionPhase	NumDays	20.00	6.00
tblFleetMix	HHD	0.02	0.00
tblFleetMix	LDA	0.50	0.56
tblFleetMix	LDT1	0.05	0.06
tblFleetMix	LDT2	0.18	0.20
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.1760e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.17	0.19
tblFleetMix	MH	3.2120e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	7.4100e-004	0.00
tblFleetMix	SBUS	1.5660e-003	0.00
tblFleetMix	UBUS	2.9200e-004	0.00
tblLandUse	LandUseSquareFeet	480.00	475.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	7.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblOffRoadEquipment	UsageHours	8.00	0.00
tblTripsAndVMT	HaulingTripLength	20.00	0.40
tblTripsAndVMT	HaulingTripLength	20.00	0.40
tblTripsAndVMT	HaulingTripLength	20.00	0.40
tblTripsAndVMT	HaulingTripLength	20.00	0.40
tblTripsAndVMT	HaulingTripLength	20.00	0.40
tblTripsAndVMT	HaulingTripNumber	0.00	14.00
tblTripsAndVMT	HaulingTripNumber	0.00	16.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	12.00
tblTripsAndVMT	HaulingTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripLength	7.30	0.40
tblTripsAndVMT	VendorTripLength	7.30	0.40
tblTripsAndVMT	VendorTripLength	7.30	0.40
tblTripsAndVMT	VendorTripLength	7.30	0.40
tblTripsAndVMT	VendorTripLength	7.30	0.40
tblTripsAndVMT	VendorTripNumber	0.00	4.00
tblTripsAndVMT	WorkerTripLength	10.80	0.40
tblTripsAndVMT	WorkerTripLength	10.80	0.40
tblTripsAndVMT	WorkerTripLength	10.80	0.40
tblTripsAndVMT	WorkerTripLength	10.80	0.40
tblTripsAndVMT	WorkerTripLength	10.80	0.40
tblVehicleTrips	CC_TL	7.30	0.40
tblVehicleTrips	CNW_TL	7.30	0.40
tblVehicleTrips	CW_TL	9.50	0.40

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	25.00
tblVehicleTrips	SU_TR	1.74	25.00
tblVehicleTrips	WD_TR	1.74	25.00

2.0 Emissions Summary

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	49.6965	38.8699	29.1998	0.0622	19.6632	1.6350	21.2759	10.1041	1.5042	11.5879	0.0000	6,022.7174	6,022.7174	1.9477	0.0738	6,071.9805
Maximum	**49.6965**	**38.8699**	**29.1998**	**0.0622**	**19.6632**	**1.6350**	**21.2759**	**10.1041**	**1.5042**	**11.5879**	**0.0000**	**6,022.7174**	**6,022.7174**	**1.9477**	**0.0738**	**6,071.9805**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	49.6965	38.8699	29.1998	0.0622	8.8518	1.6350	10.4646	4.5478	1.5042	6.0315	0.0000	6,022.7174	6,022.7174	1.9477	0.0738	6,071.9805
Maximum	**49.6965**	**38.8699**	**29.1998**	**0.0622**	**8.8518**	**1.6350**	**10.4646**	**4.5478**	**1.5042**	**6.0315**	**0.0000**	**6,022.7174**	**6,022.7174**	**1.9477**	**0.0738**	**6,071.9805**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**54.98**	**0.00**	**50.82**	**54.99**	**0.00**	**47.95**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3205	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Energy	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584
Mobile	0.0168	8.5100e-003	0.0913	5.0000e-005	3.6500e-003	7.0000e-005	3.7100e-003	9.7000e-004	6.0000e-005	1.0300e-003		4.8894	4.8894	2.0800e-003	9.3000e-004	5.2188
Total	**0.3376**	**0.0108**	**0.0951**	**6.0000e-005**	**3.6500e-003**	**2.5000e-004**	**3.8900e-003**	**9.7000e-004**	**2.4000e-004**	**1.2100e-003**		**7.6356**	**7.6356**	**2.1400e-003**	**9.8000e-004**	**7.9815**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3205	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Energy	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584
Mobile	0.0168	8.5100e-003	0.0913	5.0000e-005	3.6500e-003	7.0000e-005	3.7100e-003	9.7000e-004	6.0000e-005	1.0300e-003		4.8894	4.8894	2.0800e-003	9.3000e-004	5.2188
Total	**0.3376**	**0.0108**	**0.0951**	**6.0000e-005**	**3.6500e-003**	**2.5000e-004**	**3.8900e-003**	**9.7000e-004**	**2.4000e-004**	**1.2100e-003**		**7.6356**	**7.6356**	**2.1400e-003**	**9.8000e-004**	**7.9815**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/6/2022	1/19/2022	5	10	Default duration
2	Grading	Grading	1/20/2022	3/2/2022	5	30	Default duration
3	Building Construction	Building Construction	3/3/2022	3/23/2022	5	15	Adjusted to reflect project-specific information
4	Paving	Paving	3/3/2022	3/30/2022	5	20	Default duration
5	Architectural Coating	Architectural Coating	3/24/2022	3/31/2022	5	6	Adjusted to reflect project-specific information

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 15.17

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 713; Non-Residential Outdoor: 238; Striped Parking Area: 39,645 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	0	0.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	0	0.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	0	0.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	14.00	0.40	0.40	0.40	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	16.00	0.40	0.40	0.40	LD_Mix	HDT_Mix	HHDT
Building Construction	6	278.00	108.00	12.00	0.40	0.40	0.40	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	4.00	12.00	0.40	0.40	0.40	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	56.00	0.00	2.00	0.40	0.40	0.40	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**19.6570**	**1.6126**	**21.2696**	**10.1025**	**1.4836**	**11.5860**		**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5500e-003	0.0324	0.0229	6.0000e-005	5.2000e-004	6.0000e-005	5.8000e-004	1.5000e-004	6.0000e-005	2.1000e-004		6.1236	6.1236	9.0000e-005	9.6000e-004	6.4127
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0257	0.0127	0.1346	8.0000e-005	5.6500e-003	1.1000e-004	5.7600e-003	1.5200e-003	1.1000e-004	1.6300e-003		8.0766	8.0766	3.1500e-003	1.3900e-003	8.5695
Total	**0.0272**	**0.0450**	**0.1575**	**1.4000e-004**	**6.1700e-003**	**1.7000e-004**	**6.3400e-003**	**1.6700e-003**	**1.7000e-004**	**1.8400e-003**		**14.2003**	**14.2003**	**3.2400e-003**	**2.3500e-003**	**14.9822**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.8457	0.0000	8.8457	4.5461	0.0000	4.5461			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	**3.1701**	**33.0835**	**19.6978**	**0.0380**	**8.8457**	**1.6126**	**10.4582**	**4.5461**	**1.4836**	**6.0297**	**0.0000**	**3,686.0619**	**3,686.0619**	**1.1922**		**3,715.8655**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	1.5500e-003	0.0324	0.0229	6.0000e-005	5.2000e-004	6.0000e-005	5.8000e-004	1.5000e-004	6.0000e-005	2.1000e-004		6.1236	6.1236	9.0000e-005	9.6000e-004	6.4127
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0257	0.0127	0.1346	8.0000e-005	5.6500e-003	1.1000e-004	5.7600e-003	1.5200e-003	1.1000e-004	1.6300e-003		8.0766	8.0766	3.1500e-003	1.3900e-003	8.5695
Total	**0.0272**	**0.0450**	**0.1575**	**1.4000e-004**	**6.1700e-003**	**1.7000e-004**	**6.3400e-003**	**1.6700e-003**	**1.7000e-004**	**1.8400e-003**		**14.2003**	**14.2003**	**3.2400e-003**	**2.3500e-003**	**14.9822**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**9.2036**	**1.6349**	**10.8385**	**3.6538**	**1.5041**	**5.1579**		**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.9000e-004	0.0123	8.7300e-003	2.0000e-005	2.0000e-004	2.0000e-005	2.2000e-004	6.0000e-005	2.0000e-005	8.0000e-005		2.3328	2.3328	3.0000e-005	3.7000e-004	2.4429
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0285	0.0141	0.1496	9.0000e-005	6.2800e-003	1.3000e-004	6.4000e-003	1.6900e-003	1.2000e-004	1.8100e-003		8.9740	8.9740	3.5000e-003	1.5400e-003	9.5217
Total	**0.0291**	**0.0264**	**0.1583**	**1.1000e-004**	**6.4800e-003**	**1.5000e-004**	**6.6200e-003**	**1.7500e-003**	**1.4000e-004**	**1.8900e-003**		**11.3068**	**11.3068**	**3.5300e-003**	**1.9100e-003**	**11.9646**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.1416	0.0000	4.1416	1.6442	0.0000	1.6442			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	**3.6248**	**38.8435**	**29.0415**	**0.0621**	**4.1416**	**1.6349**	**5.7765**	**1.6442**	**1.5041**	**3.1483**	**0.0000**	**6,011.4105**	**6,011.4105**	**1.9442**		**6,060.0158**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.9000e-004	0.0123	8.7300e-003	2.0000e-005	2.0000e-004	2.0000e-005	2.2000e-004	6.0000e-005	2.0000e-005	8.0000e-005		2.3328	2.3328	3.0000e-005	3.7000e-004	2.4429
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0285	0.0141	0.1496	9.0000e-005	6.2800e-003	1.3000e-004	6.4000e-003	1.6900e-003	1.2000e-004	1.8100e-003		8.9740	8.9740	3.5000e-003	1.5400e-003	9.5217
Total	**0.0291**	**0.0264**	**0.1583**	**1.1000e-004**	**6.4800e-003**	**1.5000e-004**	**6.6200e-003**	**1.7500e-003**	**1.4000e-004**	**1.8900e-003**		**11.3068**	**11.3068**	**3.5300e-003**	**1.9100e-003**	**11.9646**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7732	7.5633	9.3358	0.0128		0.4462	0.4462		0.4105	0.4105		1,234.8447	1,234.8447	0.3994		1,244.8291
Total	**0.7732**	**7.5633**	**9.3358**	**0.0128**		**0.4462**	**0.4462**		**0.4105**	**0.4105**		**1,234.8447**	**1,234.8447**	**0.3994**		**1,244.8291**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.9000e-004	0.0185	0.0131	3.0000e-005	3.0000e-004	4.0000e-005	3.3000e-004	8.0000e-005	4.0000e-005	1.2000e-004		3.4992	3.4992	5.0000e-005	5.5000e-004	3.6644
Vendor	0.0759	1.6266	1.0660	2.9500e-003	0.0428	4.8600e-003	0.0477	0.0126	4.6500e-003	0.0173		312.0620	312.0620	4.8200e-003	0.0484	326.6046
Worker	0.3963	0.1959	2.0791	1.2300e-003	0.0872	1.7700e-003	0.0890	0.0235	1.6200e-003	0.0251		124.7392	124.7392	0.0486	0.0215	132.3514
Total	**0.4731**	**1.8410**	**3.1582**	**4.2100e-003**	**0.1303**	**6.6700e-003**	**0.1370**	**0.0362**	**6.3100e-003**	**0.0425**		**440.3004**	**440.3004**	**0.0535**	**0.0704**	**462.6204**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.7732	7.5633	9.3358	0.0128		0.4462	0.4462		0.4105	0.4105	0.0000	1,234.8447	1,234.8447	0.3994		1,244.8291
Total	**0.7732**	**7.5633**	**9.3358**	**0.0128**		**0.4462**	**0.4462**		**0.4105**	**0.4105**	**0.0000**	**1,234.8447**	**1,234.8447**	**0.3994**		**1,244.8291**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	8.9000e-004	0.0185	0.0131	3.0000e-005	3.0000e-004	4.0000e-005	3.3000e-004	8.0000e-005	4.0000e-005	1.2000e-004		3.4992	3.4992	5.0000e-005	5.5000e-004	3.6644
Vendor	0.0759	1.6266	1.0660	2.9500e-003	0.0428	4.8600e-003	0.0477	0.0126	4.6500e-003	0.0173		312.0620	312.0620	4.8200e-003	0.0484	326.6046
Worker	0.3963	0.1959	2.0791	1.2300e-003	0.0872	1.7700e-003	0.0890	0.0235	1.6200e-003	0.0251		124.7392	124.7392	0.0486	0.0215	132.3514
Total	**0.4731**	**1.8410**	**3.1582**	**4.2100e-003**	**0.1303**	**6.6700e-003**	**0.1370**	**0.0362**	**6.3100e-003**	**0.0425**		**440.3004**	**440.3004**	**0.0535**	**0.0704**	**462.6204**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.0809**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**		**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.7000e-004	0.0139	9.8200e-003	2.0000e-005	2.2000e-004	3.0000e-005	2.5000e-004	6.0000e-005	3.0000e-005	9.0000e-005		2.6244	2.6244	4.0000e-005	4.1000e-004	2.7483
Vendor	2.8100e-003	0.0603	0.0395	1.1000e-004	1.5900e-003	1.8000e-004	1.7700e-003	4.7000e-004	1.7000e-004	6.4000e-004		11.5579	11.5579	1.8000e-004	1.7900e-003	12.0965
Worker	0.0214	0.0106	0.1122	7.0000e-005	4.7100e-003	1.0000e-004	4.8000e-003	1.2700e-003	9.0000e-005	1.3500e-003		6.7305	6.7305	2.6200e-003	1.1600e-003	7.1413
Total	**0.0249**	**0.0847**	**0.1615**	**2.0000e-004**	**6.5200e-003**	**3.1000e-004**	**6.8200e-003**	**1.8000e-003**	**2.9000e-004**	**2.0800e-003**		**20.9128**	**20.9128**	**2.8400e-003**	**3.3600e-003**	**21.9860**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.6603	2,207.6603	0.7140		2,225.5104
Paving	1.9781					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**3.0809**	**11.1249**	**14.5805**	**0.0228**		**0.5679**	**0.5679**		**0.5225**	**0.5225**	**0.0000**	**2,207.6603**	**2,207.6603**	**0.7140**		**2,225.5104**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	6.7000e-004	0.0139	9.8200e-003	2.0000e-005	2.2000e-004	3.0000e-005	2.5000e-004	6.0000e-005	3.0000e-005	9.0000e-005		2.6244	2.6244	4.0000e-005	4.1000e-004	2.7483
Vendor	2.8100e-003	0.0603	0.0395	1.1000e-004	1.5900e-003	1.8000e-004	1.7700e-003	4.7000e-004	1.7000e-004	6.4000e-004		11.5579	11.5579	1.8000e-004	1.7900e-003	12.0965
Worker	0.0214	0.0106	0.1122	7.0000e-005	4.7100e-003	1.0000e-004	4.8000e-003	1.2700e-003	9.0000e-005	1.3500e-003		6.7305	6.7305	2.6200e-003	1.1600e-003	7.1413
Total	**0.0249**	**0.0847**	**0.1615**	**2.0000e-004**	**6.5200e-003**	**3.1000e-004**	**6.8200e-003**	**1.8000e-003**	**2.9000e-004**	**2.0800e-003**		**20.9128**	**20.9128**	**2.8400e-003**	**3.3600e-003**	**21.9860**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	46.3060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	**46.5105**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**		**281.4481**	**281.4481**	**0.0183**		**281.9062**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.7000e-004	7.7000e-003	5.4600e-003	1.0000e-005	1.2000e-004	2.0000e-005	1.4000e-004	3.0000e-005	1.0000e-005	5.0000e-005		1.4580	1.4580	2.0000e-005	2.3000e-004	1.5268
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0798	0.0395	0.4188	2.5000e-004	0.0176	3.6000e-004	0.0179	4.7300e-003	3.3000e-004	5.0600e-003		25.1273	25.1273	9.8000e-003	4.3200e-003	26.6607
Total	**0.0802**	**0.0472**	**0.4243**	**2.6000e-004**	**0.0177**	**3.8000e-004**	**0.0181**	**4.7600e-003**	**3.4000e-004**	**5.1100e-003**		**26.5853**	**26.5853**	**9.8200e-003**	**4.5500e-003**	**28.1876**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	46.3060					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e-003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	**46.5105**	**1.4085**	**1.8136**	**2.9700e-003**		**0.0817**	**0.0817**		**0.0817**	**0.0817**	**0.0000**	**281.4481**	**281.4481**	**0.0183**		**281.9062**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.7000e-004	7.7000e-003	5.4600e-003	1.0000e-005	1.2000e-004	2.0000e-005	1.4000e-004	3.0000e-005	1.0000e-005	5.0000e-005		1.4580	1.4580	2.0000e-005	2.3000e-004	1.5268
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0798	0.0395	0.4188	2.5000e-004	0.0176	3.6000e-004	0.0179	4.7300e-003	3.3000e-004	5.0600e-003		25.1273	25.1273	9.8000e-003	4.3200e-003	26.6607
Total	**0.0802**	**0.0472**	**0.4243**	**2.6000e-004**	**0.0177**	**3.8000e-004**	**0.0181**	**4.7600e-003**	**3.4000e-004**	**5.1100e-003**		**26.5853**	**26.5853**	**9.8200e-003**	**4.5500e-003**	**28.1876**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0168	8.5100e-003	0.0913	5.0000e-005	3.6500e-003	7.0000e-005	3.7100e-003	9.7000e-004	6.0000e-005	1.0300e-003		4.8894	4.8894	2.0800e-003	9.3000e-004	5.2188
Unmitigated	0.0168	8.5100e-003	0.0913	5.0000e-005	3.6500e-003	7.0000e-005	3.7100e-003	9.7000e-004	6.0000e-005	1.0300e-003		4.8894	4.8894	2.0800e-003	9.3000e-004	5.2188

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	12.00	12.00	12.00	1,747	1,747
Total	12.00	12.00	12.00	1,747	1,747

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.40	0.40	0.40	59.00	0.00	41.00	100	0	0

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.503307	0.052913	0.176057	0.166236	0.027694	0.007176	0.014144	0.022141	0.000741	0.000292	0.024521	0.001566	0.003212
Parking Lot	0.503307	0.052913	0.176057	0.166236	0.027694	0.007176	0.014144	0.022141	0.000741	0.000292	0.024521	0.001566	0.003212
Unrefrigerated Warehouse-No Rail	0.560160	0.058890	0.195940	0.185010	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584
NaturalGas Unmitigated	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	23.3075	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584
Total		**2.5000e-004**	**2.2900e-003**	**1.9200e-003**	**1.0000e-005**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**2.7421**	**2.7421**	**5.0000e-005**	**5.0000e-005**	**2.7584**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.0233075	2.5000e-004	2.2900e-003	1.9200e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004		2.7421	2.7421	5.0000e-005	5.0000e-005	2.7584
Total		**2.5000e-004**	**2.2900e-003**	**1.9200e-003**	**1.0000e-005**		**1.7000e-004**	**1.7000e-004**		**1.7000e-004**	**1.7000e-004**		**2.7421**	**2.7421**	**5.0000e-005**	**5.0000e-005**	**2.7584**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3205	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Unmitigated	0.3205	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Total	**0.3205**	**2.0000e-005**	**1.9000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.0700e-003**	**4.0700e-003**	**1.0000e-005**		**4.3300e-003**

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0761					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Total	**0.3205**	**2.0000e-005**	**1.9000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.0700e-003**	**4.0700e-003**	**1.0000e-005**		**4.3300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Proposed Heck Parking Lot - Construction and 2022 Operations - Localized Assessment - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis)

Fresno County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	0.48	1000sqft	0.01	475.00	0
Other Non-Asphalt Surfaces	3.00	1000sqft	0.07	3,000.00	0
Parking Lot	15.10	Acre	15.10	657,756.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2022
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Building 31 Truck Trips
Localized Screening Analysis - On-site Truck Operations

Land Use - Proposed Heck Parking Lot Land Use Summary

Construction Phase - Operational run only (truck only run) - zeroed out construction schedule

Off-road Equipment - Zeroed out construction equipment

Trips and VMT - Zeroed out construction trips

Architectural Coating - Zeroed out construction parameters

Vehicle Trips - Building 31 Truck Trips (94 daily trips)
Trip lengths updated to 0.4 mile to account for on-site emissions from mobile sources (on-site for the proposed Heck Parking Lot). On-site trip length measured in Google Earth.

Energy Use - Truck only run (zeroed out operational energy use)

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Water And Wastewater - Truck only run (zeroed out operational water use)

Solid Waste - Truck only run (zeroed out solid waste generation)

Fleet Mix - Truck operational fleet mix (assumed 100% 4+ axle trucks)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblConstructionPhase	NumDays	20.00	1.00
tblEnergyUse	LightingElect	3.22	0.00
tblEnergyUse	NT24E	5.13	0.00
tblEnergyUse	NT24NG	1.05	0.00
tblEnergyUse	T24E	0.93	0.00
tblEnergyUse	T24NG	16.86	0.00
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.50	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.1760e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.17	0.00
tblFleetMix	MH	3.2120e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	7.4100e-004	0.00
tblFleetMix	SBUS	1.5660e-003	0.00
tblFleetMix	UBUS	2.9200e-004	0.00
tblLandUse	LandUseSquareFeet	480.00	475.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	UsageHours	6.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.45	0.00
tblTripsAndVMT	WorkerTripNumber	56.00	0.00
tblVehicleTrips	CC_TL	7.30	0.40
tblVehicleTrips	CNW_TL	7.30	0.40
tblVehicleTrips	CW_TL	9.50	0.40
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	195.83
tblVehicleTrips	SU_TR	1.74	195.83
tblVehicleTrips	WD_TR	1.74	195.83
tblWater	IndoorWaterUseRate	111,000.00	0.00

2.0 Emissions Summary

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3217	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1155	1.9736	1.4668	3.5700e-003	0.0329	3.4500e-003	0.0364	9.0200e-003	3.3000e-003	0.0123		377.9876	377.9876	6.1100e-003	0.0594	395.8535
Total	**0.4372**	**1.9737**	**1.4687**	**3.5700e-003**	**0.0329**	**3.4600e-003**	**0.0364**	**9.0200e-003**	**3.3100e-003**	**0.0123**		**377.9917**	**377.9917**	**6.1200e-003**	**0.0594**	**395.8579**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3217	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1155	1.9736	1.4668	3.5700e-003	0.0329	3.4500e-003	0.0364	9.0200e-003	3.3000e-003	0.0123		377.9876	377.9876	6.1100e-003	0.0594	395.8535
Total	**0.4372**	**1.9737**	**1.4687**	**3.5700e-003**	**0.0329**	**3.4600e-003**	**0.0364**	**9.0200e-003**	**3.3100e-003**	**0.0123**		**377.9917**	**377.9917**	**6.1200e-003**	**0.0594**	**395.8579**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/6/2022	1/6/2022	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 15.17

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 713; Non-Residential Outdoor: 238; Striped Parking Area: 39,645 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1155	1.9736	1.4668	3.5700e-003	0.0329	3.4500e-003	0.0364	9.0200e-003	3.3000e-003	0.0123		377.9876	377.9876	6.1100e-003	0.0594	395.8535
Unmitigated	0.1155	1.9736	1.4668	3.5700e-003	0.0329	3.4500e-003	0.0364	9.0200e-003	3.3000e-003	0.0123		377.9876	377.9876	6.1100e-003	0.0594	395.8535

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	94.00	94.00	94.00	13,686	13,686
Total	94.00	94.00	94.00	13,686	13,686

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.40	0.40	0.40	59.00	0.00	41.00	100	0	0

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.503307	0.052913	0.176057	0.166236	0.027694	0.007176	0.014144	0.022141	0.000741	0.000292	0.024521	0.001566	0.003212
Parking Lot	0.503307	0.052913	0.176057	0.166236	0.027694	0.007176	0.014144	0.022141	0.000741	0.000292	0.024521	0.001566	0.003212
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3217	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Unmitigated	0.3217	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0773					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Total	**0.3217**	**2.0000e-005**	**1.9000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.0700e-003**	**4.0700e-003**	**1.0000e-005**		**4.3300e-003**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0773					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Total	**0.3217**	**2.0000e-005**	**1.9000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.0700e-003**	**4.0700e-003**	**1.0000e-005**		**4.3300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis)

Fresno County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	0.48	1000sqft	0.01	475.00	0
Other Non-Asphalt Surfaces	3.00	1000sqft	0.07	3,000.00	0
Parking Lot	15.10	Acre	15.10	657,756.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	45
Climate Zone	3			**Operational Year**	2022
Utility Company	Pacific Gas and Electric Company				
CO2 Intensity (lb/MWhr)	203.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Building 31 Truck Trips
Localized Screening Analysis - On-site Truck Operations

Land Use - Proposed Heck Parking Lot Land Use Summary

Construction Phase - Operational run only (truck only run) - zeroed out construction schedule

Off-road Equipment - Zeroed out construction equipment

Trips and VMT - Zeroed out construction trips

Architectural Coating - Zeroed out construction parameters

Vehicle Trips - Building 31 Truck Trips (94 daily trips)
Trip lengths updated to 0.4 mile to account for on-site emissions from mobile sources (on-site for the proposed Heck Parking Lot). On-site trip length measured in Google Earth.

Energy Use - Truck only run (zeroed out operational energy use)

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Water And Wastewater - Truck only run (zeroed out operational water use)

Solid Waste - Truck only run (zeroed out solid waste generation)

Fleet Mix - Truck operational fleet mix (assumed 100% 4+ axle trucks)

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	150.00	0.00
tblArchitecturalCoating	EF_Nonresidential_Interior	150.00	0.00
tblArchitecturalCoating	EF_Parking	150.00	0.00
tblConstructionPhase	NumDays	20.00	1.00
tblEnergyUse	LightingElect	3.22	0.00
tblEnergyUse	NT24E	5.13	0.00
tblEnergyUse	NT24NG	1.05	0.00
tblEnergyUse	T24E	0.93	0.00
tblEnergyUse	T24NG	16.86	0.00
tblFleetMix	HHD	0.02	1.00
tblFleetMix	LDA	0.50	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.1760e-003	0.00
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.17	0.00
tblFleetMix	MH	3.2120e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	OBUS	7.4100e-004	0.00
tblFleetMix	SBUS	1.5660e-003	0.00
tblFleetMix	UBUS	2.9200e-004	0.00
tblLandUse	LandUseSquareFeet	480.00	475.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblOffRoadEquipment	UsageHours	6.00	0.00
tblSolidWaste	SolidWasteGenerationRate	0.45	0.00
tblTripsAndVMT	WorkerTripNumber	56.00	0.00
tblVehicleTrips	CC_TL	7.30	0.40
tblVehicleTrips	CNW_TL	7.30	0.40
tblVehicleTrips	CW_TL	9.50	0.40
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.74	195.83
tblVehicleTrips	SU_TR	1.74	195.83
tblVehicleTrips	WD_TR	1.74	195.83
tblWater	IndoorWaterUseRate	111,000.00	0.00

2.0 Emissions Summary

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3217	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1029	2.1086	1.5325	3.6000e-003	0.0329	3.6300e-003	0.0365	9.0200e-003	3.4700e-003	0.0125		382.0190	382.0190	5.5300e-003	0.0601	400.0591
Total	**0.4246**	**2.1086**	**1.5344**	**3.6000e-003**	**0.0329**	**3.6400e-003**	**0.0365**	**9.0200e-003**	**3.4800e-003**	**0.0125**		**382.0231**	**382.0231**	**5.5400e-003**	**0.0601**	**400.0635**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.3217	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.1029	2.1086	1.5325	3.6000e-003	0.0329	3.6300e-003	0.0365	9.0200e-003	3.4700e-003	0.0125		382.0190	382.0190	5.5300e-003	0.0601	400.0591
Total	**0.4246**	**2.1086**	**1.5344**	**3.6000e-003**	**0.0329**	**3.6400e-003**	**0.0365**	**9.0200e-003**	**3.4800e-003**	**0.0125**		**382.0231**	**382.0231**	**5.5400e-003**	**0.0601**	**400.0635**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	1/6/2022	1/6/2022	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 15.17

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 713; Non-Residential Outdoor: 238; Striped Parking Area: 39,645 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	0	0.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1029	2.1086	1.5325	3.6000e-003	0.0329	3.6300e-003	0.0365	9.0200e-003	3.4700e-003	0.0125		382.0190	382.0190	5.5300e-003	0.0601	400.0591
Unmitigated	0.1029	2.1086	1.5325	3.6000e-003	0.0329	3.6300e-003	0.0365	9.0200e-003	3.4700e-003	0.0125		382.0190	382.0190	5.5300e-003	0.0601	400.0591

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	94.00	94.00	94.00	13,686	13,686
Total	94.00	94.00	94.00	13,686	13,686

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.40	0.40	0.40	59.00	0.00	41.00	100	0	0

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.503307	0.052913	0.176057	0.166236	0.027694	0.007176	0.014144	0.022141	0.000741	0.000292	0.024521	0.001566	0.003212
Parking Lot	0.503307	0.052913	0.176057	0.166236	0.027694	0.007176	0.014144	0.022141	0.000741	0.000292	0.024521	0.001566	0.003212
Unrefrigerated Warehouse-No Rail	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3217	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Unmitigated	0.3217	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0773					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Total	**0.3217**	**2.0000e-005**	**1.9000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.0700e-003**	**4.0700e-003**	**1.0000e-005**		**4.3300e-003**

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0773					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.2442					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		4.0700e-003	4.0700e-003	1.0000e-005		4.3300e-003
Total	**0.3217**	**2.0000e-005**	**1.9000e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**4.0700e-003**	**4.0700e-003**	**1.0000e-005**		**4.3300e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

Building 31 Truck Trips - Truck Operations (Localized Screening Analysis) - Fresno County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Additional Supporting Information

Proposed Heck Parking Lot Construction Assumptions

Construction Phase

Phase Name	Start Date	End Date	Num Days Week	Num Days	
Site Preparation	1/6/2022	1/19/2022	5	10	Default duration
Grading	1/20/2022	3/2/2022	5	30	Default duration
Building Construction	3/3/2022	3/23/2022	5	15	Adjusted to reflect project-specific information
Paving	3/3/2022	3/30/2022	5	20	Default duration
Architectural Coating	3/24/2022	3/31/2022	5	6	Adjusted to reflect project-specific information

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8	97	0.37
Grading	Excavators	2	8	158	0.38
Grading	Graders	1	8	187	0.41
Grading	Rubber Tired Dozers	1	8	247	0.40
Grading	Scrapers	2	8	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8	97	0.37
Building Construction	Cranes	0	0	231	0.29
Building Construction	Forklifts	3	8	89	0.20
Building Construction	Generator Sets	0	0	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7	97	0.37
Building Construction	Welders	0	0	46	0.45
Paving	Pavers	2	8	130	0.42
Paving	Paving Equipment	2	8	132	0.36
Paving	Rollers	2	8	80	0.38
Architectural Coating	Air Compressors	1	6	78	0.48

Construction Trips and VMT

Phase Name	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length
Site Preparation	18	0	14	10.8	7.3	20
Grading	20	0	16	10.8	7.3	20
Building Construction	278	108	12	10.8	7.3	20
Paving	15	4	12	10.8	7.3	20
Architectural Coating	56	0	2	10.8	7.3	20

Additional truck trips were added to each phase for mobilization/demobilization of on-site equipment (two trips per piece of equipment).
Additional vendor trips added to the paving phase to account for delivery of materials.

Proposed Heck Parking Lot Trip Rates

Employees	6	
Daily Trips	12	(Passenger Vehicles)
Warehouse Size (1k sq ft)	0.48	(Guard shack total rounded in CalEEMod land use summary)
Trip Rate/1k sq ft	25.00	

Building 31 Truck Trips (Relevant for Localized Assessment Only)

Daily Truck Trips	94	
Warehouse Size (1k sq ft)	0.48	(Guard shack total rounded in CalEEMod land use summary)
Trip Rate/1k sq ft	195.833333	

Proposed Heck Parking Lot Fleet Mix Adjustments (2022)

Proposed Heck Parking Lot 2022 Operational Year

Default Fresno Warehouse - Fresno County 2022														**Total**
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0.503307	0.052913	0.176057	0.1662	0.027694	0.007176	0.014144	0.022141	0.000741	0.000292	0.024521	0.001566	0.003212	1 0
Passenger Cars														
	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
Default Light Duty Fleet Mix	0.503307	0.052913	0.176057	0.1662	0	0	0	0	0	0	0	0	0	0.898513
Difference to be allocated	0.101487													
Revised Passenger Cars Fleet Mix 2022	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH	
	0.56016	0.05889	0.19594	0.18501	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	1.00000

Yard Tractor Parameters

Yard Tractor (Hostler)	4-6	Hours/Day
Load Factor	19.10%	Intermodal Yard Activity and Emissions Evaluations, Environ
Load Factor	0.39	CARB Offroad 2017
HP	240	Range for Yard Hostlers is from 155 HP in Report to 240 HP in POLB Inventory
Age	2021	Assumed new Yard Tractor for proposed project
Calendar Year	2022	Operations could occur as early as 2022
Hours per Year	2,190	6 hours/day * 365 days/year

Input	Input Engine Here
Horsepower (hp)	240
Model year	2021
Calendar year	2022
Activity (annual hours)	2190
Accumulated hours on equipment (estimate using annual-hours*age if you only know the age of the equipment)	2190
Load factor (check the lookup table)	0.39

Results	
Fuel Used (gallon)	10582
NOx Emissions (kg)	24.2
PM Emissions (kg)	1.9
THC Emissions (kg)	14.0
CO2 Emissions (kg)	108046.2
NOx Emission Factor (including deterioration and fuel correction factor): gram/bhp-hr	0.12
PM Emission Factor (including deterioration and fuel correction factor): gram/bhp-hr	0.01
THC Emission Factor (including deterioration and fuel correction factor): gram/ bhp-hr	0.07

Intermediate steps

HPbin	300
NOx_EF0	0.12
NOx_DR	1.6E-06
NOx_FCF	0.950
PM_EF0	0.01
PM_DR	3.4E-07
PM_FCF	0.90
THC_EF0	0.05
THC_DR	1.2E-05
THC_FCF	0.90
NOx_EF (g/hp-hr)	0.12
PM_EF (g/hp-hr)	0.01
THC_EF (g/hp-hr)	0.07
CO2_EF (kg/gallon-diesel)*	10.21
BSFC (lb/hp-hr)	0.367
Unit conversion (lb/gallon)	7.109

*Reference: www.epa.gov/sites/production/files/2015-07/documents/emission-factors_2014.pdf

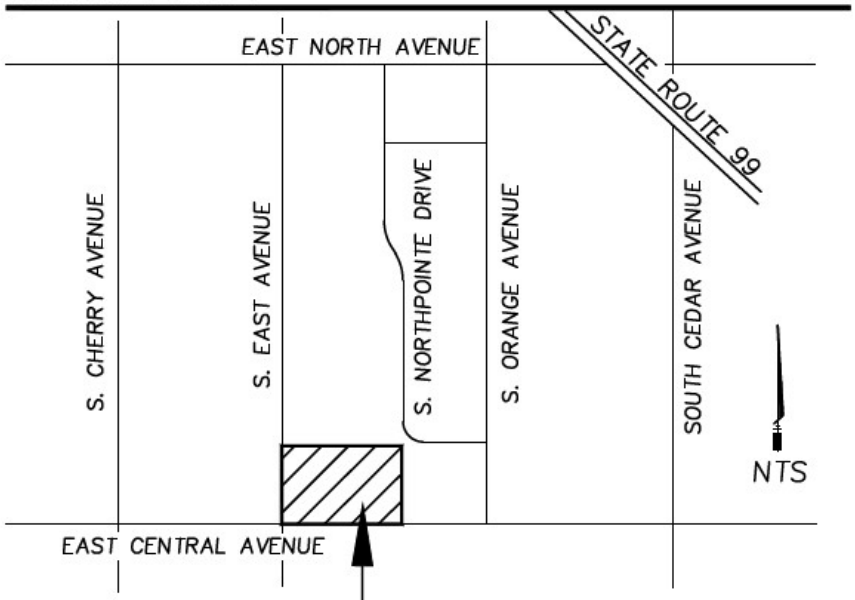
Yard Tractor Operational Emissions for the Proposed Heck Parking Lot

Yard Tractor Results	
Fuel Used (gallon)	10582.38659
NOx Emissions (kg)	24.19830753
PM Emissions (kg)	1.85902421
THC Emissions (kg)	13.95135453
CO2 Emissions (kg)	108046.167
NOx Emission Factor (including deterioration and fuel correction factor): gram/bhp-hr	0.1180
PM Emission Factor (including deterioration and fuel correction factor): gram/bhp-hr	0.0091
THC Emission Factor (including deterioration and fuel correction factor): gram/ bhp-hr	0.0681

	NOX Unmitigated	PM Exhaust Unmitigated	CO2
Emissions (kg/year)	24.20	1.86	108,046.17
Emissions (lbs/year)	53.34813619	4.098446828	238201.0241
Emissions (tons/year)	0.026674068	0.002049223	—
Emissions (MT/yr)	—	—	108.0461485

Conversion factors:
1 kg = 2.2046226218 lbs
1 ton = 2,000 lbs
1 metric ton = 2,204.623 pounds

VICINITY MAP:

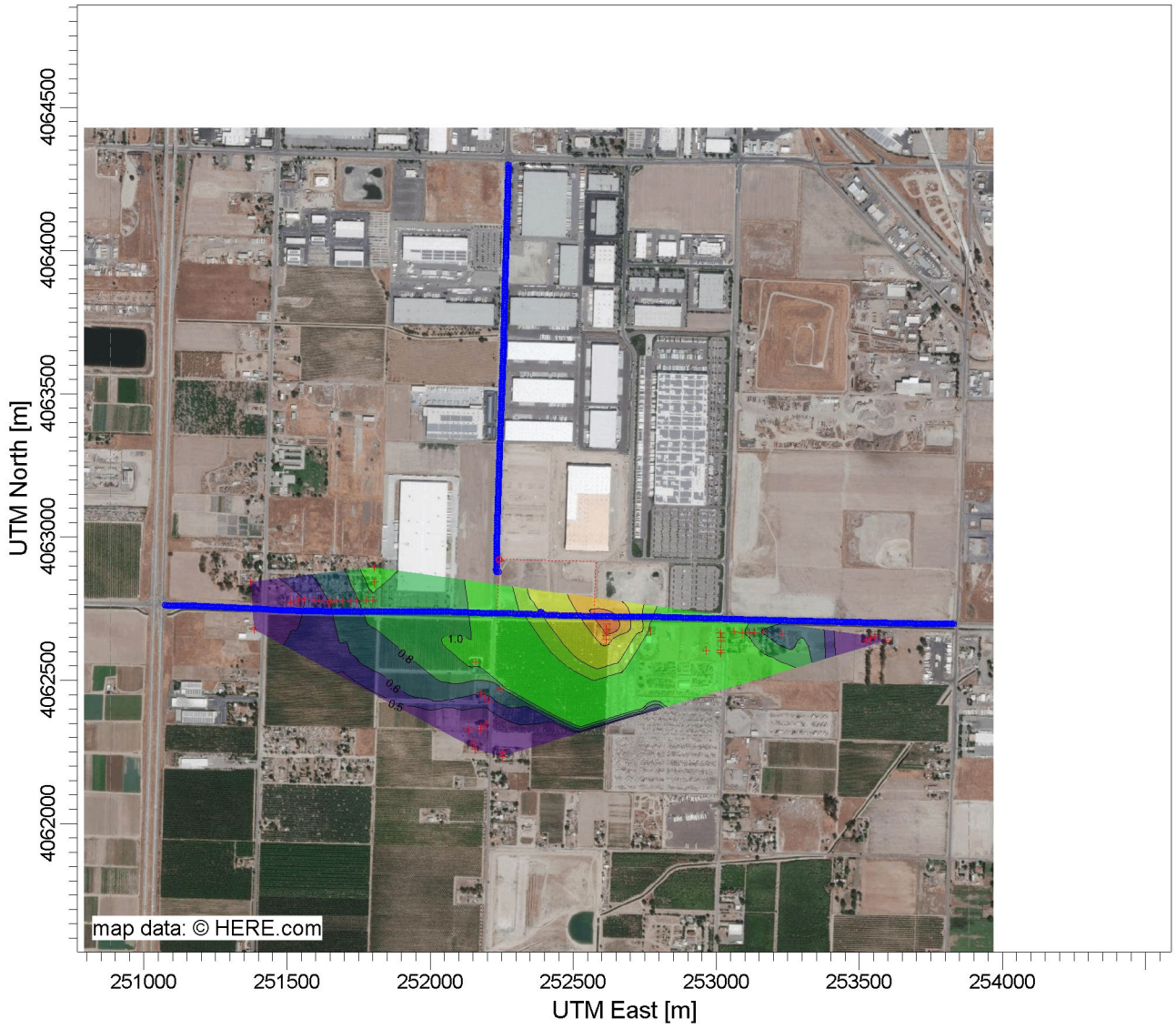


PROJECT LOCATION

ATTACHMENT B
Construction Health Risk Assessment

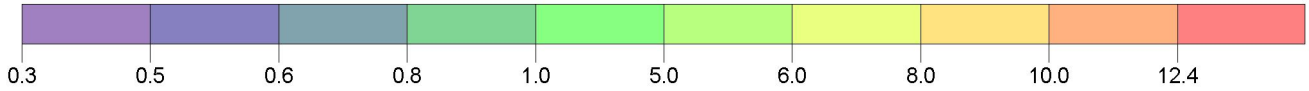
PROJECT TITLE:

Dispersion Modeling Inputs and Dispersion Trend (Unit Concentrations)



PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOURCE GROUP: AREA1 ug/m^3

Max: 12.4 [ug/m^3] at (252616.04, 4062678.51)



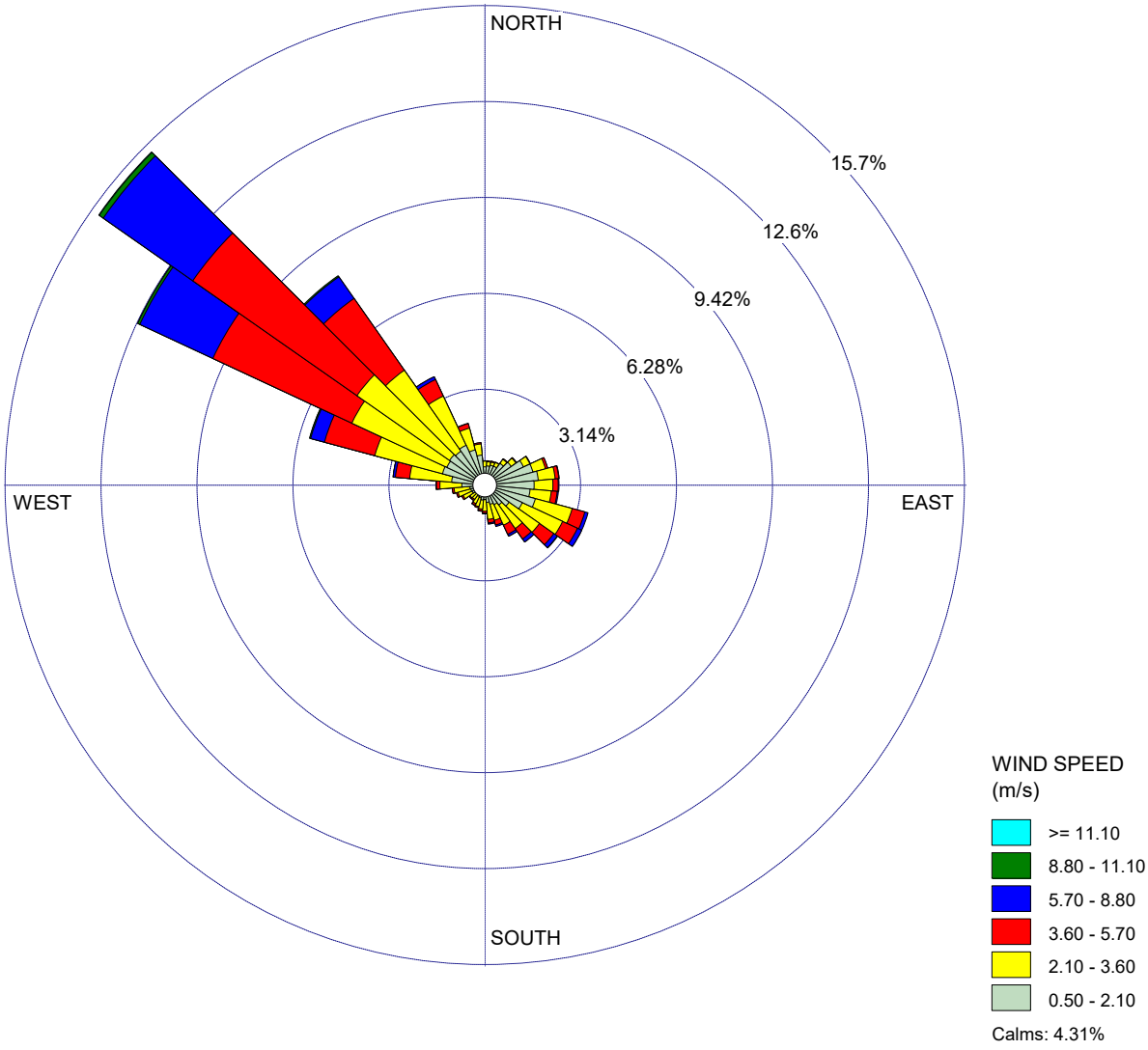
COMMENTS:	SOURCES:		
Unit concentrations	**4**		
	RECEPTORS:		
	50		
	OUTPUT TYPE:	SCALE: 1:24,049	
	Concentration	0 0.5 km	
	MAX:	DATE:	PROJECT NO.:
	12.4 ug/m^3	**11/8/2021**	

WIND ROSE PLOT:

Wind Rose - Station #93193 (Blowing From)

DISPLAY:

Wind Speed
Direction (blowing from)



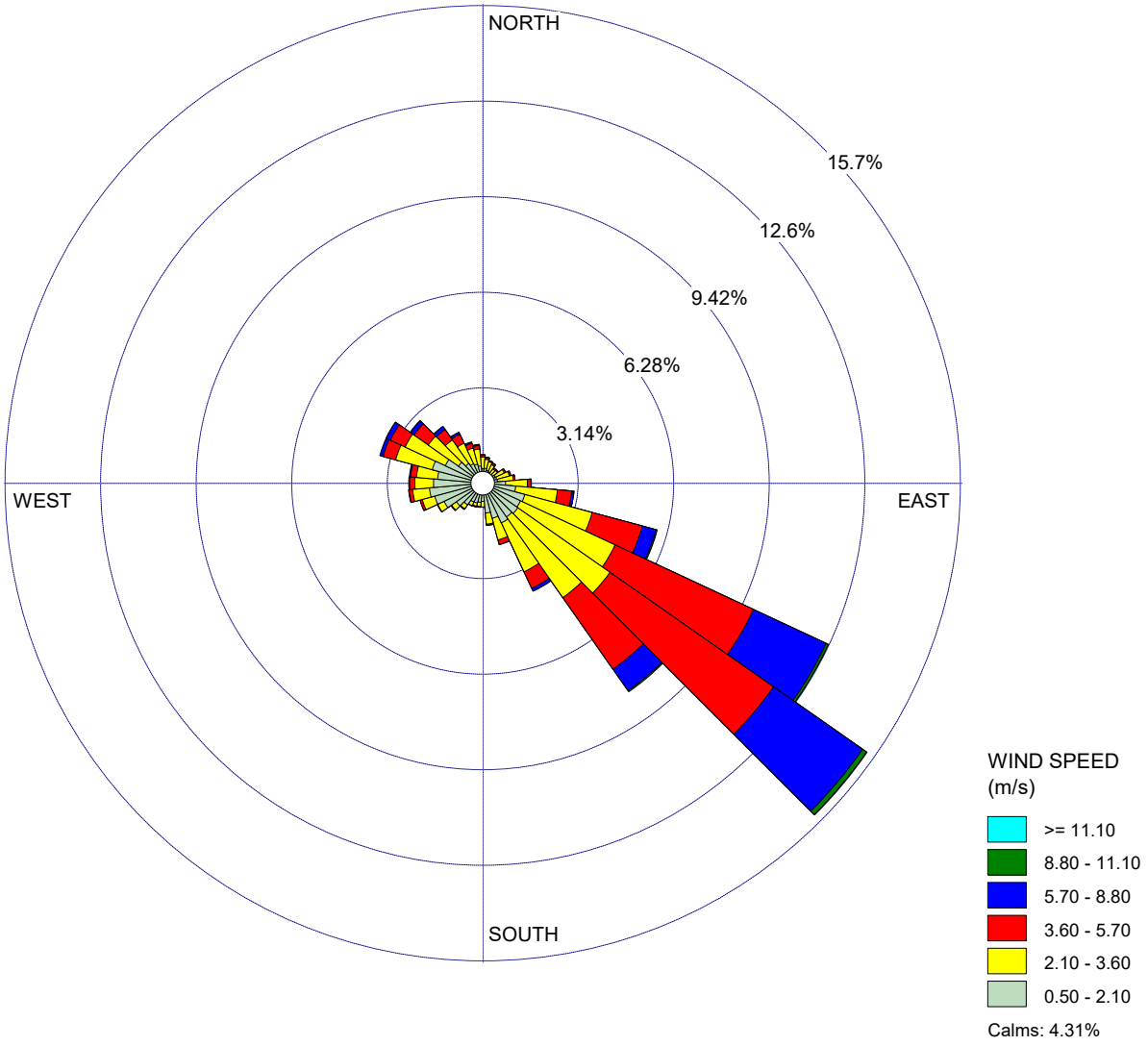
COMMENTS:	DATA PERIOD:		
	Start Date: 1/1/2013 - 00:00 **End Date: 12/31/2017 - 23:59**		
	CALM WINDS:	TOTAL COUNT:	
	4.31%	**43534 hrs.**	
	AVG. WIND SPEED:	DATE:	PROJECT NO.:
	2.95 m/s	**11/8/2021**	

WIND ROSE PLOT:

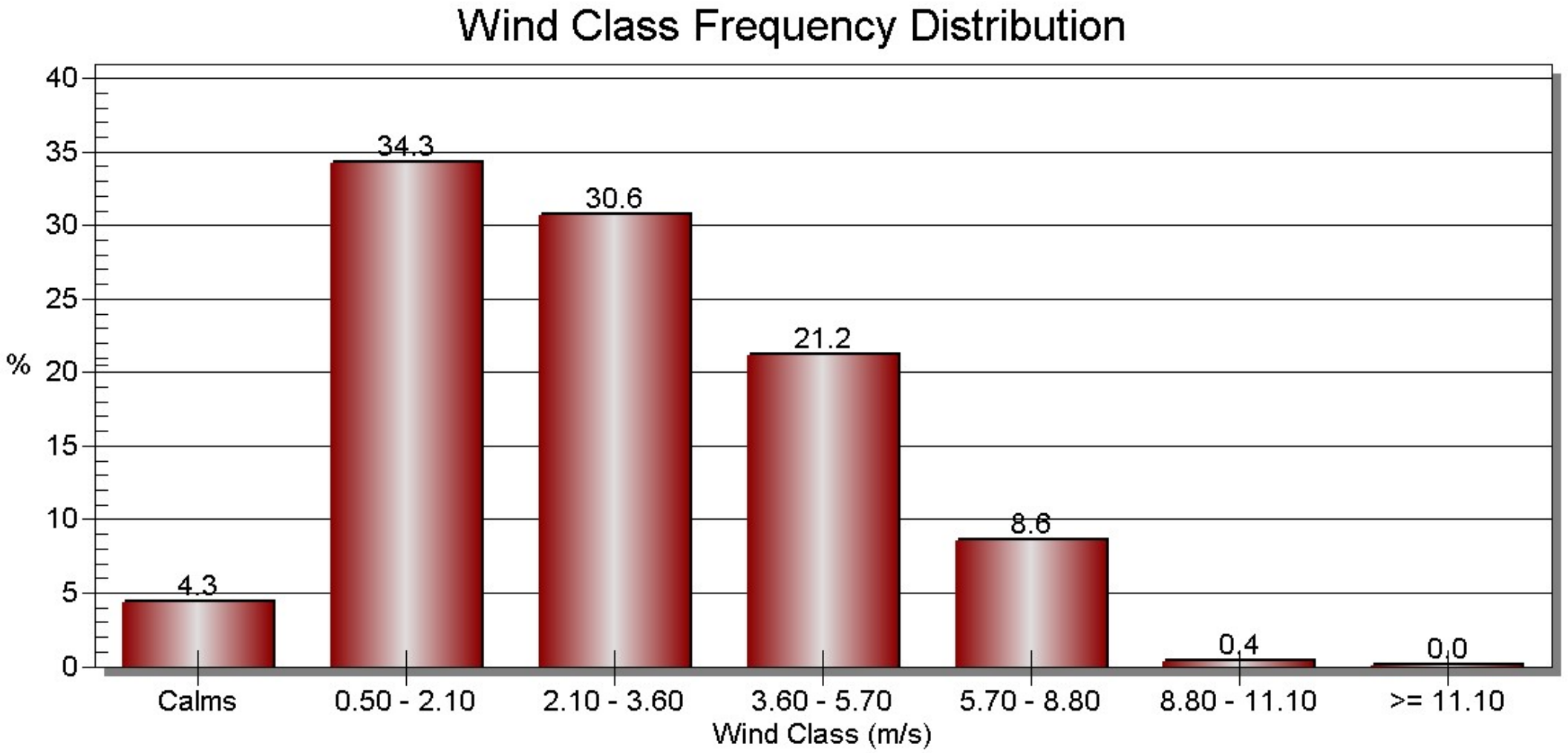
Wind Rose - Station #93193 (Flow Vector - Blowing To)

DISPLAY:

Wind Speed
Flow Vector (blowing to)



COMMENTS:	DATA PERIOD:		
	Start Date: 1/1/2013 - 00:00 **End Date: 12/31/2017 - 23:59**		
	CALM WINDS:	TOTAL COUNT:	
	4.31%	**43534 hrs.**	
	AVG. WIND SPEED:	DATE:	PROJECT NO.:
	2.95 m/s	**11/8/2021**	


Wind Class Frequency Distribution
40
35
30
25
20
15
10
5
0
%
34.3
30.6
21.2
8.6
4.3
0.4
0.0
Calms
0.50 - 2.10
2.10 - 3.60
3.60 - 5.70
5.70 - 8.80
8.80 - 11.10
>= 11.10
Wind Class (m/s)

Proposed Heck Parking Lot Project

Estimation of Annual Onsite Construction Emissions

Start of Construction	1/6/2022	
End of Construction	3/31/2022	**Total**
Number of Days	84	84
Number of Hours	2,016	2,016

Year	**On-site Construction Activity**	**Unmitigated On-site DPM (tons)**
2022	On-site Site Preparation	0.00806
2022	On-site Grading	0.02450
2022	On-site Building Construction	0.00335
2022	On-site Paving	0.00568
2022	On-site Architectural Coating	0.00025

Total Unmitigated DPM (On-site) 4.184E-02 tons

Average Emission 3.799E+04 grams

5.235E-03 grams/sec

Proposed Heck Parking Lot Project

Estimation of Annual Offsite Construction DPM Emissions (Unmitigated)

Start of Construction		1/6/2022				
End of Construction		3/31/2022				**Total**
Number of Days		84				84
Number of Hours		2,016				2,016
	2022	2022	2022	2022	2022	
Construction Trip Type	Site Preparation	Grading	Building Construction	Paving	Architectural Coating	
Haul Truck	0.00001	0.00001	0.00001	0.00001	0.00000	
Vendor Truck	0.00000	0.00000	0.00047	0.00002	0.00000	
Worker	0.00000	0.00001	0.00009	0.00001	0.00001	
Total	0.00001	0.00002	0.00057	0.00004	0.00001	

	Haul Truck (tons)	**Vendor Truck (tons)**	**Worker (tons)**	**Total (tons)**	
Total DPM	4.000E-05	4.900E-04	1.200E-04	6.500E-04	
Average Emissions					
Grams	3.632E+01	4.449E+02	1.090E+02		
Grams/sec	5.004E-06	6.130E-05	1.501E-05		
Default Distance	20	7.3	10.8	Default Vehicle Travel Distance in CalEEMod	

Vehicle Travel Distances in the Construction HRA (miles)			
Road Segment 1 (mi)	0.82	0.82	0.82
Road Segment 2 (mi)	0.91	0.91	0.91
Road Segment 3 (mi)	0.89	0.89	0.89
Trip Distribution (percent)			
Road Segment 1	33.3%	33.3%	33.3%
Road Segment 2	33.3%	33.3%	33.3%
Road Segment 3	33.3%	33.3%	33.3%

Total Average Offsite Vehicle Emissions Along Travel Distance (g/sec)				**Total**
Road Segment 1	6.862E-08	2.303E-06	3.812E-07	2.753E-06
Road Segment 2	7.579E-08	2.544E-06	4.210E-07	3.040E-06
Road Segment 3	7.436E-08	2.496E-06	4.131E-07	2.983E-06

OEHHA Cancer Risk Methodology

Cancer Risk = DPM x CPF x ASF x DBR x ED x EF x TAH x AF/ AT

Cancer Risk = probability of an individual contracting cancer out of a population of 1 million people over a lifetime exposure duration of 30 years

DPM = long-term average concentration of diesel PM as predicted by the air dispersion model (ug/m3)

CPF = cancer potency factor for DPM (mg.ke-day)

ASF = age sensitivity factors that are dependent on the age of the exposed individual (unitless)

DBR = daily breathing rates that are dependent on the age of the exposed individual (liters/kg-day)

ED = exposure duration (years)

EF = exposure frequency (days/year)

TAH = time at home factors that are dependent on the age of the exposed individual (%)

AT = averaging time over the lifetime of an individual (days)

AF = adjustment factor for workers and students (unitless)

Cancer Risk Equation Values as recommended by the California Office of Environmental Health Hazards Assessment

Cancer Risk Calculations Using OEHHA Cancer Risk Assumptions
Proposed Heck Parking Lot Project

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant (Starting in 3rd Trimester)

UTM: 252616.04 4062678.51

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM10 Exhaust) Unmitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
3rd Trimester	0.064885919	10	361	1	0.23	0.81
					Total	0.81

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Infant (Starting at Age Zero)

UTM: 1.15524E-06 0

Cancer Potency Factor: 1.1 $(mg/kg\text{-}day)^{-1}$
Exposure Frequency 350 days/year
Averaging Period 25550 days

Construction Annual DPM Emissions (as PM10 Exhaust) Unmitigated

Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Cancer Risk (/million)
0-1	0.064885919	10	1090	1	0.23	2.45
					Total	2.45

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Child

UTM: 252616.04 4062678.51

Cancer Potency Factor:	1.1	$(mg/kg\text{-}day)^{-1}$
Exposure Frequency	350	days/year
Averaging Period	25550	days

Construction Annual DPM Emissions (as PM10Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
1	0.064885919	3	745	1	0.23	0.50
					Total	0.50

Cancer Risk Impacts from Construction at the Maximum Impacted Sensitive Receptor - Adult

UTM: 252616.04 4062678.51

Cancer Potency Factor:	1.1	$(mg/kg\text{-}day)^{-1}$
Exposure Frequency	350	days/year
Averaging Period	25550	days

Construction Annual DPM Emissions (as PM10 Exhaust) Unmitigated

Construction Year	Maximum DPM Concentration (ug/m3)	Age Sensitivity Factor	Daily Breathing Rate (L/kg-day)	Time At Home Factor	Exposure Duration (years)	Unit Risk Factor $(ug/m3)^{-1}$
1	0.064885919	1	290	0.73	0.23	0.05
					Total	0.05

Proposed Heck Parking Lot Project

UTM: 252616.04 4062678.51

Estimates of Chronic Non-Cancer Hazard Index (CNCHI)

Unmitigated

Chronic Non-Cancer Hazard Index at the Maximum Impacted Sensitive Receptor

Reference Exposure Level (REL) for DPM: 5 ug/m3

CNCHI = DPM/REL

X (m)	Y (m)	Average DPM (ug/m3)	Max DPM (ug/m3)	CNCHI
252616.04	4062678.51	0.0649	0.0649	0.013

Proposed Heck Parking Lot Project

Construction Annual DPM Emissions (PM10 Exhaust)—Unmitigated Concentrations

		Maximum DPM (ug/m3)	UTM X	UTM Y
Annual Average Onsite Total DPM Emission Rate (grams/m2/sec):	5.23E-03	6.4886E-02	252616.04	4062678.51
Annual Average Offsite Total DPM Emission Rate - Road Segment 1 (grams/sec):	2.75E-06			
Annual Average Offsite Total DPM Emission Rate - Road Segment 2 (grams/sec):	3.04E-06			
Annual Average Offsite Total DPM Emission Rate - Road Segment 3 (grams/sec):	2.98E-06			

Residential Receptors		Unit Emissions VALUES AVERAGED	Unit Emissions VALUES AVERAGED	Unit Emissions VALUES AVERAGED	Unit Emissions VALUES AVERAGED	Onsite Annual DPM Exhaust w/Actual Emissions	Offsite-Road Segment 1 Annual DPM Exhaust w/Actual Emissions	Offsite-Road Segment 2 Annual DPM Exhaust w/Actual Emissions	Offsite-Road Segment 3 Annual DPM Exhaust w/Actual Emissions	**Total DPM**
X	Y	SITE AREA	ROAD 1	ROAD 2	ROAD 3	(ug/m3)	(ug/m3)	(ug/m3)	(ug/m3)	**(ug/m3)**
252616.04	4062678.51	12.38538	1.08515	15.87250	0.67547	6.48E-02	2.99E-06	4.83E-05	2.01E-06	6.4886E-02
252616.40	4062656.06	9.77359	1.15904	9.75349	0.62502	5.12E-02	3.19E-06	2.97E-05	1.86E-06	5.1196E-02
252615.32	4062642.66	8.55726	1.20597	7.71684	0.59626	4.48E-02	3.32E-06	2.35E-05	1.78E-06	4.4822E-02
252770.87	4062671.25	4.76689	0.52257	14.37392	0.53583	2.50E-02	1.44E-06	4.37E-05	1.60E-06	2.5000E-02
252964.27	4062603.63	1.80264	0.32797	5.57932	0.37948	9.44E-03	9.03E-07	1.70E-05	1.13E-06	9.4551E-03
253014.74	4062596.24	1.47940	0.29283	5.25453	0.35679	7.74E-03	8.06E-07	1.60E-05	1.06E-06	7.7619E-03
253015.05	4062606.71	1.46888	0.28767	5.88653	0.36148	7.69E-03	7.92E-07	1.79E-05	1.08E-06	7.7088E-03
253016.59	4062636.87	1.41997	0.27250	8.71383	0.37427	7.43E-03	7.50E-07	2.65E-05	1.12E-06	7.4614E-03
253016.28	4062650.11	1.39775	0.26658	10.81836	0.38009	7.32E-03	7.34E-07	3.29E-05	1.13E-06	7.3514E-03
253014.44	4062665.19	1.37671	0.26082	14.58238	0.38728	7.21E-03	7.18E-07	4.43E-05	1.16E-06	7.2528E-03
251805.52	4062895.31	1.26534	4.41220	0.35596	0.43240	6.62E-03	1.21E-05	1.08E-06	1.29E-06	6.6381E-03
253060.99	4062668.00	1.13275	0.23479	16.03880	0.36773	5.93E-03	6.46E-07	4.88E-05	1.10E-06	5.9800E-03
251806.37	4062843.32	1.11659	7.32988	0.32911	0.37794	5.84E-03	2.02E-05	1.00E-06	1.13E-06	5.8672E-03
252160.57	4062562.47	1.05229	3.35023	0.52734	0.28643	5.51E-03	9.22E-06	1.60E-06	8.54E-07	5.5200E-03
253091.11	4062665.03	1.01446	0.22198	15.25650	0.35429	5.31E-03	6.11E-07	4.64E-05	1.06E-06	5.3584E-03
251799.12	4062778.97	0.92609	22.25974	0.29373	0.31457	4.85E-03	6.13E-05	8.93E-07	9.38E-07	4.9108E-03
253116.40	4062664.28	0.92576	0.21163	15.23899	0.34419	4.85E-03	5.83E-07	4.63E-05	1.03E-06	4.8939E-03
253132.39	4062667.26	0.86962	0.20447	16.52664	0.33902	4.55E-03	5.63E-07	5.02E-05	1.01E-06	4.6039E-03
251777.59	4062778.17	0.86392	22.48098	0.28065	0.30030	4.52E-03	6.19E-05	8.53E-07	8.96E-07	4.5859E-03
251742.95	4062775.34	0.77468	23.95045	0.26129	0.27878	4.06E-03	6.59E-05	7.94E-07	8.32E-07	4.1227E-03
253165.82	4062671.07	0.76977	0.19148	18.64902	0.32786	4.03E-03	5.27E-07	5.67E-05	9.78E-07	4.0877E-03
251724.15	4062774.54	0.73356	24.52490	0.25205	0.26871	3.84E-03	6.75E-05	7.66E-07	8.02E-07	3.9090E-03
252243.01	4062470.24	0.71024	1.83026	0.49470	0.22188	3.72E-03	5.04E-06	1.50E-06	6.62E-07	3.7250E-03
251694.87	4062776.42	0.68048	23.43332	0.23975	0.25600	3.56E-03	6.45E-05	7.29E-07	7.64E-07	3.6280E-03
253227.78	4062662.78	0.64207	0.17456	15.78758	0.30525	3.36E-03	4.81E-07	4.80E-05	9.11E-07	3.4104E-03
251669.62	4062778.03	0.63960	22.62336	0.23004	0.24590	3.35E-03	6.23E-05	6.99E-07	7.34E-07	3.4118E-03
251644.90	4062777.76	0.60137	23.10140	0.22079	0.23587	3.15E-03	6.36E-05	6.71E-07	7.04E-07	3.2129E-03
251650.55	4062768.09	0.59909	30.93889	0.22044	0.23371	3.14E-03	8.52E-05	6.70E-07	6.97E-07	3.2225E-03
252176.45	4062452.81	0.59559	1.72635	0.40071	0.20443	3.12E-03	4.75E-06	1.22E-06	6.10E-07	3.1243E-03
252191.49	4062445.30	0.58530	1.65568	0.40567	0.20169	3.06E-03	4.56E-06	1.23E-06	6.02E-07	3.0702E-03
251614.82	4062778.30	0.56061	23.32022	0.21066	0.22503	2.93E-03	6.42E-05	6.40E-07	6.71E-07	3.0001E-03
252202.51	4062425.75	0.54220	1.50576	0.39321	0.19236	2.84E-03	4.14E-06	1.20E-06	5.74E-07	2.8441E-03
251593.60	4062779.91	0.53567	22.67381	0.20430	0.21839	2.80E-03	6.24E-05	6.21E-07	6.51E-07	2.8677E-03
251561.46	4062783.43	0.50219	21.01288	0.19556	0.20939	2.63E-03	5.78E-05	5.95E-07	6.25E-07	2.6878E-03
251539.02	4062778.06	0.47505	24.61679	0.18844	0.20099	2.49E-03	6.78E-05	5.73E-07	6.00E-07	2.5556E-03
251511.52	4062770.79	0.44462	31.44519	0.18027	0.19134	2.33E-03	8.66E-05	5.48E-07	5.71E-07	2.4151E-03
252196.00	4062347.05	0.39107	1.09186	0.31641	0.15887	2.05E-03	3.01E-06	9.62E-07	4.74E-07	2.0515E-03
251372.71	4062844.34	0.38188	8.01518	0.16174	0.17694	2.00E-03	2.21E-05	4.92E-07	5.28E-07	2.0221E-03
252175.95	4062338.03	0.37173	1.06088	0.29965	0.15474	1.95E-03	2.92E-06	9.11E-07	4.62E-07	1.9502E-03
252177.45	4062326.00	0.35670	1.01435	0.29216	0.15091	1.87E-03	2.79E-06	8.88E-07	4.50E-07	1.8713E-03
252133.34	4062326.50	0.34479	1.02434	0.27322	0.14882	1.80E-03	2.82E-06	8.31E-07	4.44E-07	1.8089E-03
253523.60	4062638.17	0.31992	0.12020	10.77384	0.22803	1.67E-03	3.31E-07	3.28E-05	6.80E-07	1.7084E-03
251385.53	4062677.80	0.31753	10.02648	0.14406	0.14476	1.66E-03	2.76E-05	4.38E-07	4.32E-07	1.6906E-03
253540.70	4062647.10	0.30442	0.11681	12.88325	0.22544	1.59E-03	3.22E-07	3.92E-05	6.72E-07	1.6337E-03
252152.67	4062277.51	0.29808	0.85788	0.25354	0.13592	1.56E-03	2.36E-06	7.71E-07	4.05E-07	1.5639E-03
253554.84	4062652.68	0.29319	0.11435	14.62966	0.22313	1.53E-03	3.15E-07	4.45E-05	6.66E-07	1.5802E-03
252250.68	4062247.26	0.29264	0.76451	0.27119	0.13195	1.53E-03	2.10E-06	8.25E-07	3.94E-07	1.5352E-03
252158.21	4062260.47	0.28400	0.80939	0.24668	0.13185	1.49E-03	2.23E-06	7.50E-07	3.93E-07	1.4900E-03
252250.68	4062234.05	0.28098	0.73373	0.26320	0.12877	1.47E-03	2.02E-06	8.00E-07	3.84E-07	1.4740E-03
253598.35	4062640.03	0.27518	0.11045	11.35049	0.21400	1.44E-03	3.04E-07	3.45E-05	6.38E-07	1.4759E-03

CONCUNIT ug/m^3

DEPUNIT g/m^2

* AERMOD (1919 1): G:\Parking Lot\Parking Lot .isc ########
* AERMET (1808 1): 21:16:03 2
* MODELING OPTI ONS USED: Reg DFAULT CONC E LEV URBA N ADJ_U*
* PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOUR CE GROUP : AREA1
* FOR A TOTAL OF 50 RECEPTORS.
* FORMA T: (3(1X,F13.5) ,3(1X,F8.2),2X, A6,2X,A8, 2X,I8.8,2 X,A8)

* X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM YRS	NET ID
252616.04	4062678.51	12.38538	86.28	86.28	0	ANNUAL	AREA1	5	
252616.4	4062656.06	9.77359	86.21	86.21	0	ANNUAL	AREA1	5	
252615.32	4062642.66	8.55726	86.19	86.19	0	ANNUAL	AREA1	5	
252770.87	4062671.25	4.76689	86.57	86.57	0	ANNUAL	AREA1	5	
252964.27	4062603.63	1.80264	86.78	86.78	0	ANNUAL	AREA1	5	
253014.44	4062665.19	1.37671	86.82	86.82	0	ANNUAL	AREA1	5	
253016.28	4062650.11	1.39775	86.83	86.83	0	ANNUAL	AREA1	5	
253016.59	4062636.87	1.41997	86.83	86.83	0	ANNUAL	AREA1	5	
253015.05	4062606.71	1.46888	86.83	86.83	0	ANNUAL	AREA1	5	
253014.74	4062596.24	1.4794	86.84	86.84	0	ANNUAL	AREA1	5	
252160.57	4062562.47	1.05229	85.95	85.95	0	ANNUAL	AREA1	5	
252243.01	4062470.24	0.71024	86.02	86.02	0	ANNUAL	AREA1	5	
252176.45	4062452.81	0.59559	86	86	0	ANNUAL	AREA1	5	
252191.49	4062445.3	0.5853	86.02	86.02	0	ANNUAL	AREA1	5	
252202.51	4062425.75	0.5422	86.04	86.04	0	ANNUAL	AREA1	5	
252175.95	4062338.03	0.37173	86.12	86.12	0	ANNUAL	AREA1	5	
252133.34	4062326.5	0.34479	86.13	86.13	0	ANNUAL	AREA1	5	
252177.45	4062326	0.3567	86.13	86.13	0	ANNUAL	AREA1	5	
252196	4062347.05	0.39107	86.11	86.11	0	ANNUAL	AREA1	5	
252152.67	4062277.51	0.29808	86.17	86.17	0	ANNUAL	AREA1	5	
252158.21	4062260.47	0.284	86.17	86.17	0	ANNUAL	AREA1	5	
252250.68	4062247.26	0.29264	86.19	86.19	0	ANNUAL	AREA1	5	
252250.68	4062234.05	0.28098	86.2	86.2	0	ANNUAL	AREA1	5	
251799.12	4062778.97	0.92609	85.55	85.55	0	ANNUAL	AREA1	5	
251806.37	4062843.32	1.11659	85.57	85.57	0	ANNUAL	AREA1	5	
251805.52	4062895.31	1.26534	85.58	85.58	0	ANNUAL	AREA1	5	
251777.59	4062778.17	0.86392	85.52	85.52	0	ANNUAL	AREA1	5	
251742.95	4062775.34	0.77468	85.48	85.48	0	ANNUAL	AREA1	5	
251724.15	4062774.54	0.73356	85.46	85.46	0	ANNUAL	AREA1	5	
251694.87	4062776.42	0.68048	85.43	85.43	0	ANNUAL	AREA1	5	
251669.62	4062778.03	0.6396	85.4	85.4	0	ANNUAL	AREA1	5	
251644.9	4062777.76	0.60137	85.37	85.37	0	ANNUAL	AREA1	5	
251650.55	4062768.09	0.59909	85.38	85.38	0	ANNUAL	AREA1	5	
251614.82	4062778.3	0.56061	85.34	85.34	0	ANNUAL	AREA1	5	
251593.6	4062779.91	0.53567	85.31	85.31	0	ANNUAL	AREA1	5	
251561.46	4062783.43	0.50219	85.28	85.28	0	ANNUAL	AREA1	5	
251539.02	4062778.06	0.47505	85.25	85.25	0	ANNUAL	AREA1	5	
251511.52	4062770.79	0.44462	85.22	85.22	0	ANNUAL	AREA1	5	
251372.71	4062844.34	0.38188	85.08	85.08	0	ANNUAL	AREA1	5	
251385.53	4062677.8	0.31753	85.06	85.06	0	ANNUAL	AREA1	5	
253060.99	4062668	1.13275	86.87	86.87	0	ANNUAL	AREA1	5	
253091.11	4062665.03	1.01446	86.9	86.9	0	ANNUAL	AREA1	5	
253116.4	4062664.28	0.92576	86.92	86.92	0	ANNUAL	AREA1	5	
253132.39	4062667.26	0.86962	86.94	86.94	0	ANNUAL	AREA1	5	
253165.82	4062671.07	0.76977	86.97	86.97	0	ANNUAL	AREA1	5	
253227.78	4062662.78	0.64207	87.04	87.04	0	ANNUAL	AREA1	5	
253523.6	4062638.17	0.31992	87.33	87.33	0	ANNUAL	AREA1	5	
253540.7	4062647.1	0.30442	87.35	87.35	0	ANNUAL	AREA1	5	
253554.84	4062652.68	0.29319	87.36	87.36	0	ANNUAL	AREA1	5	
253598.35	4062640.03	0.27518	87.4	87.4	0	ANNUAL	AREA1	5	

** CONCUNIT ug/m^3
** DEPUNIT g/m^2

* AERMOD (1919 1): G:\Parking Lot\Parking Lot .isc ########
* AERMET (1808 1): 21:16:03 2
* MODELING OPTI ONS USED: Reg DFAULT CONC E LEV URBA N ADJ_U*
* PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOUR CE GROUP : RD1
* FOR A TOTAL OF 50 RECEPTORS.
* FORMA T: (3(1X,F13.5) ,3(1X,F8.2),2X, A6,2X,A8, 2X,I8.8,2 X,A8)

* X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM YRS	NET ID
252616.04	4062678.51	1.08515	86.28	86.28	0	ANNUAL	RD1	5	
252616.4	4062656.06	1.15904	86.21	86.21	0	ANNUAL	RD1	5	
252615.32	4062642.66	1.20597	86.19	86.19	0	ANNUAL	RD1	5	
252770.87	4062671.25	0.52257	86.57	86.57	0	ANNUAL	RD1	5	
252964.27	4062603.63	0.32797	86.78	86.78	0	ANNUAL	RD1	5	
253014.44	4062665.19	0.26082	86.82	86.82	0	ANNUAL	RD1	5	
253016.28	4062650.11	0.26658	86.83	86.83	0	ANNUAL	RD1	5	
253016.59	4062636.87	0.2725	86.83	86.83	0	ANNUAL	RD1	5	
253015.05	4062606.71	0.28767	86.83	86.83	0	ANNUAL	RD1	5	
253014.74	4062596.24	0.29283	86.84	86.84	0	ANNUAL	RD1	5	
252160.57	4062562.47	3.35023	85.95	85.95	0	ANNUAL	RD1	5	
252243.01	4062470.24	1.83026	86.02	86.02	0	ANNUAL	RD1	5	
252176.45	4062452.81	1.72635	86	86	0	ANNUAL	RD1	5	
252191.49	4062445.3	1.65568	86.02	86.02	0	ANNUAL	RD1	5	
252202.51	4062425.75	1.50576	86.04	86.04	0	ANNUAL	RD1	5	
252175.95	4062338.03	1.06088	86.12	86.12	0	ANNUAL	RD1	5	
252133.34	4062326.5	1.02434	86.13	86.13	0	ANNUAL	RD1	5	
252177.45	4062326	1.01435	86.13	86.13	0	ANNUAL	RD1	5	
252196	4062347.05	1.09186	86.11	86.11	0	ANNUAL	RD1	5	
252152.67	4062277.51	0.85788	86.17	86.17	0	ANNUAL	RD1	5	
252158.21	4062260.47	0.80939	86.17	86.17	0	ANNUAL	RD1	5	
252250.68	4062247.26	0.76451	86.19	86.19	0	ANNUAL	RD1	5	
252250.68	4062234.05	0.73373	86.2	86.2	0	ANNUAL	RD1	5	
251799.12	4062778.97	22.25974	85.55	85.55	0	ANNUAL	RD1	5	
251806.37	4062843.32	7.32988	85.57	85.57	0	ANNUAL	RD1	5	
251805.52	4062895.31	4.4122	85.58	85.58	0	ANNUAL	RD1	5	
251777.59	4062778.17	22.48098	85.52	85.52	0	ANNUAL	RD1	5	
251742.95	4062775.34	23.95045	85.48	85.48	0	ANNUAL	RD1	5	
251724.15	4062774.54	24.5249	85.46	85.46	0	ANNUAL	RD1	5	
251694.87	4062776.42	23.43332	85.43	85.43	0	ANNUAL	RD1	5	
251669.62	4062778.03	22.62336	85.4	85.4	0	ANNUAL	RD1	5	
251644.9	4062777.76	23.1014	85.37	85.37	0	ANNUAL	RD1	5	
251650.55	4062768.09	30.93889	85.38	85.38	0	ANNUAL	RD1	5	
251614.82	4062778.3	23.32022	85.34	85.34	0	ANNUAL	RD1	5	
251593.6	4062779.91	22.67381	85.31	85.31	0	ANNUAL	RD1	5	
251561.46	4062783.43	21.01288	85.28	85.28	0	ANNUAL	RD1	5	
251539.02	4062778.06	24.61679	85.25	85.25	0	ANNUAL	RD1	5	
251511.52	4062770.79	31.44519	85.22	85.22	0	ANNUAL	RD1	5	
251372.71	4062844.34	8.01518	85.08	85.08	0	ANNUAL	RD1	5	
251385.53	4062677.8	10.02648	85.06	85.06	0	ANNUAL	RD1	5	
253060.99	4062668	0.23479	86.87	86.87	0	ANNUAL	RD1	5	
253091.11	4062665.03	0.22198	86.9	86.9	0	ANNUAL	RD1	5	
253116.4	4062664.28	0.21163	86.92	86.92	0	ANNUAL	RD1	5	
253132.39	4062667.26	0.20447	86.94	86.94	0	ANNUAL	RD1	5	
253165.82	4062671.07	0.19148	86.97	86.97	0	ANNUAL	RD1	5	
253227.78	4062662.78	0.17456	87.04	87.04	0	ANNUAL	RD1	5	
253523.6	4062638.17	0.1202	87.33	87.33	0	ANNUAL	RD1	5	
253540.7	4062647.1	0.11681	87.35	87.35	0	ANNUAL	RD1	5	
253554.84	4062652.68	0.11435	87.36	87.36	0	ANNUAL	RD1	5	
253598.35	4062640.03	0.11045	87.4	87.4	0	ANNUAL	RD1	5	

** CONCUNIT ug/m^3
** DEPUNIT g/m^2

* AERMOD (1919 1): G:\Parking Lot\Parking Lot .isc ########
* AERMET (1808 1): 21:16:03 2
* MODELING OPTI ONS USED: Reg DFAULT CONC E LEV URBA N ADJ_U*
* PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOUR CE GROUP : RD2
* FOR A TOTAL OF 50 RECEPTORS.
* FORMA T: (3(1X,F13.5) ,3(1X,F8.2),2X, A6,2X,A8, 2X,I8.8,2 X,A8)

* X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM YRS	NET ID
252616.04	4062678.51	15.8725	86.28	86.28	0	ANNUAL	RD2	5	
252616.4	4062656.06	9.75349	86.21	86.21	0	ANNUAL	RD2	5	
252615.32	4062642.66	7.71684	86.19	86.19	0	ANNUAL	RD2	5	
252770.87	4062671.25	14.37392	86.57	86.57	0	ANNUAL	RD2	5	
252964.27	4062603.63	5.57932	86.78	86.78	0	ANNUAL	RD2	5	
253014.44	4062665.19	14.58238	86.82	86.82	0	ANNUAL	RD2	5	
253016.28	4062650.11	10.81836	86.83	86.83	0	ANNUAL	RD2	5	
253016.59	4062636.87	8.71383	86.83	86.83	0	ANNUAL	RD2	5	
253015.05	4062606.71	5.88653	86.83	86.83	0	ANNUAL	RD2	5	
253014.74	4062596.24	5.25453	86.84	86.84	0	ANNUAL	RD2	5	
252160.57	4062562.47	0.52734	85.95	85.95	0	ANNUAL	RD2	5	
252243.01	4062470.24	0.4947	86.02	86.02	0	ANNUAL	RD2	5	
252176.45	4062452.81	0.40071	86	86	0	ANNUAL	RD2	5	
252191.49	4062445.3	0.40567	86.02	86.02	0	ANNUAL	RD2	5	
252202.51	4062425.75	0.39321	86.04	86.04	0	ANNUAL	RD2	5	
252175.95	4062338.03	0.29965	86.12	86.12	0	ANNUAL	RD2	5	
252133.34	4062326.5	0.27322	86.13	86.13	0	ANNUAL	RD2	5	
252177.45	4062326	0.29216	86.13	86.13	0	ANNUAL	RD2	5	
252196	4062347.05	0.31641	86.11	86.11	0	ANNUAL	RD2	5	
252152.67	4062277.51	0.25354	86.17	86.17	0	ANNUAL	RD2	5	
252158.21	4062260.47	0.24668	86.17	86.17	0	ANNUAL	RD2	5	
252250.68	4062247.26	0.27119	86.19	86.19	0	ANNUAL	RD2	5	
252250.68	4062234.05	0.2632	86.2	86.2	0	ANNUAL	RD2	5	
251799.12	4062778.97	0.29373	85.55	85.55	0	ANNUAL	RD2	5	
251806.37	4062843.32	0.32911	85.57	85.57	0	ANNUAL	RD2	5	
251805.52	4062895.31	0.35596	85.58	85.58	0	ANNUAL	RD2	5	
251777.59	4062778.17	0.28065	85.52	85.52	0	ANNUAL	RD2	5	
251742.95	4062775.34	0.26129	85.48	85.48	0	ANNUAL	RD2	5	
251724.15	4062774.54	0.25205	85.46	85.46	0	ANNUAL	RD2	5	
251694.87	4062776.42	0.23975	85.43	85.43	0	ANNUAL	RD2	5	
251669.62	4062778.03	0.23004	85.4	85.4	0	ANNUAL	RD2	5	
251644.9	4062777.76	0.22079	85.37	85.37	0	ANNUAL	RD2	5	
251650.55	4062768.09	0.22044	85.38	85.38	0	ANNUAL	RD2	5	
251614.82	4062778.3	0.21066	85.34	85.34	0	ANNUAL	RD2	5	
251593.6	4062779.91	0.2043	85.31	85.31	0	ANNUAL	RD2	5	
251561.46	4062783.43	0.19556	85.28	85.28	0	ANNUAL	RD2	5	
251539.02	4062778.06	0.18844	85.25	85.25	0	ANNUAL	RD2	5	
251511.52	4062770.79	0.18027	85.22	85.22	0	ANNUAL	RD2	5	
251372.71	4062844.34	0.16174	85.08	85.08	0	ANNUAL	RD2	5	
251385.53	4062677.8	0.14406	85.06	85.06	0	ANNUAL	RD2	5	
253060.99	4062668	16.0388	86.87	86.87	0	ANNUAL	RD2	5	
253091.11	4062665.03	15.2565	86.9	86.9	0	ANNUAL	RD2	5	
253116.4	4062664.28	15.23899	86.92	86.92	0	ANNUAL	RD2	5	
253132.39	4062667.26	16.52664	86.94	86.94	0	ANNUAL	RD2	5	
253165.82	4062671.07	18.64902	86.97	86.97	0	ANNUAL	RD2	5	
253227.78	4062662.78	15.78758	87.04	87.04	0	ANNUAL	RD2	5	
253523.6	4062638.17	10.77384	87.33	87.33	0	ANNUAL	RD2	5	
253540.7	4062647.1	12.88325	87.35	87.35	0	ANNUAL	RD2	5	
253554.84	4062652.68	14.62966	87.36	87.36	0	ANNUAL	RD2	5	
253598.35	4062640.03	11.35049	87.4	87.4	0	ANNUAL	RD2	5	

** CONCUNIT ug/m^3
** DEPUNIT g/m^2

* AERMOD (1919 1): G:\Parking Lot\Parking Lot .isc ########
* AERMET (1808 1): 21:16:03 2
* MODELING OPTI ONS USED: Reg DFAULT CONC E LEV URBA N ADJ_U*
* PLOT FILE OF ANNUAL VALUES AVERAGED ACROSS 5 YEARS FOR SOUR CE GROUP : RD3
* FOR A TOTAL OF 50 RECEPTORS.
* FORMA T: (3(1X,F13.5) ,3(1X,F8.2),2X, A6,2X,A8, 2X,I8.8,2 X,A8)

* X	Y	AVERAGE CONC	ZELEV	ZHILL	ZFLAG	AVE	GRP	NUM YRS	NET ID
252616.04	4062678.51	0.67547	86.28	86.28	0	ANNUAL	RD3	5	
252616.4	4062656.06	0.62502	86.21	86.21	0	ANNUAL	RD3	5	
252615.32	4062642.66	0.59626	86.19	86.19	0	ANNUAL	RD3	5	
252770.87	4062671.25	0.53583	86.57	86.57	0	ANNUAL	RD3	5	
252964.27	4062603.63	0.37948	86.78	86.78	0	ANNUAL	RD3	5	
253014.44	4062665.19	0.38728	86.82	86.82	0	ANNUAL	RD3	5	
253016.28	4062650.11	0.38009	86.83	86.83	0	ANNUAL	RD3	5	
253016.59	4062636.87	0.37427	86.83	86.83	0	ANNUAL	RD3	5	
253015.05	4062606.71	0.36148	86.83	86.83	0	ANNUAL	RD3	5	
253014.74	4062596.24	0.35679	86.84	86.84	0	ANNUAL	RD3	5	
252160.57	4062562.47	0.28643	85.95	85.95	0	ANNUAL	RD3	5	
252243.01	4062470.24	0.22188	86.02	86.02	0	ANNUAL	RD3	5	
252176.45	4062452.81	0.20443	86	86	0	ANNUAL	RD3	5	
252191.49	4062445.3	0.20169	86.02	86.02	0	ANNUAL	RD3	5	
252202.51	4062425.75	0.19236	86.04	86.04	0	ANNUAL	RD3	5	
252175.95	4062338.03	0.15474	86.12	86.12	0	ANNUAL	RD3	5	
252133.34	4062326.5	0.14882	86.13	86.13	0	ANNUAL	RD3	5	
252177.45	4062326	0.15091	86.13	86.13	0	ANNUAL	RD3	5	
252196	4062347.05	0.15887	86.11	86.11	0	ANNUAL	RD3	5	
252152.67	4062277.51	0.13592	86.17	86.17	0	ANNUAL	RD3	5	
252158.21	4062260.47	0.13185	86.17	86.17	0	ANNUAL	RD3	5	
252250.68	4062247.26	0.13195	86.19	86.19	0	ANNUAL	RD3	5	
252250.68	4062234.05	0.12877	86.2	86.2	0	ANNUAL	RD3	5	
251799.12	4062778.97	0.31457	85.55	85.55	0	ANNUAL	RD3	5	
251806.37	4062843.32	0.37794	85.57	85.57	0	ANNUAL	RD3	5	
251805.52	4062895.31	0.4324	85.58	85.58	0	ANNUAL	RD3	5	
251777.59	4062778.17	0.3003	85.52	85.52	0	ANNUAL	RD3	5	
251742.95	4062775.34	0.27878	85.48	85.48	0	ANNUAL	RD3	5	
251724.15	4062774.54	0.26871	85.46	85.46	0	ANNUAL	RD3	5	
251694.87	4062776.42	0.256	85.43	85.43	0	ANNUAL	RD3	5	
251669.62	4062778.03	0.2459	85.4	85.4	0	ANNUAL	RD3	5	
251644.9	4062777.76	0.23587	85.37	85.37	0	ANNUAL	RD3	5	
251650.55	4062768.09	0.23371	85.38	85.38	0	ANNUAL	RD3	5	
251614.82	4062778.3	0.22503	85.34	85.34	0	ANNUAL	RD3	5	
251593.6	4062779.91	0.21839	85.31	85.31	0	ANNUAL	RD3	5	
251561.46	4062783.43	0.20939	85.28	85.28	0	ANNUAL	RD3	5	
251539.02	4062778.06	0.20099	85.25	85.25	0	ANNUAL	RD3	5	
251511.52	4062770.79	0.19134	85.22	85.22	0	ANNUAL	RD3	5	
251372.71	4062844.34	0.17694	85.08	85.08	0	ANNUAL	RD3	5	
251385.53	4062677.8	0.14476	85.06	85.06	0	ANNUAL	RD3	5	
253060.99	4062668	0.36773	86.87	86.87	0	ANNUAL	RD3	5	
253091.11	4062665.03	0.35429	86.9	86.9	0	ANNUAL	RD3	5	
253116.4	4062664.28	0.34419	86.92	86.92	0	ANNUAL	RD3	5	
253132.39	4062667.26	0.33902	86.94	86.94	0	ANNUAL	RD3	5	
253165.82	4062671.07	0.32786	86.97	86.97	0	ANNUAL	RD3	5	
253227.78	4062662.78	0.30525	87.04	87.04	0	ANNUAL	RD3	5	
253523.6	4062638.17	0.22803	87.33	87.33	0	ANNUAL	RD3	5	
253540.7	4062647.1	0.22544	87.35	87.35	0	ANNUAL	RD3	5	
253554.84	4062652.68	0.22313	87.36	87.36	0	ANNUAL	RD3	5	
253598.35	4062640.03	0.214	87.4	87.4	0	ANNUAL	RD3	5	

** CONCUNIT ug/m^3
** DEPUNIT g/m^2

California Historical Resources Information System

Fresno
Kern
Kings
Madera
Tulare

Southern San Joaquin Valley Information Center
California State University, Bakersfield
Mail Stop: 72 DOB
9001 Stockdale Highway
Bakersfield, California 93311-1022
(661) 654-2289
E-mail: ssjvic@csub.edu
Website: www.csub.edu/ssjvic

To: Emily Bowen
Crawford & Bowen Planning, Inc.
113 N. church Street Ste. 302
Visalia, CA 93291

Record Search 21-423

Date: November 02, 2021

Re: City of Fresno Truck Trailer Parking Lot Project

County: Fresno

Map(s): South Fresno 7.5'

CULTURAL RESOURCES RECORDS SEARCH

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

The following are the results of a search of the cultural resource files at the Southern San Joaquin Valley Information Center. These files include known and recorded cultural resources sites, inventory and excavation reports filed with this office, and resources listed on the National Register of Historic Places, the OHP Built Environment Resources Directory, California State Historical Landmarks, California Register of Historical Resources, California Inventory of Historic Resources, and California Points of Historical Interest. Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the OHP are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area.

PRIOR CULTURAL RESOURCE STUDIES CONDUCTED WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

According to the information in our files, there has been no cultural resource studies in the Project Area. There are seven cultural resource studies that fall in the one-half mile radius, FR-00053, 00277, 01707, 01708, 02104, 02616, 02687.

KNOWN/RECORDED CULTURAL RESOURCES WITHIN THE PROJECT AREA AND THE ONE-HALF MILE RADIUS

There are no recorded resources within the project area. There have been three resources recorded within the one-half mile radius, P-10-004303, 004677, 006349; all of which are historic properties.

There are no recorded cultural resources within the project area or radius that are listed in the National Register of Historic Places, the California Register of Historical Resources, the California Points of Historical Interest, California Inventory of Historic Resources, or the California State Historic Landmarks.

COMMENTS AND RECOMMENDATIONS

We understand this project is to add a 151.1-acre trailer storage lot to the existing Building 31 warehouse operation at the Amazon Distribution Facility. Further, we understand this project area is agricultural land. Please note that agriculture does not constitute previous development, as it does not destroy cultural resources, but merely moves them around within the plow zone. Because no previous cultural studies have been completed in the project area, prior to ground disturbance activities we recommend a qualified, professional consultant conduct a field survey to determine if cultural resources are present. A list of qualified consultants can be found at www.chrisinfo.org.

We also recommend that you contact the Native American Heritage Commission in Sacramento. They will provide you with a current list of Native American individuals/organizations that can assist you with information regarding cultural resources that may not be included in the CHRIS Inventory and that may be of concern to the Native groups in the area. The Commission can consult their "Sacred Lands Inventory" file to determine what sacred resources, if any, exist within this project area and the way in which these resources might be managed. Finally, please consult with the lead agency on this project to determine if any other cultural resource investigation is required. If you need any additional information or have any questions or concerns, please contact our office at (661) 654-2289.

By:

Jeremy E David, Assistant Coordinator **Date**: November 02, 2021

Please note that invoices for Information Center services will be sent under separate cover from the California State University, Bakersfield Accounting Office.

PETERS ENGINEERING GROUP
A CALIFORNIA CORPORATION

Ms. Emily Bowen, LEED AP
Crawford & Bowen Planning, Inc.
113 North Church Street, Suite 302
Visalia, California 93291

October 20, 2021

Subject: Traffic Impact Study
Proposed Building 31 Trailer Storage Lot
3740 South East Avenue
Fresno, California

FAASTER Reference No.: P21-03293
Assigned Planner: Thomas Veatch

Dear Ms. Bowen:

Introduction

This report presents the results of traffic analyses for the Project. The analysis focuses on the anticipated number of vehicle trips resulting from the Project and the associated vehicle miles traveled (VMT).

Project Description

The Project site is located at 3740 South East Avenue in Fresno, California, which is northeast of the intersection of East and Central Avenues. The site covers approximately 15 acres zoned Heavy Industrial. The Project consists of development of a trailer storage lot with 314 truck trailer parking stalls. Traffic utilizing the storage lot will include trucks making deliveries to Building 31 (currently under construction) and minimal employee trips. The storage lot is intended to supplement activities occurring at Building 31, and all truck trips utilizing the storage lot were considered when Building 31 was approved. New employees generated by the project will be limited to approximately six new employees at the new guard shacks. Site access will be developed with one exit-only driveway connecting to Central Avenue and one full-access driveway connecting to East Avenue.

Trip Generation

Project Trips

Data provided in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* are typically used to estimate the number of trips anticipated to be generated by proposed projects. However, ITE does not include data that matches the Project. Therefore, the number of trips was conservatively estimated based on the characteristics of the Project. Table 1 presents worst-case trip generation characteristics for new trips (six employees) expected to be generated by the project.

Table 1
Project Trip Generation Calculations

Description	Employees	Daily Trips	A.M. Peak Hour Trips			P.M. Peak Hour Trips		
			In	Out	Total	In	Out	Total
Parking Lot Attendant	6	12	2	2	4	2	2	4

Trip generation characteristics for Building 31 were studied in a Northpoint Building 31 Trip Generation and Impact Assessment report dated November 20, 2020 (attached) and approved under Development Permit No. P20-03406. The number of trips will remain the same with the proposed Project, other than the addition of 12 daily trips generated by the six new employees.

The proposed Project would redistribute a portion of the trips that were previously analyzed from driveways associated with Building 31 to the proposed driveways on East and Central Avenues. Since the Project proposes to store the trailers adjacent to Building 31, it is possible that the Project will reduce regional truck trips accessing Building 31 because trucks will not need to drive to more distant locations to pick up trailers.

The number of trips generated (12 daily trips) and/or redistributed by the proposed trailer storage lot does not trigger the need for additional traffic studies. Therefore, it is suggested that no traffic counts and no further traffic analyses are warranted for the Project.

Trips Based on Current Zoning

The Project site is zoned for Heavy Industrial uses and could potentially be developed with industrial park-type uses with a floor area ratio of approximately 45 percent, or approximately 313,600 square feet of building area, which is a much more intensive use than the proposed storage lot. Table 2 presents an estimate of the number of trips that could potentially be generated at the site if it were developed with Heavy Industrial uses instead of a storage lot.

Table 2
Trip Generation Calculations – Hypothetical Heavy Industrial Project

Land Use	Size	Daily		A.M. Peak Hour					P.M. Peak Hour				
		Rate	Total	Rate	In:Out	In	Out	Total	Rate	In:Out	In	Out	Total
Industrial Park (ITE 130)	313,600 sq. ft.	3.37	1,058	0.34	81:19	87	20	107	0.34	22:78	24	83	107

Reference: *Trip Generation Manual, 11th Edition*, Institute of Transportation Engineers, September 2021
Rates are reported in trips per 1,000 square feet of building area.

Table 3 presents the net Project trip generation by taking the difference between the zoned land use trip generation (Table 2) and the proposed Project trip generation (Table 1).

Table 3
Net Planned Site Trip Generation With Project

Scenario	Daily	A.M. Peak Hour	P.M. Peak Hour
Project	12	4	4
Industrial Park	1,058	107	107
Difference	**-1,046**	**-103**	**-103**

The results of the trip generation analyses suggest that the proposed Project will result in substantially fewer trips than would be expected based on the planned Heavy Industrial zoning.

Vehicle Miles Traveled (VMT)

Senate Bill (SB) 743 requires that relevant CEQA analysis of transportation impacts be conducted using a metric known as vehicle miles traveled (VMT) instead of Level of Service (LOS). VMT measures how much actual auto travel (additional miles driven) a proposed project would create on California roads. If the project adds excessive car travel onto roads, the project may cause a significant transportation impact.

The State CEQA Guidelines were amended to implement SB 743 by adding Section 15064.3. Among its provisions, Section 15064.3 confirms that, except with respect to transportation projects, a project's effect on automobile delay shall not constitute a significant environmental impact. Therefore, LOS as a measure of impacts on traffic facilities is no longer a relevant CEQA criteria for transportation impacts.

CEQA Guidelines Section 15064.3(b)(4) states that "[a] lead agency has discretion to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revision to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section."

On June 25, 2020, the City of Fresno adopted CEQA Guidelines for Vehicle Miles Traveled Thresholds, dated June 25, 2020, pursuant to SB 743 to be effective as of July 1, 2020. The thresholds described therein are referred to herein as the City of Fresno VMT Thresholds. The City of Fresno VMT Thresholds document was prepared and adopted consistent with the requirements of CEQA Guidelines Sections 15064.3 and 15064.7. The December 2018 Technical Advisory on Evaluating Transportation Impacts in CEQA (Technical Advisory) published by the Governor's Office of Planning and Research (OPR) was utilized as a reference and guidance document in the preparation of the City of Fresno VMT Thresholds.

The City of Fresno VMT Thresholds adopted a screening standard and criteria that can be used to screen out qualified projects that meet the adopted criteria from a requirement to prepare a detailed VMT analysis.

The City of Fresno VMT Thresholds Section 3.0 regarding Project Screening discusses a variety of projects that may be screened out of a VMT analysis including specific

development and transportation projects. For development projects, conditions may exist that would allow the presumption that a development project will have a less-than-significant impact. These conditions may be size, location, proximity to transit, or trip-making potential. For transportation projects, the primary attribute to consider with transportation projects is the potential to increase vehicle travel, sometimes referred to as "induced travel."

The proposed Project will generate approximately 12 trips per day and is therefore eligible to screen out because the Project will generate less than 500 trips per day.

In conclusion, the Project will result in a less-than-significant VMT impact and is consistent with CEQA Guidelines section 15064.3(b).

Conclusion

The number of trips generated and/or redistributed by the proposed storage lot does not appear to trigger the need for additional traffic studies. Therefore, it is suggested that no traffic counts and no further traffic analyses are warranted for the Project.

The Project will result in a less-than-significant transportation impact.

Thank you for the opportunity to perform these traffic analyses. Please feel free to contact our office if you have any questions.

PETERS ENGINEERING GROUP

John Rowland, PE, TE

Attachments: Northpoint Building 31 Trip Generation and Impact Assessment report dated November 20, 2020

November 20, 2020

Mr. Leland Parnagian
G4 Enterprises LTD
8570 S. Cedar
Fresno, CA 93725

SUBJECT: NORTHPOINT BUILDING 31 TRIP GENERATION AND IMPACT ASSESSMENT

Dear Mr. Leland Parnagian:

Urban Crossroads, Inc. is pleased to provide the following Trip Generation and Impact Assessment for the Northpoint Building 31 Project ("Project") which is located in within the entitled TPM-2012-06 in the City of Fresno. The purpose of this work effort is to assess the potential changes in trip generation from the currently entitled Project ("Existing Project") to the proposed modified Project ("Modified Project"). It is our understanding that the Modified Project, as the Existing Project is to consist of approximately 469,596 square feet (sf). The currently entitled land uses are illustrated on Exhibit 1 and the proposed Project land uses are illustrated on Exhibit 2. As discussed below, the Modified Project's impacts are less than the impacts of the Existing Project, and thus, aside from this Trip Generation and Impact Assessment, no additional CEQA analysis is required.

The minor changes from the Existing Project to the Modified Project are summarized as follows:

TABLE 1: EXISTING PROJECT COMPARED TO MODIFIED PROJECT

Existing Project:	Modified Project
Auto Parking: 651	Auto Parking: 297
Trailer Parking: 66	Trailer Parking: 54
Dock Doors: 84	Dock Doors: 113
Dock Level Doors: 8	Dock Level Doors: 2

ENTITLED LAND USE AND EXISTING PROJECT

On March 20, 2015, the City of Fresno adopted a Mitigated Negative Declaration (MND) for TPM-2012-06 which includes approximately 122.01 acres of property generally located at the northwest corner of the intersection of East Central and South Orange Avenues in the City of Fresno. The entire TPM-2012-06 includes future development of a proposed industrial park yielding up to 2,125,728 sf of building floor area. More specifically, the Existing Project and Modified Project both consist of 469,596 sf of the total 2,125,728 sf adopted pursuant to TPM-2012-06. On January 17, 2018 the City of Fresno issued a Development Permit for the Existing Project.

EXHIBIT 1: CURRENTLY ENTITLED LAND USE/EXISTING PROJECT

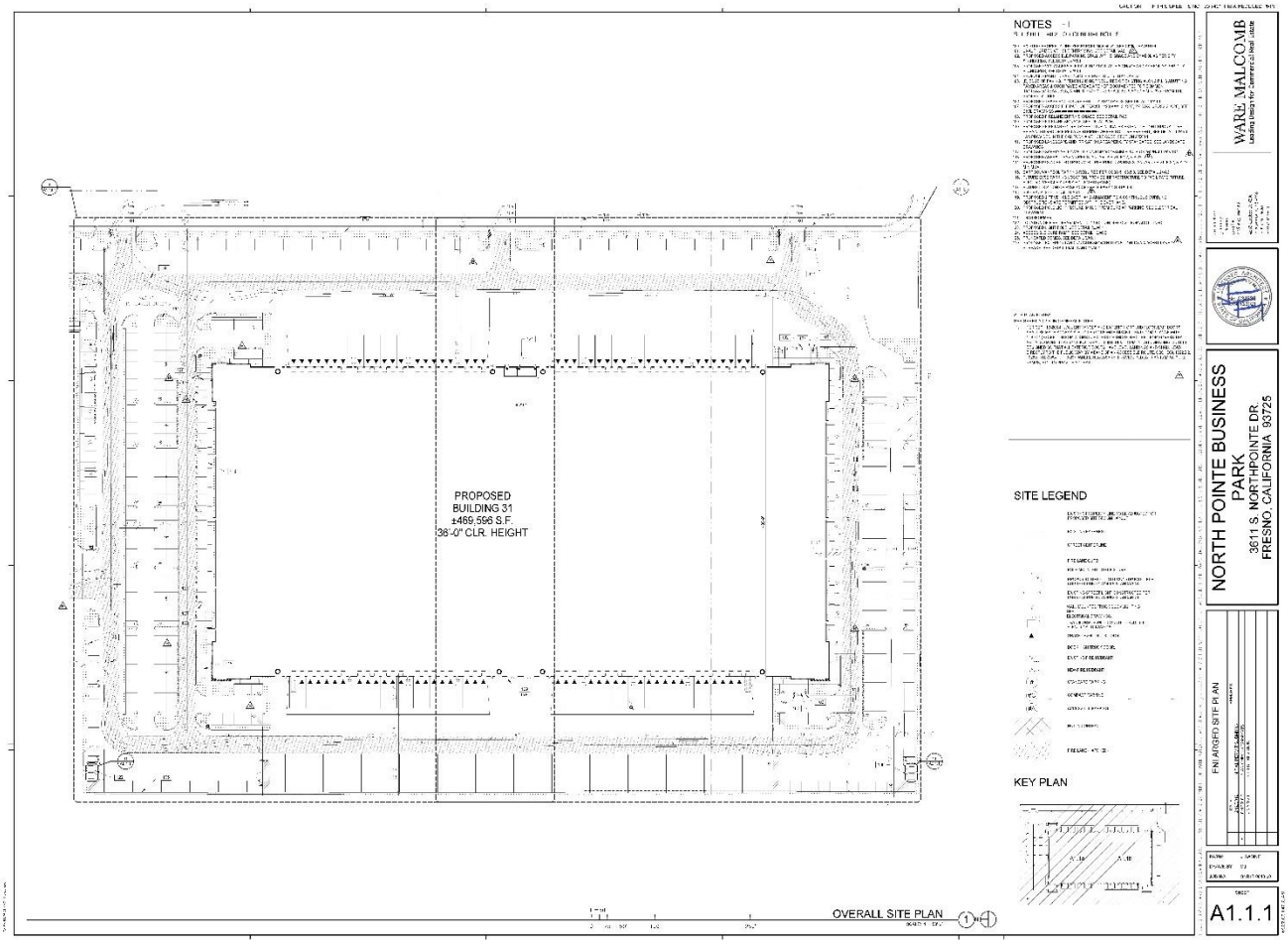


EXHIBIT 2: PROPOSED PROJECT LAND USES/MODIFIED PROJECT

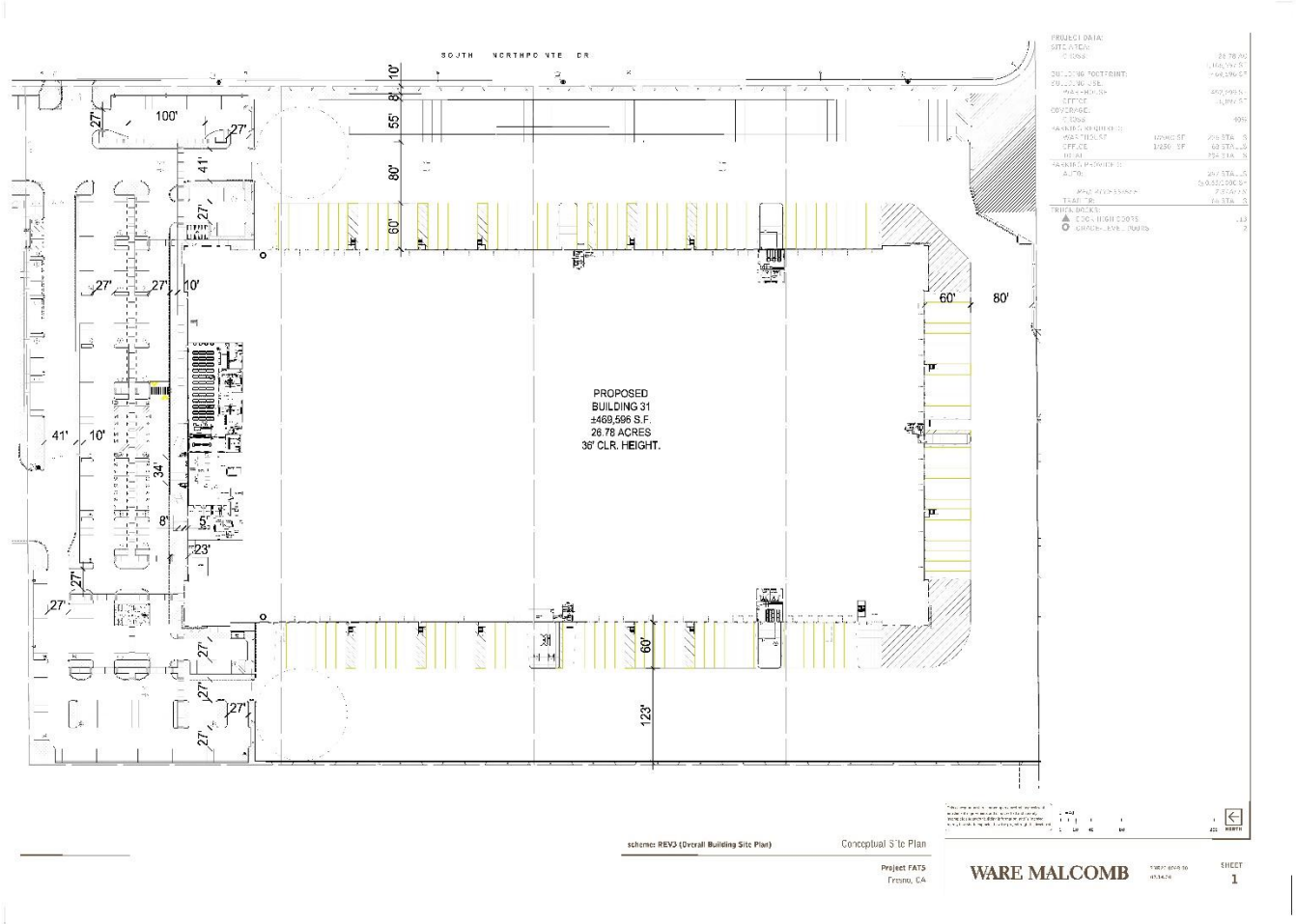


Table 2 presents the trip generation rates from the adopted MND for the existing industrial park land use.

As shown in Table 3, the Existing Project, 496,596 sf of currently entitled industrial park, would generate 3,274 vehicle trips per day, with 431 vehicle trips generated during the AM peak hour and 659 vehicle trips generated during the PM peak hour.

TABLE 2: CURRENTLY ENTITLED LAND USE/EXISTING PROJECT TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Industrial Park[3]	TSF	130	0.810	0.110	0.920	0.854	0.548	1.402	6.970
Passenger Cars (87.0%)			0.705	0.096	0.800	0.743	0.477	1.220	6.064
2-Axle Trucks (2.17%)			0.018	0.002	0.020	0.019	0.012	0.030	0.151
3-Axle Trucks (2.69%)			0.022	0.003	0.025	0.023	0.013	0.038	0.187
4+-Axle Trucks (8.14%)			0.066	0.009	0.075	0.070	0.045	0.114	0.567

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).

[2] TSF = thousand square feet

[3] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition Supplement (February 2020).

TABLE 3: CURRENTLY ENTITLED LAND USE/EXISTING PROJECT TRIP GENERATION SUMMARY

Land Use	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Industrial Park	469.596	TSF							
Passenger Cars:			331	45	376	349	224	573	2,848
Truck Trips:									
2-axle:			8	1	9	9	6	15	72
3-axle:			10	1	11	11	6	17	88
4+-axle:			31	4	35	33	21	54	266
- Truck Trips			49	6	55	53	33	86	426
TOTAL TRIPS [2]			**380**	**51**	**431**	**402**	**257**	**659**	**3,274**

[1] TSF = thousand square feet

[2] TOTAL TRIPS = Passenger Cars + Truck Trips.

MODIFIED PROJECT

The Modified Project is to consist of up to 469,596 sf of high-cube fulfillment center (sort) warehouse space.

Table 4 presents the trip generation rates obtained from the Institute of Transportation Engineers (ITE) Trip Generation Manual (10th Edition) for the high-cube fulfillment center (sort). As shown in Table 5, the Modified Project, 469,596 sf of proposed high-cube fulfillment center (sort) space, would generate 3,028 vehicle trips per day, with 407 vehicle trips generated during the AM peak hour and 563 vehicle trips generated during the PM peak hour.

PROJECT TRIP GENERATION COMPARISON AND RELATED IMPACTS COMPARISON

As shown in Table 6, the development of the Modified Project is anticipated to generate 246 fewer vehicle trip-ends per day with 24 fewer AM and 96 fewer PM peak hour vehicle trips as compared to the Existing Project. The development of the Modified Project is also anticipated to generate 332 fewer truck trip-ends per day with 48 fewer AM and 75 fewer PM peak hour truck trips as compared to the Existing Project. Also, because the Modified Project will generate less trips than the Existing Project, the Modified Project will have less air quality and greenhouse gas impacts.

It should also be noted that even if the Project site were developed consistent with the industrial park land use designation, it would result in fewer vehicle trips than what was previously entitled since the ITE trip generation rates for the industrial park use have been updated based on more current survey data resulting in a reduction in vehicle trips and consequently fewer air quality and greenhouse gas impacts.

TABLE 4: MODIFIED PROJECT LAND USE TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
High-Cube Fulfillment Center (Sort)[3,4]	TSF	155	0.705	0.165	0.870	0.468	0.732	1.200	6.440
Passenger Cars (AM-98.0%; PM-98.0%; Daily-97.0%)			0.691	0.162	0.853	0.459	0.717	1.176	6.247
2-Axle Trucks (AM-0.33%; PM-0.33%; Daily-0.50%)			0.002	0.001	0.003	0.002	0.002	0.004	0.032
3-Axle Trucks (AM-0.41%; PM-0.41%; Daily-0.62%)			0.003	0.001	0.004	0.002	0.003	0.005	0.040
4-Axle+ Trucks (AM-1.25%; PM-1.25%; Daily-1.88%)			0.009	0.002	0.011	0.006	0.009	0.015	0.121

[1] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition (2017).

[2] TSF = thousand square feet

[3] Vehicle Mix Source: ITE Trip Generation Handbook Supplement (2020), Appendix C.

Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.

Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

Inbound and outbound split source: ITE Trip Generation Manual, Tenth Edition (2017) for ITE Land Use Code 154.

[4] Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Tenth Edition Supplement (February 2020).

TABLE 5: MODIFIED PROJECT LAND USE TRIP GENERATION SUMMARY

Land Use	Quantity	Units[1]	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
High-Cube Fulfillment (Sort)	469.596	TSF							
Passenger Cars:			324	76	400	215	337	552	2,934
Truck Trips:									
2-axle:			1	0	1	1	1	2	16
3-axle:			1	0	2	1	1	2	20
4+-axle:			4	1	5	3	4	7	58
- Truck Trips			6	1	7	5	6	11	94
TOTAL TRIPS [2]			**330**	**77**	**407**	**220**	**343**	**563**	**3,028**

[1] TSF = thousand square feet

[2] TOTAL TRIPS = Passenger Cars + Truck Trips.

TABLE 6: TRIP GENERATION COMPARISON

Land Use	AM Peak Hour			PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	
Existing Project - Industrial Park	380	51	431	402	257	659	3,274
Modified Project - High-Cube Fulfillment Center (Sort)	330	77	407	220	343	563	3,028
Variance	***-50***	***26***	***-24***	***-182***	***86***	***-96***	***-246***

CONCLUSION

As the Modified Project is anticipated to result in a net reduction to the AM, PM, and daily trips (including fewer trucks) in comparison to that evaluated for the Existing Project, no additional traffic-related, air quality, and greenhouse gas impacts are anticipated as a result of the proposed development currently being contemplated. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

Respectfully submitted,

URBAN CROSSROADS, INC.

Haseeb Qureshi
Associate Principal

MITIGATION MONITORING AND REPORTING PROGRAM – April 8, 2022

This Mitigation Monitoring and Reporting Program (MMRP) has been formulated based upon the findings of the Initial Study/Mitigated Negative Declaration (IS/MND) for the City of Fresno's P21-03293 – Bld 31 Trailer Storage Project (proposed Project). The MMRP lists mitigation measures recommended in the IS/MND for the proposed Project and identifies monitoring and reporting requirements as well as conditions recommended by responsible agencies who commented on the project.

The first column of the Table identifies the mitigation measure. The second column, entitled "Party Responsible for Implementing Mitigation," names the party responsible for carrying out the required action. The third column, "Implementation Timing," identifies the time the mitigation measure should be initiated. The fourth column, "Party Responsible for Monitoring," names the party ultimately responsible for ensuring that the mitigation measure is implemented. The last column will be used by the City to ensure that individual mitigation measures have been monitored.

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
AES-4.3: Lighting for Non-Residential Uses. Lighting systems for non-residential uses, not including public facilities, shall provide shields on the light fixtures and orient the lighting system away from adjacent properties. Low intensity light fixtures shall also be used if excessive spillover light onto adjacent properties will occur.	Project Applicant and project architect	Lighting systems to be confirmed during plan check, prior to issuance of building permits.	Public Works Department (PW) and Planning and Development Department (PDD)	
AES-4.5: Use of Non-Reflective Materials. Materials used on building facades shall be non-reflective.	Project Applicant and project architect	Lighting systems to be confirmed during plan check, prior to issuance of building permits.	PW & PDD	
CUL-1.1: If previously unknown resources are encountered before or during grading activities, construction shall stop in the immediate vicinity of the find and a qualified historical resources specialist shall be consulted to determine whether the resource requires further study. The qualified historical resources specialist shall make recommendations to the City on the measures that shall be implemented to protect the discovered resources, including but not limited to excavation of the finds and evaluation of the finds in accordance with Section 15064.5 of the CEQA Guidelines and the City's Historic Preservation Ordinance. If the resources are determined to be unique historical resources as defined under Section 15064.5 of the CEQA Guidelines, measures shall be identified by the monitor and recommended to the Lead Agency. Appropriate measures for significant resources could include avoidance or capping,	Project Applicant and qualified historical resources specialist	Planning and Development Department to review contract specifications to ensure inclusion of provisions included in project-specific mitigation measure. Following discovery of previously unknown resource, a qualified historical resources	PDD	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
incorporation of the site in green space, parks, or open space, or data recovery excavations of the finds. No further grading shall occur in the area of the discovery until the Lead Agency approves the measures to protect these resources. Any historical artifacts recovered as a result of mitigation shall be provided to a City-approved institution or person who is capable of providing long-term preservation to allow future scientific study.		specialist shall prepare recommendations and submit to the Planning and Development Department. Timing for recommendations shall be established by project-specific mitigation measure.		
CUL-3: In the event that human remains are unearthed during excavation and grading activities of any future development project, all activity shall cease immediately. Pursuant to Health and Safety Code (HSC) Section 7050.5, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98(a). If the remains are determined to be of Native American descent, the coroner shall within 24 hours notify the Native American Heritage Commission (NAHC). The NAHC shall then contact the most likely descendent of the deceased Native American, who shall then serve as the consultant on how to proceed with the remains. Pursuant to PRC Section 5097.98(b), upon the discovery of Native American remains, the landowner shall ensure that the immediate vicinity, according to generally accepted	Project Applicant and qualified historical resources specialist	Planning and Development Department to review construction specifications to ensure inclusion of provisions included in mitigation measure.	PDD	

Mitigation Measure	Party responsible for Implementing Mitigation	Implementation Timing	Party responsible for Monitoring	Verification (name/date)
cultural or archaeological standards or practices, where the Native American human remains are located is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendants regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. The landowner shall discuss and confer with the descendants all reasonable options regarding the descendants' preferences for treatment.				