Appendix B-1

Air Quality Report

Meridian D-1 Gateway Aviation Center

Air Quality Impact Analysis

March Joint Powers Authority (March JPA)

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April 25, 2024

13445-13 AQ Report

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LIST OF ABBREVIATED TERMS

%	Percent
°F	Degrees Fahrenheit
(1)	Reference
$\mu g/m^3$	Microgram per Cubic Meter
1992 CO Plan	*1992 Federal Attainment Plan for Carbon Monoxide*
1993 CEQA Handbook	SCAQMD's *CEQA Air Quality Handbook (1993)*
2003 AQMP	SCAQMD's *2003 Air Quality Management Plan*
2003 Focused EIR	*March Business Center Specific Plan and Final Focused Environmental Impact Report (SCH#2002071089)*
2016 AQMP	SCAQMD's *Final 2019 Air Quality Management Plan*
2016-2040 RTP/SCS	*2016-2040 Regional Transportation Plan/Sustainable Communities Strategy*
AB 2595	California Clean Air Act
AEDT	Aviation Environmental Design Tool
AQIA	Air Quality Impact Analysis
AQMP	Air Quality Management Plan
BAAQMD	Bay Area Air Quality Management District
BC	Black Carbon
C_2Cl_4	Perchloroethylene
C_4H_6	1,3-butadiene
C_6H_6	Benzene
C_2H_3Cl	Vinyl Chloride
C_2H_4O	Acetaldehyde
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen	California Green Building Standards Code
CAP	Climate Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CEQA Guidelines	*2019 CEQA Statute and Guidelines*
CH_2O	Formaldehyde

CO	Carbon Monoxide
COH	Coefficient of Haze
COHb	Carboxyhemoglobin
Cr(VI)	Chromium
CTP	Clean Truck Program
Cr(VI)	Chromium
CRRC	Cool Roof Rating Council
CTP	Clean Truck Program
CY	Cubic Yards
DPM	Diesel Particulate Matter
DRRP	Diesel Risk Reduction Plan
EC	Elemental Carbon
EIR	Environmental Impact Reports
EMFAC	EMissions FACtor Model
EPA	Environmental Protection Agency
ETW	Equivalent Test Weight
EV	Electric Vehicles
FAA	Federal Aviation Administration
g/L	Grams Per Liter
GHG	Greenhouse Gas
GVWR	Gross Vehicle Weight Rating
H_2S	Hydrogen Sulfide
HDT	Heavy Duty Trucks
HI	Hazard Index
HHDT	Heavy-Heavy-Duty Trucks
hp	Horsepower
HRA	*Gateway Aviation Health Risk Assessment*
I-215	Interstate 215
ITE	Institute of Transportation Engineers
lbs	Pounds
lbs/day	Pounds Per Day
LDA	Light Duty Auto
LDT1/LDT2	Light-Duty Trucks
LHDT	Light-Heavy-Duty Trucks
LST	Localized Significance Threshold
LST METHODOLOGY	Final Localized Significance Threshold Methodology
March ARB	March Air Reserve Base
March JPA	March Joint Powers Authority

MATES	Multiple Air Toxics Exposure Study
MDV	Medium-Duty Vehicles
MHDT	Medium-Heavy-Duty Trucks
MICR	Maximum Individual Cancer Risk
MM	Mitigation Measures
MW	Megawatt
MWELO	California Department of Water Resources' Model Water Efficient
N_2	Nitrogen
N_2O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NO_X	Nitrogen Oxides
O_2	Oxygen
O_3	Ozone
O_2 Deficiency	Chronic Hypoxemia
OBD-II	On-Board Diagnostic
OPR	Office of Planning and Research
Pb	Lead
PM_{10}	Particulate Matter 10 microns in diameter or less
$PM_{2.5}$	Particulate Matter 2.5 microns in diameter or less
POLA	Port of Los Angeles
POLB	Port of Long Beach
ppm	Parts Per Million
Project	Meridian D-1 Gateway Aviation Center
RECLAIM	Regional Clean Air Incentives Market
RFG-2	Reformulated Gasoline Regulation
ROG	Reactive Organic Gases
RTP	Regional Transportation Plan
SCAB	South Coast Air Basin
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCAQMD Rule 403	Fugitive Dust
SCAQMD Rule 1113	Architectural Coating
SCS	Sustainable Communities Strategy
sf	Square Feet
SIPs	State Implementation Plans

SO_2	Sulfur Dioxide
SO_4	Sulfates
SO_X	Sulfur Oxides
SRA	Source Receptor Area
TAC	Toxic Air Contaminant
TAZ	Traffic Analysis Zone
TDM	Transportation Demand Management
TA	*Meridian D-1 Gateway Aviation Center Traffic Analysis*
TITLE I	Non-Attainment Provisions
TITLE II	Mobile Sources Provisions
UFP	Ultra Fine Particles
UTRs	Utility Tractors
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
vph	Vehicles Per Hour

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EXECUTIVE SUMMARY

ES.1 SUMMARY OF FINDINGS

The results of this *Meridian D-1 Gateway Aviation Center Air Quality Impact Analysis* (AQIA) are summarized below based on the significance criteria in Section 3 of this report consistent with Appendix G of the *California Environmental Quality Act (CEQA) Guidelines* (*CEQA Guidelines*) as implemented by March JPA (1). Table ES-1 shows the findings of significance for each potential air quality impact under CEQA before and after any required mitigation described below.

TABLE ES-1: SUMMARY OF CEQA SIGNIFICANCE FINDINGS (1 OF 2)

Analysis	Report Section	Significance Findings		
		Unmitigated	Mitigation Measure	Mitigated
Regional Construction Emissions	5.3	*Less Than Significant*	*MM AQ-1 MM AQ-2*	*n/a*
Localized Construction Emissions	5.5	*Less Than Significant*	*n/a*	*n/a*
Regional Operational Emissions	5.4	*Potentially Significant*	*MM AQ-3 MM AQ-4 MM AQ-5 MM AQ-6*	*Significant and Unavoidable*
Localized Operational Emissions	5.6	*Less Than Significant*	*n/a*	*n/a*
CO "Hot Spot" Analysis	5.7	*Less Than Significant*	*n/a*	*n/a*
Air Quality Management Plan	5.8	*Potentially Significant*	*MM AQ-1 MM AQ-2 MM AQ-3 MM AQ-4 MM AQ-5 MM AQ-6*	*Significant and Unavoidable*
Regional Transportation Plan/ Sustainable Communities Strategy	5.9	*Less Than Significant*	*n/a*	*n/a*
Sensitive Receptors	5.10	*Less Than Significant*	*n/a*	*n/a*
Odors	5.11	*Less Than Significant*	*n/a*	*n/a*
Cumulative Impacts	5.12	*Potentially Significant*	*MM AQ-1 MM AQ-2 MM AQ-3 MM AQ-4 MM AQ-5 MM AQ-6*	*Significant and Unavoidable*

ES.2 STANDARD REGULATORY REQUIREMENTS

There are numerous requirements that development projects must comply with by law, and that were put in place by federal, State, and local regulatory agencies for the improvement of air quality. The two most pertinent regulatory requirements that apply to the proposed Project and which are required by South Coast Air Quality Management District (SCAQMD) Rules that are currently applicable during construction activity for this Project include but are not limited to Rule 403 (Fugitive Dust) (2) and Rule 1113 (Architectural Coatings) (3). As such, credit for Rule 403 and Rule 1113 have been taken in the analysis.

SCAQMD RULE 403

This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent and reduce fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust and requires best available control measures to be applied to earth moving and grading activities.

SCAQMD RULE 1113

This rule serves to limit the Volatile Organic Compound (VOC) content of architectural coatings used on projects in the SCAQMD. Any person who supplies, sells, offers for sale, or manufactures any architectural coating for use on projects in the SCAQMD must comply with the current VOC standards set in this rule.

ES.3 MITIGATION MEASURES

ES.3.1 CONSTRUCTION-SOURCE MMS

The Project construction-source emissions would not exceed SCAQMD regional thresholds. Thus, the Project would result in a less than significant impact associated with construction activities. Additionally, implementation of Mitigation Measure (MM) AQ-1 and MM AQ-2 would further reduce Project construction-source emissions.

MM AQ-1 (CONSTRUCTION MANAGEMENT PLAN)

Prior to the issuance of a grading permit, the applicant shall prepare and submit to the March Joint Powers Authority for approval a Construction Management Plan to ensure that off-road diesel construction equipment rated at 50 horsepower (hp) or greater, complies with Environmental Protection Agency (EPA)/California Air Resources Board (CARB) Tier 4 off-road emissions standards or equivalent and shall ensure that all construction equipment is tuned and maintained in accordance with the manufacturer’s specifications. All equipment maintenance records and data sheets, including design specifications and emission control tier classifications shall be kept onsite and furnished to the March JPA or other regulators upon request.

MM AQ-2 (Construction Requirements)

Prior to issuance of a grading permit and/or building permit, the applicant shall provide evidence to March Joint Powers Authority (JPA) that the subject plans contain the following requirements and restrictions:

A. No grading shall occur on days with an Air Quality Index forecast greater than 150 for particulates or ozone as forecasted for the project area (Source Receptor Area 24).

B. Active ground disturbance shall not exceed 20 acres per day.

C. Contractor shall require all heavy-duty trucks hauling onto the project site to be model year 2014 or later. This measure shall not apply to trucks that are not owned or operated by the contractor since it would be infeasible to prohibit access to the site by any truck that is otherwise legal to operate on California roads and highways.

D. No construction equipment idling longer than three (3) minutes shall be permitted. No off-road diesel-powered equipment shall be in the “on” position for more than 8 hours per day.

E. No diesel-powered portable generators shall be used, unless necessary due to emergency situations or constrained supply.

F. Contractor required to provide transit and ridesharing information to onsite construction workers.

G. Contractor required to establish location for food or catering truck service to construction workers and to cooperate with food service providers to provide consistent food service.

H. Use of electric-powered hand tools, forklifts and pressure washers, to the extent feasible.

I. Designation of an area in the construction site where electric-powered construction vehicles and equipment can charge.

J. Project will utilize “Super-Compliant” low VOC paints which have been reformulated to exceed the regulatory VOC limits put forth by SCAQMD’s Rule 1113. Super-Compliant low VOC paints shall be no more than 10 grams per liter (g/L) of VOC. Alternatively, the applicant may utilize tilt-up concrete buildings that do not require the use of architectural coatings.

ES.3.2 Operational-Source MMs

For regional emissions, the Project has the potential to exceed the numerical thresholds of significance established by the SCAQMD. It is important to note that the majority of the Project’s emissions are derived from aviation-related emissions. Since neither the Project Applicant nor the March JPA have regulatory authority to control aviation-related emissions, no feasible mitigation measures (MMs) beyond the measures identified herein exist that would reduce emissions to levels that are less-than-significant, thus these emissions are considered significant and unavoidable.

The following measures (MM AQ-3 through MM AQ-6) are designed to reduce Project operational-source VOCs, NO_X, and CO emissions. There is no way to meaningfully quantify these reductions in California Emissions Estimator Model (CalEEMod), and therefore no numeric emissions credit has been taken in the analysis. As such, even with application of MM AQ-2 through MM AQ-5, Project operational-source emissions impacts would be significant and unavoidable.

MM AQ-3 (IMPROVED ENERGY EFFICIENCY AND WATER REDUCTION)

A. Building Design - Prior to issuance of a building permit, March JPA shall confirm building plans include the following:

   i. Building constructed to achieve 2023 LEED Silver certification standards or equivalent, at a minimum.

   ii. Energy Star-certified light bulbs and light fixtures.

   iii. Duct insulation to a minimum level (R-6) of and modestly enhanced window insulation (0.28 or less U-factor, 0.22 or less SHGC).

   iv. A modest cool roof, defined as Cool Roof Rating Council Rated 0.15 aged solar reflectance and 0.75 thermal emittance.

   v. Heating, ventilation, and air conditioning equipment with a season energy efficiency ratio of 14 or higher and energy efficiency ratio [EER] 14/78% annual fuel utilization efficiency [AFUE] or 8 heating seasonal performance factor [HSPF].

   vi. Water heaters with an energy factor of 0.92 or higher.

   vii. All occupied rooms shall have some form of daylighting (e.g., skylights or windows).

   viii. At least 50% of artificial lighting unit fixtures shall be high efficacy.

   ix. Waterless urinals and high efficiency toilets.

   x. Water-efficient faucets (1.28 gpm).

   xi. Blower door home energy rating system (HERS) verified envelope leakage or equivalent.

   xii. Enhanced insulation (rigid wall insulation R-13 or equivalent, roof/attic R-38).

   xiii. Cool surface treatments on all drive aisles and parking areas or with a solar-reflective cool pavement such as concrete subject to ALUC approval.

B. Landscape Design – Prior to issuance of a building permit, March JPA shall confirm building and landscaping plans include the following:

   i. Electrical outlets to each of the areas in the vicinity of the building that are to be landscaped so that electrical equipment shall be used for landscape maintenance. This measure may also be satisfied by locating charging stations around the building to accommodate battery-operated equipment.

   ii. Landscape non-potable water system shall meet “purple” pipe standards.

iii. Water efficient landscaping having no turf and only drought-tolerant plants and including additional water-efficient irrigation controls such as smart irrigation controllers.

C. Tenant Agreement Requirements – Prior to issuance of a certificate of occupancy, March JPA shall confirm any tenant agreement includes the following:

i. Require the use of electric or battery-operated equipment for landscape maintenance.

ii. Require the use of electric service yard trucks (hostlers), pallet jacks and forklifts, and other on-site equipment, with necessary electrical charging stations provided. Yard hostlers may be diesel fueled in lieu of electrically powered, provided that the occupant submits a letter identifying that electric hostlers are technically infeasible and provided such yard hostlers are compliant with California Air Resources Board (CARB) Tier 4 Final compliant for off-road vehicles. As an alternative, hydrogen fuel-cell or compressed natural gas (CNG)-powered equipment shall also be acceptable.

iii. Require provision of the following information annually to employees and truck drivers as appropriate:

a. Building energy efficiency, solid waste reduction, recycling, and water conservation.

b. Vehicle GHG emissions, electric vehicle charging availability, and alternate transportation opportunities for commuting.

c. Participation in the Voluntary Interindustry Commerce Solutions (VICS) “Empty Miles” program to improve goods trucking efficiencies.

d. Health effects of diesel particulates, state regulations limiting truck idling time, and the benefits of minimized idling.

e. The importance of minimizing traffic, noise, and air pollutant impacts to any residences in the Project vicinity.

f. Efficient scheduling and load management to eliminate unnecessary queuing and idling of trucks.

MM AQ-4 (TRUCK REQUIREMENTS)

A. Building Design – Prior to issuance of a building permit, March Joint Powers Authority (JPA) shall confirm the following:

i. The loading docks shall be designed to accommodate SmartWay trucks.

ii. Conduit shall be installed in truck courts in logical locations that would allow for the future installation of charging stations for electric trucks, in anticipation of this technology becoming available.

iii. Applicant shall provide project specifications, drawings, and calculations that demonstrate that main electrical supply lines and panels have been sized to support 'clean fleet' charging facilities, including heavy trucks and delivery vehicles, when these trucks become available. The calculations shall be based on reasonable predictions from currently available truck manufacturer's data. Electrical system upgrades that exceed reasonable costs shall not be required.

B. Anti-Idling Signs – Prior to issuance of a certificate of occupancy, March JPA shall confirm the following:

   i. Legible, durable, weather-proof signs shall be placed at truck access gates, loading docks, and truck parking areas that identify applicable California Air Resources Board (CARB) anti-idling regulations. At a minimum, each sign shall include (1) instructions for truck drivers to shut off engines when not in use; (2) instructions for drivers of diesel trucks to restrict idling to no more than three (3) minutes once the vehicle is stopped, the transmission is set to "neutral" or "park," and the parking brake is engaged; and (3) telephone numbers of the building facilities manager, South Coast Air Quality Management District, and CARB to report violations. Prior to the issuance of an occupancy permit, March JPA shall conduct a site inspection to ensure that the signs are in place. One six square foot sign providing this information shall be located on the building between every two dock-high doors and the sign shall be posted in highly visible locations at the entrance gates, semi parking areas, and trailer parking locations.

C. Prior to issuance of a certificate of occupancy, March Joint Powers Authority shall confirm any tenant agreement includes the following:

   i. Tenant to apply in good faith for funding to replace/retrofit their trucks, such as Carl Moyer, VIP, Prop 1B, SmartWay Finance, or other similar funds. If awarded, the tenant shall be required to accept and use the funding. Tenant shall be encouraged to consider the use of alternative fueled trucks, as well as new or retrofitted diesel trucks. Tenant shall also be encouraged to become SmartWay Partners, if eligible.

   ii. Tenant shall monitor and ensure compliance with all current air quality regulations for on-road trucks including CARB's Heavy-Duty (Tractor-trailer) Greenhouse Gas Regulation, Periodic Smoke Inspection Program, and the Statewide Truck and Bus Regulation, as applicable.

MM AQ-5 (COMMUTE TRIP REDUCTION)

Prior to issuance of a certificate of occupancy, March Joint Powers Authority shall confirm any tenant agreement includes the following:

A. Reservation of a total of 5% of vehicle/employee parking spaces for preferential spaces for carpools and van pools.

B. Provision of short- and long- term bicycle parking facilities to meet peak season maximum demand (one bike rack space per 20 vehicle/employee parking spaces).

C. Provision of "end-of-trip" facilities including showers, lockers, and changing space (four clothes lockers and one shower provided for every 80 employee parking spaces).

D. Provision of on-site food vending machines or refrigerator, microwave oven, and mail facilities (i.e., drop box) at the project site. Office space shall include an on-site computer, internet connection, and other services for personal employee use.

E. Requirement to establish and promote a rideshare program that discourages single-occupancy vehicle trips and provides financial incentives for alternate modes of transportation, including carpooling, public transit, and biking.

MM AQ-6 (ADDITIONAL AIR QUALITY TENANT REQUIREMENTS)

Prior to issuance of a certificate of occupancy, March JPA shall confirm any tenant agreement includes the following:

A. Tenant shall not use diesel back-up generators, unless absolutely necessary. Tenant shall provide documentation demonstrating, to March JPA's satisfaction, that no other back-up energy source(s) are available and sufficient for the building's needs. If absolutely necessary, at the time of initial operation, generators shall have Best Available Control Technology (BACT) that meets CARB's Tier 4 emission standards or meets the most stringent in-use standard, whichever has the least emissions. In the event rental back-up generators are required during an emergency, the units shall be located at the project site for only the minimum time required. Tenant shall make every effort to utilize rental emergency backup generators that meet CARB's Tier 4 emission standards or have the least emissions.

B. Tenant shall sweep the property monthly, including parking lot and truck court, to remove road dust, tire wear, brake dust, and other contaminants.

C. Tenant shall comply with all applicable requirements of the MMRP, a copy of which shall be attached to each agreement.

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1 INTRODUCTION

This report presents the results of the AQIA prepared by Urban Crossroads, Inc., for the proposed Meridian D-1 Meridian D-1 Gateway Aviation Center (Project). The purpose of this AQIA is to evaluate the potential impacts to air quality associated with construction and operation of the Project and recommend measures to mitigate impacts considered potentially significant in comparison to thresholds established by the SCAQMD.

1.1 SITE LOCATION

The proposed Project site is located within the southeastern portion of the March JPA jurisdiction, within unincorporated Riverside County, California (see Exhibit 1-A). More specifically, the Project is surrounded by and partially within March Air Reserve Base (March ARB) to the north and west, west of Heacock Street, and southwest of the intersection of Heacock Street and Krameria Avenue, in Moreno Valley, California. Interstate 215 (I-215) is located approximately one (1) mile west of the Project site.

1.2 PROJECT DESCRIPTION

The proposed Project consists of two components: Air Cargo Center Component and the Off-Site Component. The footprint of the Proposed Action/Project would be approximately 45 acres. Of these 45 acres, approximately 33 acres would consist of the proposed development of a gateway air freight cargo center (the Air Cargo Center Component), The rest of the Proposed Action/Project's 45-acre footprint would be an Off-Site Component consisting of approximately 12 acres within March Air Reserve Base (March ARB).

The Air Cargo Center Component of the Project includes the development of a gateway air freight cargo center, which consists of construction of a 180,800 square foot cargo building with 9 at-grade (ground level) loading doors, 31 dock-high door positions, and 37 trailer storage positions. The cargo building would contain approximately 9,000 square feet of office space. The cargo building would be constructed to a maximum height of 45-feet. The Project would also construct a tarmac and parking apron sized to accommodate commercial cargo airplanes, allowing for aircraft to access 4 proposed parking gates along the northern side of the cargo building (see Exhibit 1-B). The tarmac/parking apron would be paved to meet Federal Aviation Administration (FAA) standards. The construction of a new taxilane (Taxilane J) would provide aircraft access to the existing Taxiway A within March ARB. In addition, the existing Taxiway G is proposed to be expanded with the construction of a parking apron adjacent to the western boundary of the cargo building, within the March JPA and would allow for aircraft to access 3 proposed aircraft parking gates along the western side of the cargo building. The proposed tarmac expansion, Taxilane J, and parking aprons would be sized to accommodate commercial cargo airplanes and would be paved to meet FAA standards. Parking aprons would connect with existing Taxiways A and G, which would be used by aircraft to access the March Inland Port Airport runway. Construction and development activities within the public right-of-way along Heacock Street would include construction of a 225-foot right-turn pocket into the project site along the southbound side of Heacock Street, and installation of a traffic signal at the existing access roadway (Access Road).

The Off-site Component of the Project would include construction of Project features on land owned by March ARB. Development occurring on March ARB would require easements from the United States Air Force within 5 work areas as identified below:

- **Work Area 1:** Construction of a 50-foot-wide perimeter patrol road running along the northern and northwestern boundaries of the Project site that would connect with the existing patrol road on the eastern and western ends of the constructed patrol road; replacement of an existing chain-link fence with a security fence.
- **Work Area 2:** Construction of a headwall and inlet apron for a storm drain culvert; extension of a dual 36-inch-diameter storm drain backbone via jack and bore under Taxiway A to replace the existing silt-filled culvert; connection of the culvert to the storm drain extension.
- **Work Area 3:** Reconfiguration of the Taxiway A to Taxilane J transition to allow for aircraft access to the proposed cargo building. Portions of Taxiway A would be demolished and reconstructed to allow for the taxiway to connect with the proposed Taxilane J within the proposed Project.
- **Work Area 4:** Removal of an existing inverted culvert apron outlet; cleaning of the existing 36-inch-diameter culvert; extension of the existing single 36-inch diameter storm drain under Taxiway A via jack and bore to connect the culvert.
- **Work Area 5:** Reconstruction and realignment of the intersection of Taxiway A and taxiway G. This would result in widened entryway for aircraft to turn from Taxiway A to Taxiway G, and to accommodate aircraft access to the aircraft parking stations along the western boundary of the cargo building.

Once constructed, the Project is anticipated to average 17 flights per day, as shown in Table 1-1 below. Flight would occur 6 days a week. Generally, inbound flights would occur in the early morning hours, and outbound flights would occur in the late evening hours. Inbound flights would approach from the west, over non-residential land uses. During the holiday season, increased flight operations would be anticipated (estimated to result in an additional 256 flights over a 4-week period); however, the maximum annual flight operations would not exceed the currently available civilian air cargo operations capacity under the Joint Use Agreement.

Aircraft-related operational emissions provided by Mead & Hunt are presented in Appendix 5.5 and were based on Project-specific data and modeled using the FAA's Aviation Environmental Design Tool (AEDT) version 3C.

Refueling of aircrafts that would use the proposed facilities would occur on site. Aircraft fuel would be trucked from the existing March JPA aircraft fuel farm located off site; emissions associated with the trucked fuel are included in AEDT.

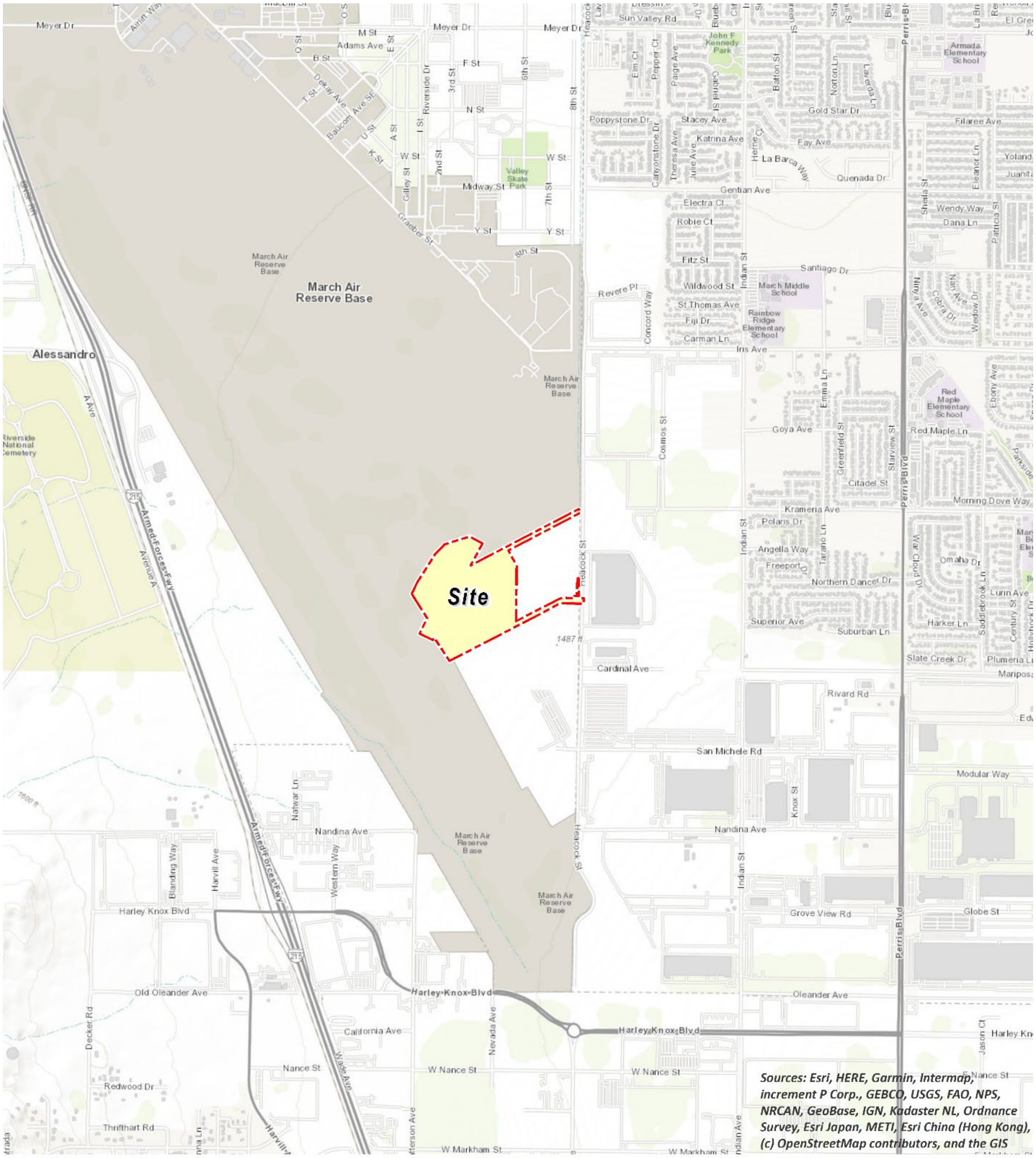
TABLE 1-1: PROPOSED FLIGHT OPERATIONS

Average Daily Arrival Operations (Non-Peak)			Average Daily Departures (Non-Peak)			Average Daily Arrival Operations (Peak)			Average Daily Departures (Peak)			Total Average Daily Departures (Non-Peak)	Total Average Daily Departures (Peak)	Total Annual Operations
D	E	N	D	E	N	D	E	N	D	E	N			
14	3	0	3	12	2[A]	15	7	0	7	13	2	17	22	10,608

Notes; D = Day; E = Evening; N = Night
[A] This represents an overstatement of the average daily nighttime flight operations during non-peak hours, which is approximately 1.6 flight operations.

This analysis is intended to describe air quality impacts associated with the expected construction and operational activities at the Project site. Although not proposed, this report assumes the cargo center will operate 24-hours daily for seven days per week to present a conservative approach.

EXHIBIT 1-A: LOCATION MAP

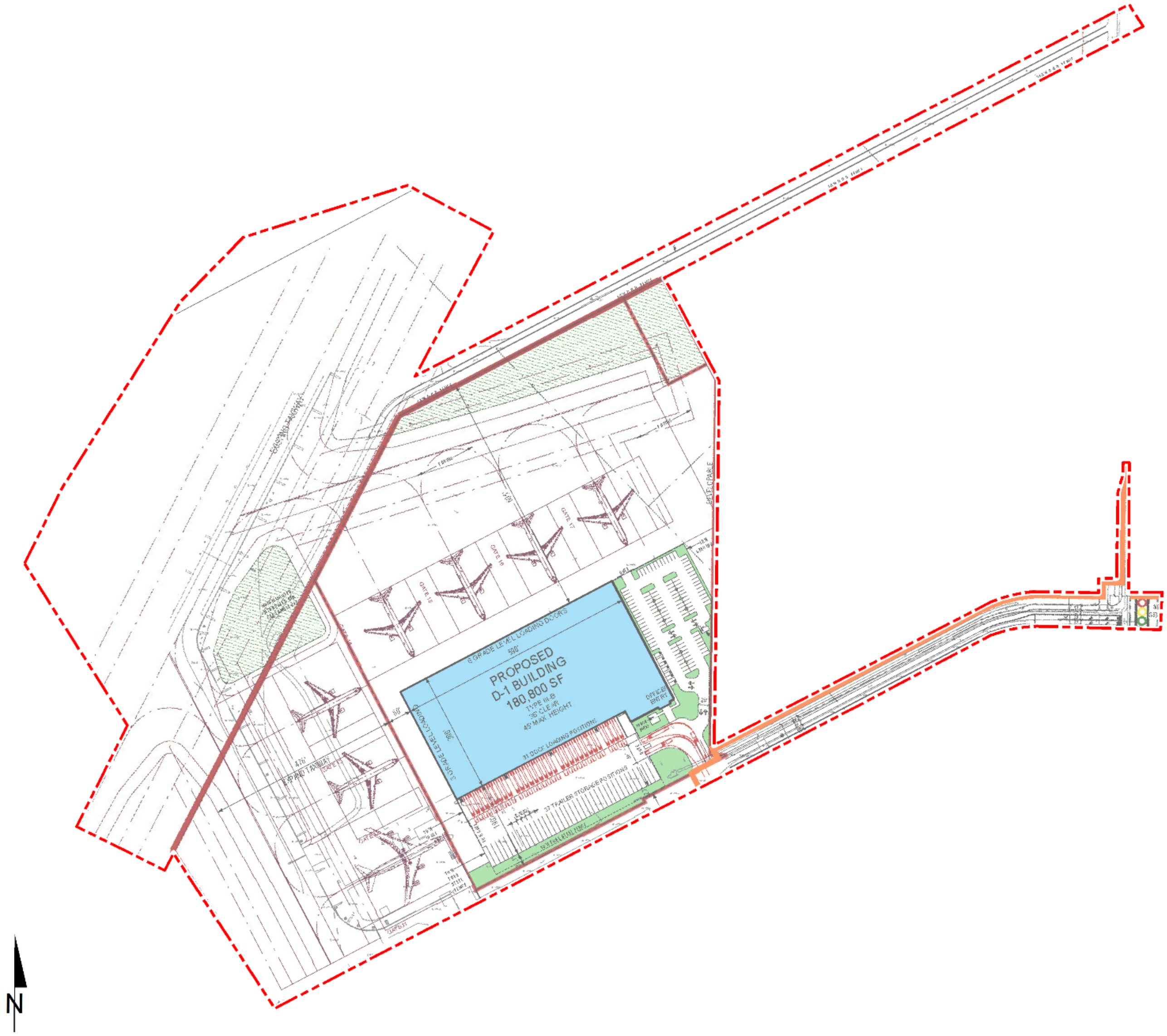


N

LEGEND:

Project Action/Project Location

EXHIBIT 1-B: SITE PLAN



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2 AIR QUALITY SETTING

This section provides an overview of the existing air quality conditions in the Project area and region.

2.1 SOUTH COAST AIR BASIN

The Project site is located in the South Coast Air Basin (SCAB) within the jurisdiction of SCAQMD (4). The SCAQMD was created by the 1977 Lewis-Presley Air Quality Management Act, which merged four county air pollution control bodies into one regional district. Under the Act, the SCAQMD is responsible for bringing air quality in areas under its jurisdiction into conformity with federal and state air quality standards. As previously stated, the Project site is located within the SCAB, a 6,745-square mile subregion of the SCAQMD, which includes the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County.

The SCAB is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego Air Basin to the south.

2.2 REGIONAL CLIMATE

The regional climate has a substantial influence on air quality in the SCAB. In addition, the temperature, wind, humidity, precipitation, and amount of sunshine influence the air quality.

The annual average temperatures throughout the SCAB vary from the low to middle 60s degrees Fahrenheit (°F). Due to a decreased marine influence, the eastern portion of the SCAB shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the SCAB, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the SCAB have recorded maximum temperatures above 100°F.

Although the climate of the SCAB can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of SCAB climate. Humidity restricts visibility in the SCAB, and the conversion of sulfur dioxide (SO_2) to sulfates (SO_4) is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity within the SCAB is 71 percent (%) along the coast and 59% inland. Since the ocean effect is dominant, periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90% of the SCAB’s rainfall occurs from November through April. The annual average rainfall varies from approximately nine inches in Riverside to fourteen inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the SCAB with frequency being higher near the coast.

Due to its generally clear weather, about three-quarters of available sunshine is received in the SCAB. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year, there are approximately 10 hours of possible sunshine, and on the longest day of the year, there are approximately 14½ hours of possible sunshine.

The importance of wind to air pollution is considerable. The direction and speed of the wind determines the horizontal dispersion and transport of the air pollutants. During the late autumn to early spring rainy season, the SCAB is subjected to wind flows associated with the traveling storms moving through the region from the northwest. This period also brings five to ten periods of strong, dry offshore winds, locally termed "Santa Anas" each year. During the dry season, which coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, typified by a daytime onshore sea breeze and a nighttime offshore drainage wind. Summer wind flows are created by the pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces that modify the general northwesterly wind circulation over southern California. Nighttime drainage begins with the radiational cooling of the mountain slopes. Heavy, cool air descends the slopes and flows through the mountain passes and canyons as it follows the lowering terrain toward the ocean. Another characteristic wind regime in the SCAB is the "Catalina Eddy," a low level cyclonic (counterclockwise) flow centered over Santa Catalina Island which results in an offshore flow to the southwest. On most spring and summer days, some indication of an eddy is apparent in coastal sections.

In the SCAB, there are two distinct temperature inversion structures that control vertical mixing of air pollution. During the summer, warm high-pressure descending (subsiding) air is undercut by a shallow layer of cool marine air. The boundary between these two layers of air is a persistent marine subsidence/inversion. This boundary prevents vertical mixing which effectively acts as an impervious lid to pollutants over the entire SCAB. The mixing height for the inversion structure is normally situated 1,000 to 1,500 feet above mean sea level.

A second inversion-type forms in conjunction with the drainage of cool air off the surrounding mountains at night followed by the seaward drift of this pool of cool air. The top of this layer forms a sharp boundary with the warmer air aloft and creates nocturnal radiation inversions. These inversions occur primarily in the winter, when nights are longer and onshore flow is weakest. They are typically only a few hundred feet above mean sea level. These inversions effectively trap pollutants, such as nitrogen oxides (NO_X) and carbon monoxide (CO) from vehicles, as the pool of cool air drifts seaward. Winter is therefore a period of high levels of primary pollutants along the coastline.

2.3 WIND PATTERNS AND PROJECT LOCATION

The distinctive climate of the Project area and the SCAB is determined by its terrain and geographical location. The SCAB is located in a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean in the southwest quadrant with high mountains forming the remainder of the perimeter.

Wind patterns across the south coastal region are characterized by westerly and southwesterly onshore winds during the day and easterly or northeasterly breezes at night. Winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season.

2.4 CRITERIA POLLUTANTS

Criteria pollutants are pollutants that are regulated through the development of human health based and/or environmentally based criteria for setting permissible levels. Criteria pollutants, their typical sources, and health effects are identified below (5):

TABLE 2-1: CRITERIA POLLUTANTS

Criteria Pollutant	Description	Sources	Health Effects
CO	CO is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone (O_3), motor vehicles operating at slow speeds are the primary source of CO in the SCAB. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming equipment and residential heating.	Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of decreased oxygen (O_2) supply to the heart. Inhaled CO has no direct toxic effect on the lungs but exerts its effect on tissues by interfering with O_2 transport and competing with O_2 to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for O_2 supply can be adversely affected by exposure to CO. Individuals most at risk include fetuses, patients with diseases involving heart and blood vessels, and patients with chronic hypoxemia (O_2 deficiency) as seen at high altitudes.
SO_2	SO_2 is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant	Coal or oil burning power plants and industries,	A few minutes of exposure to low levels of SO_2 can result in airway constriction in some

Criteria Pollutant	Description	Sources	Health Effects
	mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms SO_4. Collectively, these pollutants are referred to as sulfur oxides (SO_X).	refineries, diesel engines	asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO_2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO_2. Animal studies suggest that despite SO_2 being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO_2 levels. In these studies, efforts to separate the effects of SO_2 from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.
NO_X	NO_X consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen (N_2) combines with O_2. Their lifespan in the atmosphere ranges from	Any source that burns fuel such as automobiles, trucks, heavy construction equipment, farming	Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is

Criteria Pollutant	Description	Sources	Health Effects
	one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. NO_X is typically created during combustion processes and are major contributors to smog formation and acid deposition. NO_2 is a criteria air pollutant and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by regional monitoring station.	equipment and residential heating.	associated with long-term exposure to NO_2 at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO_2 in healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups. In animals, exposure to levels of NO_2 considerably higher than ambient concentrations result in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of O_3 exposure increases when animals are exposed to a combination of O_3 and NO_2.
O_3	O_3 is a highly reactive and unstable gas that is formed when VOCs and NO_X, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. O_3 concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.	Formed when reactive organic gases (ROG) and NO_X react in the presence of sunlight. ROG sources include any source that burns fuels, (e.g., gasoline, natural gas, wood, oil) solvents, petroleum processing and	Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the most susceptible sub-groups for O_3 effects. Short-term exposure (lasting for a few hours) to O_3 at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased

Criteria Pollutant	Description	Sources	Health Effects
		storage and pesticides.	susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated O_3 levels are associated with increased school absences. In recent years, a correlation between elevated ambient O_3 levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple outdoor sports and live in communities with high O_3 levels. O_3 exposure under exercising conditions is known to increase the severity of the responses described above. Animal studies suggest that exposure to a combination of pollutants that includes O_3 may be more toxic than exposure to O_3 alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.
Particulate Matter	PM_{10}: A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. Particulate matter pollution is a major cause of reduce visibility (haze) which is caused by the scattering of light and consequently the significant reduction air clarity. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the lungs where they may be	Sources of PM_{10} include road dust, windblown dust and construction. Also formed from other pollutants (acid rain, NO_X, SO_X, organics). Incomplete combustion of any fuel. $PM_{2.5}$ comes from	A consistent correlation between elevated ambient fine particulate matter (PM_{10} and $PM_{2.5}$) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In

Criteria Pollutant	Description	Sources	Health Effects
	deposited, resulting in adverse health effects. Additionally, it should be noted that PM_{10} is considered a criteria air pollutant. $PM_{2.5}$: A similar air pollutant to PM_{10} consisting of tiny solid or liquid particles which are 2.5 microns or smaller (which is often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include SO_4 formed from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_X release from power plants, automobiles, and other types of combustion sources. The chemical composition of fine particles highly depends on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant.	fuel combustion in motor vehicles, equipment, and industrial sources, residential and agricultural burning. Also formed from reaction of other pollutants (acid rain, NO_X, SO_X, organics).	recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in lifespan, and an increased mortality from lung cancer. Daily fluctuations in $PM_{2.5}$ concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children, and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long term exposure to particulate matter. The elderly, people with pre-existing respiratory or cardiovascular disease, and children appear to be more susceptible to the effects of high levels of PM_{10} and $PM_{2.5}$.
VOC	VOCs are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form O_3 to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the	Organic chemicals are widely used as ingredients in household products. Paints, varnishes, and wax all contain organic solvents, as do many cleaning, disinfecting, cosmetic, degreasing and hobby products. Fuels are made up of organic chemicals. All of these products can release organic	Breathing VOCs can irritate the eyes, nose, and throat, can cause difficulty breathing and nausea, and can damage the central nervous system as well as other organs. Some VOCs can cause cancer. Not all VOCs have all these health effects, though many have several.

Criteria Pollutant	Description	Sources	Health Effects
	solvents used in paints. Exceptions to the VOC designation include CO, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms VOC and ROG (see below) interchangeably.	compounds while you are using them, and, to some degree, when they are stored.	
ROG	Similar to VOC, ROGs are also precursors in forming O_3 and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/decomposition process. Smog is formed when ROG and NO_X react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The terms ROG and VOC (see previous) interchangeably.	Sources similar to VOCs.	Health effects similar to VOCs.
Lead (Pb)	Pb is a heavy metal that is highly persistent in the environment and is considered a criteria pollutant. In the past, the primary source of Pb in the air was emissions from vehicles burning leaded gasoline. The major sources of Pb emissions are ore and metals processing, particularly Pb smelters, and piston-engine aircraft operating on leaded aviation gasoline. Other stationary sources include waste incinerators, utilities, and lead-acid battery manufacturers. It should be noted that the Project does not include operational activities such as metal processing or Pb acid battery manufacturing. As such, the Project is not anticipated to	Metal smelters, resource recovery, leaded gasoline, deterioration of Pb paint.	Fetuses, infants, and children are more sensitive than others to the adverse effects of Pb exposure. Exposure to low levels of Pb can adversely affect the development and function of the central nervous system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased Pb levels are associated with increased blood pressure. Pb poisoning can cause anemia, lethargy, seizures, and death; although it appears that there are no direct effects of Pb on the respiratory system. Pb can be

Criteria Pollutant	Description	Sources	Health Effects
	generate a quantifiable amount of Pb emissions.		stored in the bone from early age environmental exposure, and elevated blood Pb levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of Pb because of previous environmental Pb exposure of their mothers.
Odor	Odor means the perception experienced by a person when one or more chemical substances in the air come into contact with the human olfactory nerves (6).	Odors can come from many sources including animals, human activities, industry, natures, and vehicles.	Offensive odors can potentially affect human health in several ways. First, odorant compounds can irritate the eye, nose, and throat, which can reduce respiratory volume. Second, studies have shown that the VOCs that cause odors can stimulate sensory nerves to cause neurochemical changes that might influence health, for instance, by compromising the immune system. Finally, unpleasant odors can trigger memories or attitudes linked to unpleasant odors, causing cognitive and emotional effects such as stress.

2.5 EXISTING AIR QUALITY

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect are shown in Table 2-2 (7).

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the state and federal standards. At the time of this AQIA, the most recent state and federal standards were updated by CARB on May ,4 2016 and are presented in Table 2-2. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O_3, CO (except 8-hour Lake Tahoe), SO_2 (1 and 24 hour), NO_2, PM_{10}, and $PM_{2.5}$ are not to be exceeded. All others are not to be equaled or exceeded. It should be noted that the three-year period is presented for informational purposes and is not the basis for how the State assigns attainment status. Attainment status for a pollutant means that the SCAQMD meets the standards set by the EPA or the California EPA (CalEPA). Conversely, nonattainment means that an area has monitored air quality that does not meet the NAAQS or CAAQS standards. In order to improve air quality in nonattainment areas, a State Implementation Plan (SIP) is drafted by CARB. The SIP outlines the measures that the state will take to improve air quality. Once nonattainment areas meet the standards and additional redesignation requirements, the EPA will designate the area as a maintenance area (8).

TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (1 OF 2)

Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m^3)		0.070 ppm (137 µg/m^3)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 µg/m^3	Gravimetric or Beta Attenuation	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation	12.0 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 µg/m^3)	Gas Phase Chemiluminescence	100 ppb (188 µg/m^3)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m^3)		0.053 ppm (100 µg/m^3)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 µg/m^3)	Ultraviolet Fluorescence	75 ppb (196 µg/m^3)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m^3)	
	24 Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3 (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

See footnotes on next page ...

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TABLE 2-2: AMBIENT AIR QUALITY STANDARDS (2 OF 2)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 $\mu g/m^3$ to 12.0 $\mu g/m^3$. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 $\mu g/m^3$, as was the annual secondary standard of 15 $\mu g/m^3$. The existing 24-hour PM10 standards (primary and secondary) of 150 $\mu g/m^3$ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 $\mu g/m^3$ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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2.6 REGIONAL AIR QUALITY

Air pollution contributes to a wide variety of adverse health effects. The EPA has established NAAQS for six of the most common air pollutants, which are known as criteria pollutants: CO, Pb, O_3, particulate matter (PM_{10} and $PM_{2.5}$), NO_2, and SO_2. The SCAQMD monitors levels of various criteria pollutants at 37 permanent monitoring stations and 5 single-pollutant source Pb air monitoring sites throughout the air district (9). On January 5, 2021, CARB posted the 2020 amendments to the state and national area designations. See Table 2-3 for attainment designations for the SCAB (10). Appendix 2.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB.

TABLE 2-3: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SCAB

Criteria Pollutant	State Designation	Federal Designation
O_3 – 1-hour standard	Nonattainment	--
O_3 – 8-hour standard	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
CO	Attainment	Unclassifiable/Attainment
NO_2	Attainment	Unclassifiable/Attainment
SO_2	Attainment	Unclassifiable/Attainment
Pb[1]	Attainment	Unclassifiable/Attainment

Note: See Appendix 2.1 for a detailed map of State/National Area Designations within the SCAB
"-" = The national 1-hour O_3 standard was revoked effective June 15, 2005.

2.7 LOCAL AIR QUALITY

The SCAQMD has designated general forecast areas and air monitoring areas (referred to as Source Receptor Areas [SRA]) throughout the district in order to provide Southern California residents with information on the air quality conditions. The Project Site is located within the SRA 24 (11). Within SRA 24, the SCAQMD Perris Valley monitoring station, located approximately 5.7 miles south of the Project site, is the nearest long-term air quality monitoring station for O_3 and PM_{10}. The Perris Valley monitoring station does not include data for CO, NO_2, and $PM_{2.5}$. As such, the next nearest monitoring stations will be used. The Metropolitan Riverside County monitoring station, located in SRA 23, is the next nearest monitoring station for CO, NO_2, and $PM_{2.5}$, and is located approximately 12.7 miles northwest of the Project site. It should be noted that the Metropolitan Riverside County monitoring stations was utilized in lieu of the Perris Valley monitoring station only in instances where data was not available.

The most recent three (3) years of data available are shown on Table 2-4 and identifies the number of days ambient air quality standards were exceeded for the study area, which is considered to be representative of the local air quality at the Project Site. Data for O_3, CO, NO_2,

[1] The Federal nonattainment designation for lead is only applicable towards the Los Angeles County portion of the SCAB.

PM_{10}, and $PM_{2.5}$ for 2018 through 2020 was obtained from the SCAQMD Air Quality Data Tables (12). Additionally, data for SO_2 has been omitted as attainment is regularly met in the SCAB and few monitoring stations measure SO_2 concentrations.

TABLE 2-4: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2018-2020

Pollutant	Standard	Year		
		2018	2019	2020
O_3				
Maximum Federal 1-Hour Concentration (ppm)		0.117	0.118	0.125
Maximum Federal 8-Hour Concentration (ppm)		0.103	0.095	0.106
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	31	26	34
Number of Days Exceeding State/Federal 8-Hour Standard	> 0.070 ppm	67	64	74
CO				
Maximum Federal 1-Hour Concentration	> 35 ppm	2.2	1.5	1.9
Maximum Federal 8-Hour Concentration	> 20 ppm	2.0	1.2	1.4
NO_2				
Maximum Federal 1-Hour Concentration	> 0.100 ppm	0.055	0.056	0.066
Annual Average		0.014	0.014	0.014
PM_{10}				
Maximum Federal 24-Hour Concentration (μg/m^3)	> 150 μg/m^3	64	97	77
Annual Federal Arithmetic Mean (μg/m^3)		29.7	25.3	35.9
Number of Days Exceeding Federal 24-Hour Standard	> 150 μg/m^3	0	0	0
Number of Days Exceeding State 24-Hour Standard	> 50 μg/m^3	3	4	6
$PM_{2.5}$				
Maximum Federal 24-Hour Concentration (μg/m^3)	> 35 μg/m^3	50.70	46.70	41.00
Annual Federal Arithmetic Mean (μg/m^3)	> 12 μg/m^3	12.41	11.13	12.63
Number of Days Exceeding Federal 24-Hour Standard	> 35 μg/m^3	2	4	4

ppm = Parts Per Million
μg/m^3 = Microgram per Cubic Meter
Source: Data for O_3, CO, NO_2, PM_{10}, and $PM_{2.5}$ was obtained from SCAQMD Air Quality Data Tables.

2.8 REGIONAL AIR QUALITY IMPROVEMENT

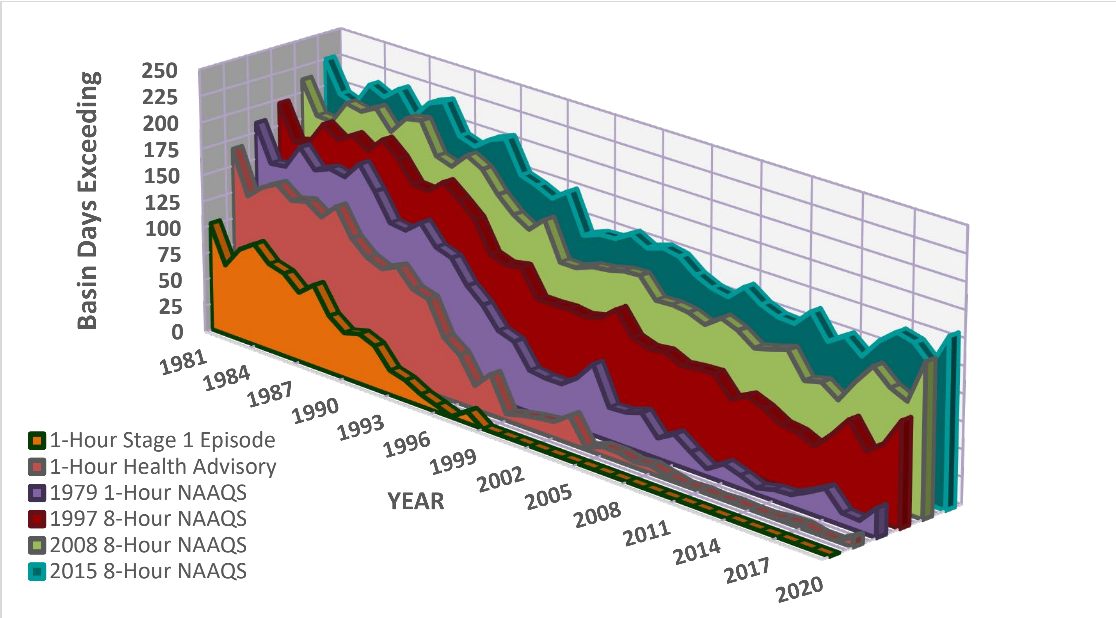
The Project is within the jurisdiction of the SCAQMD. In 1976, California adopted the Lewis Air Quality Management Act which created SCAQMD from a voluntary association of air pollution control districts in Los Angeles, Orange, Riverside, and San Bernardino counties. The geographic area of which SCAQMD consists of is known as the SCAB. SCAQMD develops comprehensive plans and regulatory programs for the region to attain federal standards by dates specified in federal law. The agency is also responsible for meeting state standards by the earliest date achievable, using reasonably available control measures.

SCAQMD rule development through the 1970s and 1980s resulted in dramatic improvement in SCAB air quality. Nearly all control programs developed through the early 1990s relied on (i) the development and application of cleaner technology; (ii) add-on emission controls, and (iii) uniform CEQA review throughout the SCAB. Industrial emission sources have been significantly reduced by this approach and vehicular emissions have been reduced by technologies implemented at the state level by CARB.

As discussed above, the SCAQMD is the lead agency charged with regulating air quality emission reductions for the entire SCAB. SCAQMD created AQMPs which represent a regional blueprint for achieving healthful air on behalf of the 16 million residents of the SCAB. The 2012 AQMP states, “the remarkable historical improvement in air quality since the 1970’s is the direct result of Southern California’s comprehensive, multiyear strategy of reducing air pollution from all sources as outlined in its AQMPs,” (13).

Emissions of O_3, NO_X, VOC, and CO have been decreasing in the SCAB since 1975 and are projected to continue to decrease through 2020 (14). These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although vehicle miles traveled (VMT) in the SCAB continue to increase, NO_X and VOC levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NO_X emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy. O_3 contour maps show that the number of days exceeding the 8-hour NAAQS has generally decreased between 1980 and 2020. For 2020, there was an overall decrease in exceedance days compared with the 1980 period. However, as shown on Table 2-5, O_3 levels have increased in the past three years due to higher temperatures and stagnant weather conditions. Notwithstanding, O_3 levels in the SCAB have decreased substantially over the last 30 years with the current maximum measured concentrations being approximately one-third of concentrations within the late 70’s (15).

TABLE 2-5: SCAB O_3 TREND

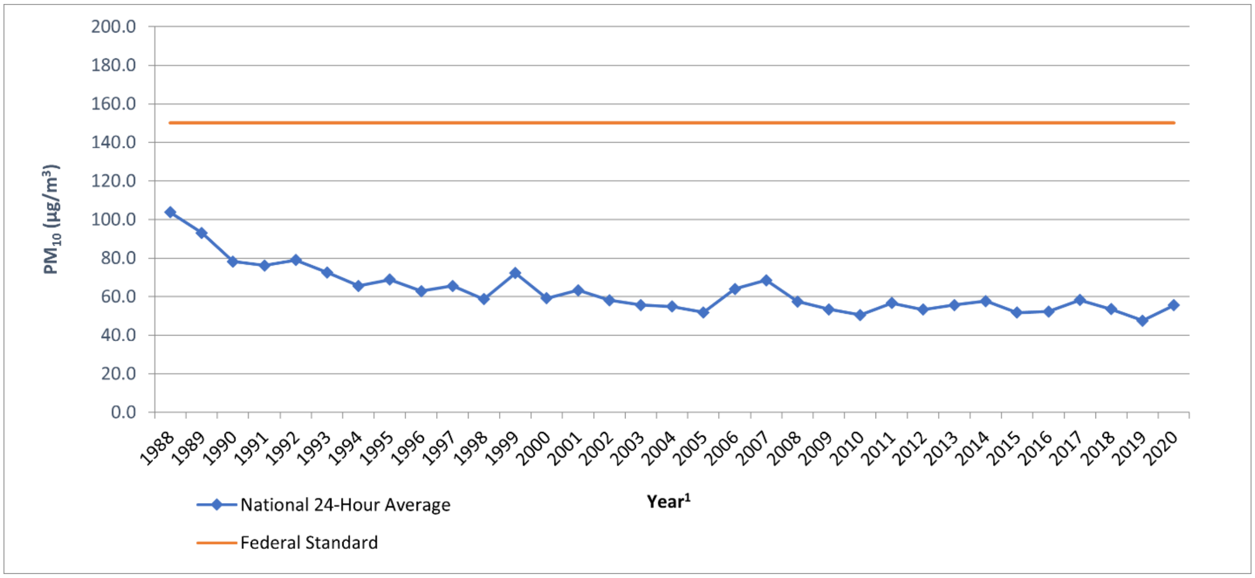


Source: 2020 SCAQMD, Historical O_3 Air Quality Trends (1976-2020)

The overall trends of PM_{10} and $PM_{2.5}$ levels in the air (not emissions) show an overall improvement since 1975. Direct emissions of PM_{10} have remained somewhat constant in the SCAB and direct emissions of $PM_{2.5}$ have decreased slightly since 1975. Area wide sources (fugitive dust from roads, dust from construction, and other sources) contribute the greatest amount of direct particulate matter emissions.

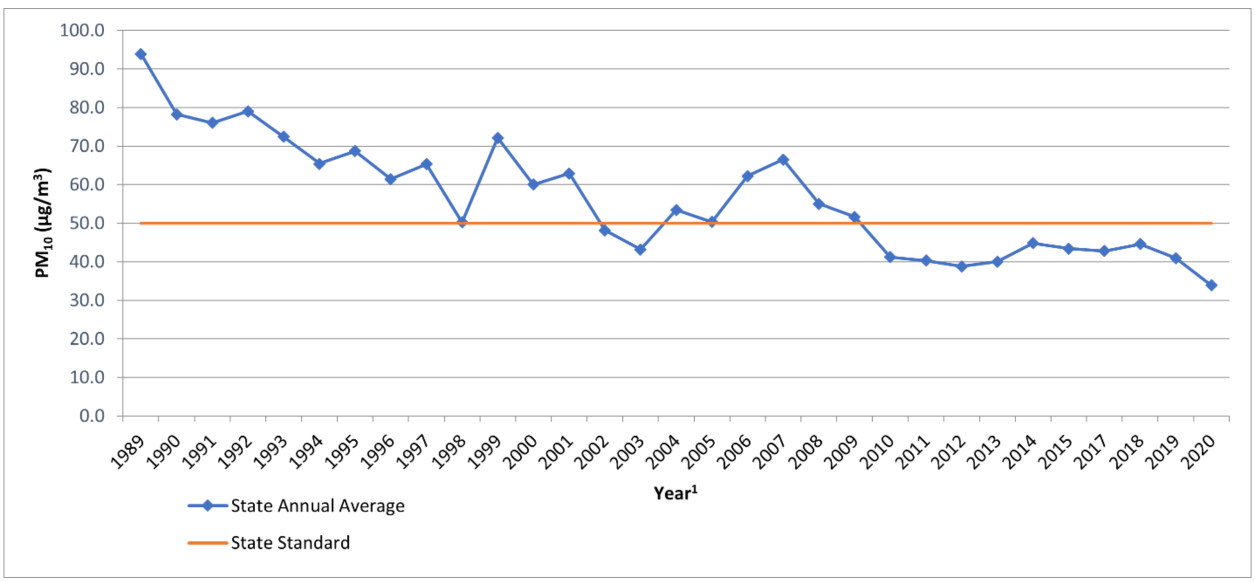
As with other pollutants, the most recent PM_{10} statistics show an overall improvement as illustrated in Tables 2-6 and 2-7. During the period for which data are available, the 24-hour national annual average concentration for PM_{10} decreased by approximately 46%, from 103.7 microgram per cubic meter (μg/m³) in 1988 to 55.5 μg/m³ in 2020 (16). Although the values are below the federal standard, it should be noted that there are days within the year where the concentrations would exceed the threshold. The 24-hour state annual average for emissions for PM_{10}, have decreased by approximately 64%, from 93.9 μg/m³ in 1989 to 33.9 μg/m³ in 2020 (16). Although data in the late 1990's show some variability, this is probably due to the advances in meteorological science rather than a change in emissions. Similar to the ambient concentrations, the calculated number of days above the 24-hour PM_{10} standards has also shown an overall drop.

TABLE 2-6: SCAB AVERAGE 24-HOUR CONCENTRATION PM_{10} TREND (BASED ON FEDERAL STANDARD)[1]



Source: 2020 CARB, iADAM: Top Four Summary: PM_{10} 24-Hour Averages (1988-2020)
[1] Some years have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

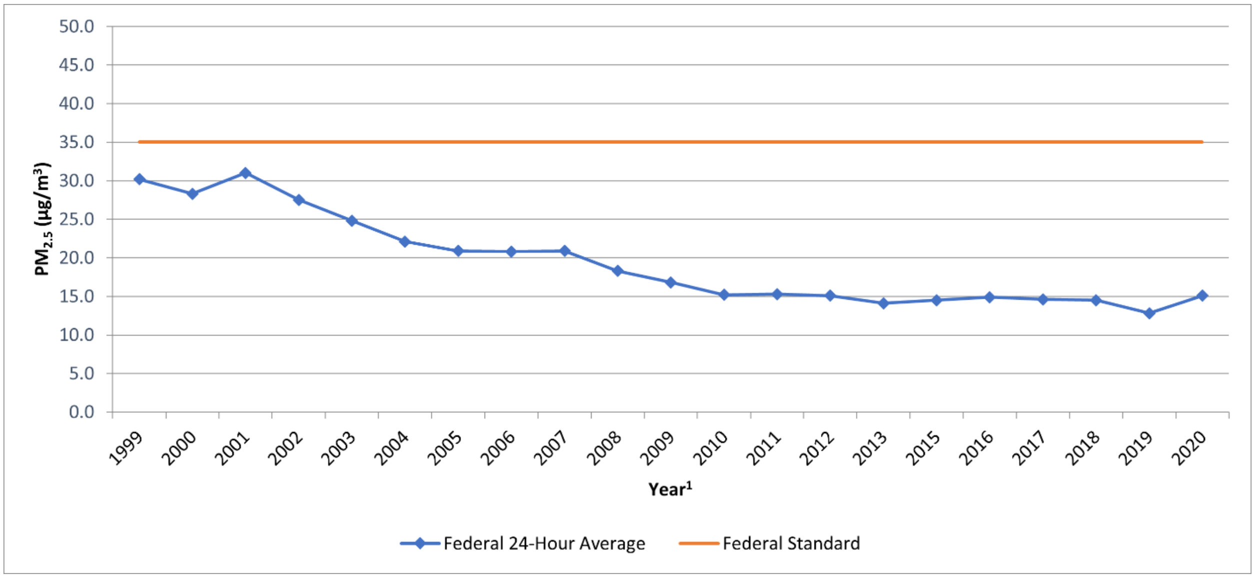
TABLE 2-7: SCAB ANNUAL AVERAGE CONCENTRATION PM_{10} TREND (BASED ON STATE STANDARD)[1]



Source: 2020 CARB, iADAM: Top Four Summary: PM_{10} 24-Hour Averages (1988-2020)
[1] Some years have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

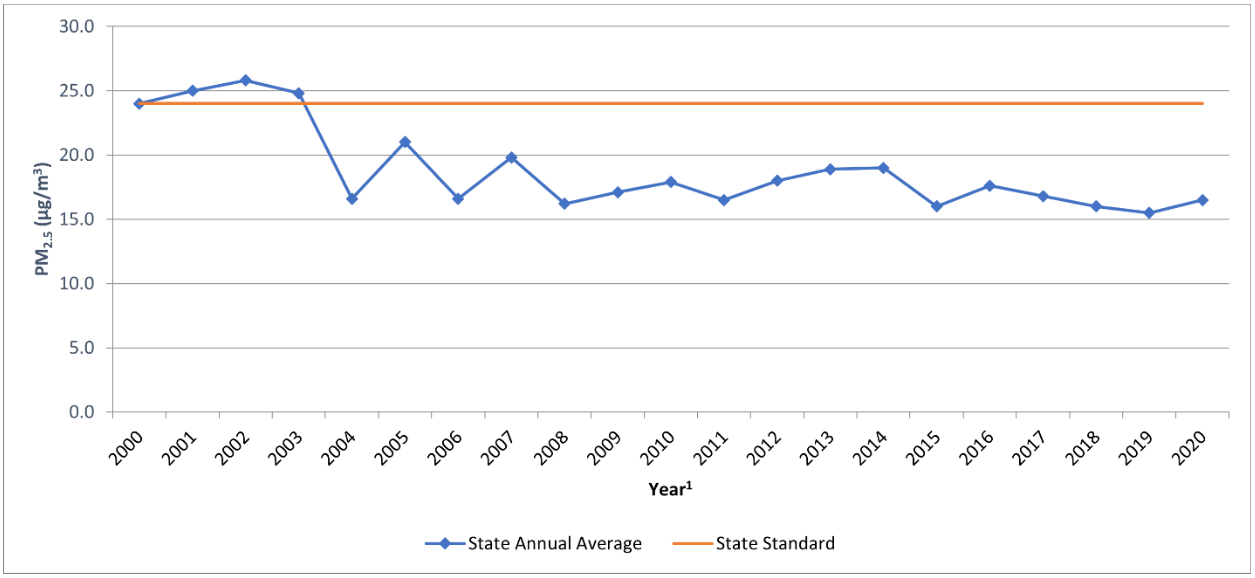
Tables 2-8 and 2-9 shows the most recent 24-hour average $PM_{2.5}$ concentrations in the SCAB from 1999 through 2020. Overall, the national and state annual average concentrations have decreased by almost 50% and 31% respectively (16). It should be noted that the SCAB is currently designated as nonattainment for the state and federal $PM_{2.5}$ standards.

TABLE 2-8: SCAB 24-HOUR AVERAGE CONCENTRATION $PM_{2.5}$ TREND (BASED ON FEDERAL STANDARD)[1]



Source: 2020 CARB, iADAM: Top Four Summary: $PM_{2.5}$ 24-Hour Averages (1999-2020)
[1] Some years have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

TABLE 2-9: SCAB ANNUAL AVERAGE CONCENTRATION $PM_{2.5}$ TREND (BASED ON STATE STANDARD)[1]



Source: 2020 CARB, iADAM: Top Four Summary: $PM_{2.5}$ 24-Hour Averages (1999-2020)
[1] Some years have been omitted from the table as insufficient data (or no) data has been reported. Years with reported value of "0" have also been omitted.

While the 2012 AQMP PM_{10} attainment demonstration and the 2015 associated supplemental SIP submission indicated that attainment of the 24-hour standard was predicted to occur by the end of 2015, it could not anticipate the effect of the ongoing drought on the measured $PM_{2.5}$.

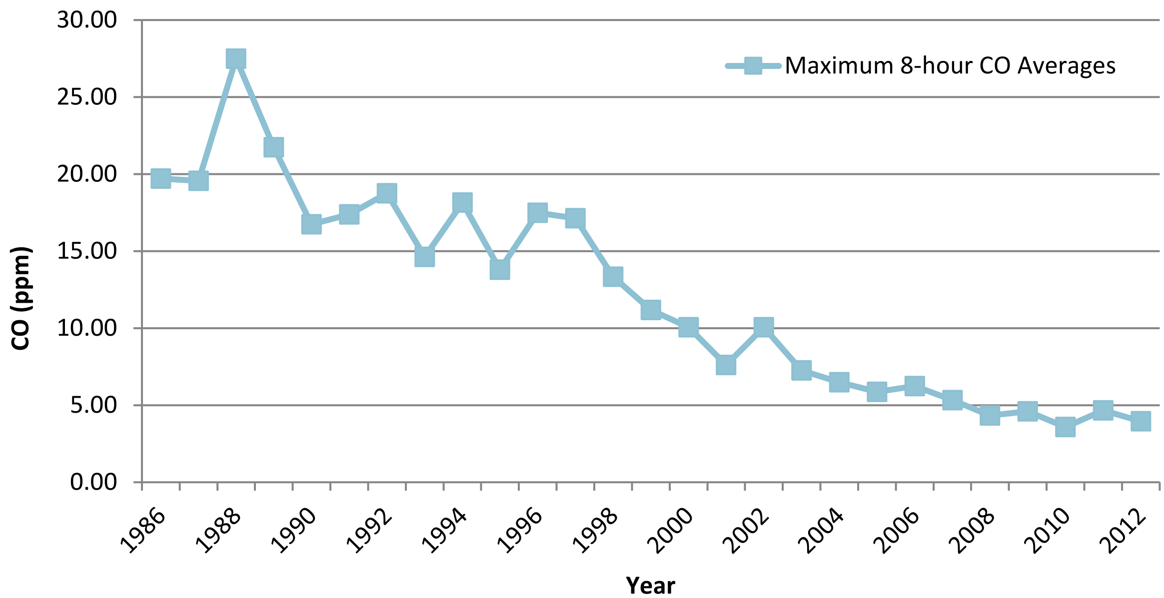
The 2006 to 2010 base period used for the 2012 attainment demonstration had near-normal rainfall. While the trend of $PM_{2.5}$-equivalent emission reductions continued through 2015, the severe drought conditions contributed to the $PM_{2.5}$ increases observed after 2012. As a result of the disrupted progress toward attainment of the federal 24-hour $PM_{2.5}$ standard, SCAQMD submitted a request and the EPA approved, in January 2016, a “bump up” to the nonattainment classification from “moderate” to “serious,” with a new attainment deadline as soon as practicable, but not beyond December 31, 2019. As of March 14, 2019, the EPA approved portions of a SIP revision submitted by California to address CAA requirements for the 2006 24-hour $PM_{2.5}$ NAAQS in the Los Angeles-SCAB Serious $PM_{2.5}$ nonattainment area. The EPA also approved 2017 and 2019 motor vehicle emissions budgets for transportation conformity purposes and inter-pollutant trading ratios for use in transportation conformity analyses (17).

In March 2017, the SCAQMD released the Final 2016 AQMP. The 2016 AQMP continues to evaluate current integrated strategies and control measures to meet the NAAQS, as well as explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (18). Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016-2040 RTP/SCS) and updated emission inventory methodologies for various source categories (19).

The 2022 AQMP is currently being developed by SCAQMD to address the EPA’s strengthened ozone standard. Development of the 2022 AQMP is in its early stages and no formal timeline for completion and adoption is currently known.

The most recent CO concentrations in the SCAB are shown in Table 2-10 (16). CO concentrations in the SCAB have decreased markedly — a total decrease of more about 80% in the peak 8-hour concentration from 1986 to 2012. It should be noted 2012 is the most recent year where 8-hour CO averages and related statistics are available in the SCAB. The number of exceedance days has also declined. The entire SCAB is now designated as attainment for both the state and national CO standards. Ongoing reductions from motor vehicle control programs should continue the downward trend in ambient CO concentrations.

TABLE 2-10: SCAB 8-HOUR AVERAGE CONCENTRATION CO TREND[1]

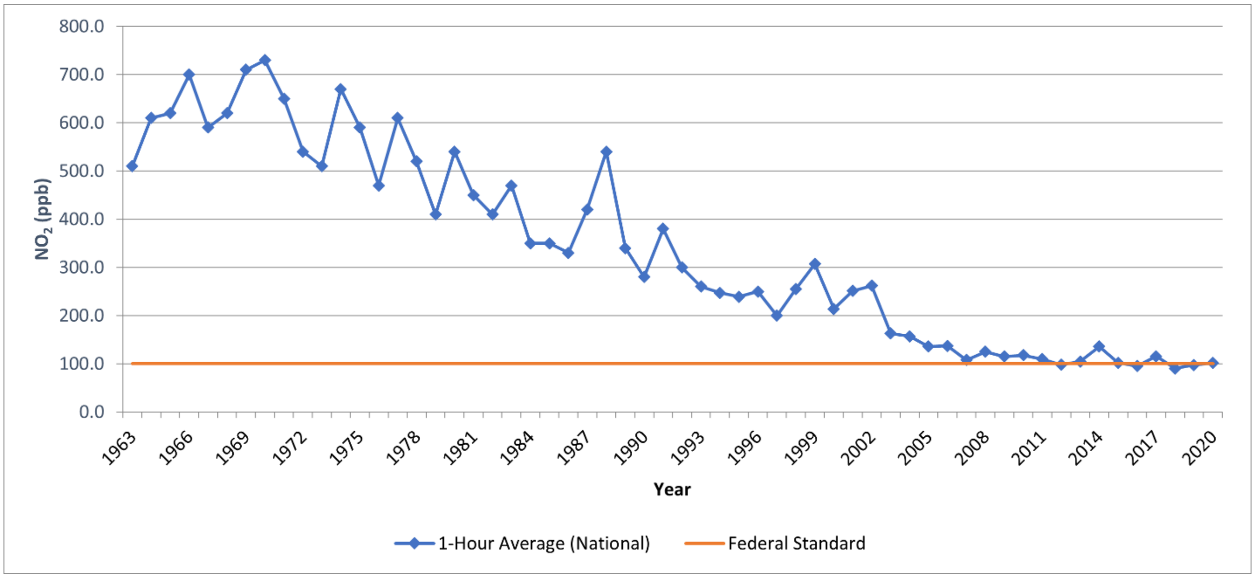


Source: 2020 CARB, iADAM: Top Four Summary: CO 8-Hour Averages (1986-2012)
[1] The most recent year where 8-hour concentration data is available is 2012.

Part of the control process of the SCAQMD's duty to greatly improve the air quality in the SCAB is the uniform CEQA review procedures required by SCAQMD's *CEQA Air Quality Handbook (1993)* (*1993 CEQA Handbook*) (20). The single threshold of significance used to assess Project direct and cumulative impacts has in fact "worked" as evidenced by the track record of the air quality in the SCAB dramatically improving over the course of the past decades. As stated by the SCAQMD, the District's thresholds of significance are based on factual and scientific data and are therefore appropriate thresholds of significance to use for this Project.

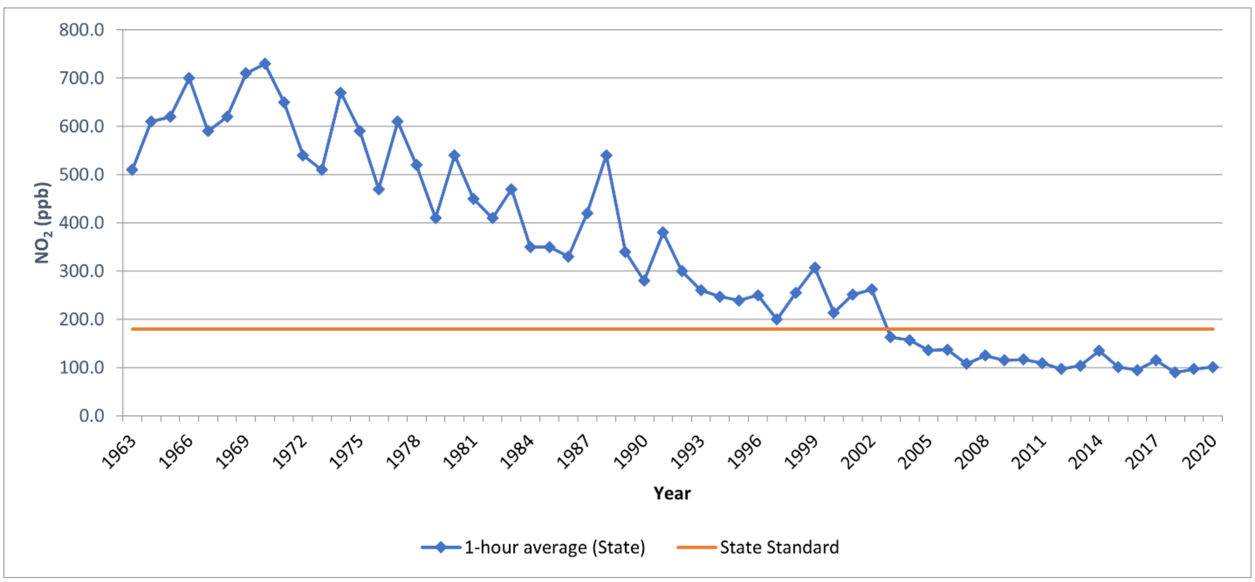
The most recent NO_2 data for the SCAB is shown in Tables 2-11 and 2-12 (16). Over the last 50 years, NO_2 values have decreased significantly; the peak 1-hour national and state averages for 2020 is approximately 80% lower than what it was during 1963. The SCAB attained the State 1-hour NO_2 standard in 1994, bringing the entire state into attainment. A new state annual average standard of 0.030 ppm was adopted by CARB in February 2007 (21). The new standard is just barely exceeded in the SCAQMD. NO_2 is formed from NO_X emissions, which also contribute to O_3. As a result, the majority of the future emission control measures would be implemented as part of the overall O_3 control strategy. Many of these control measures would target mobile sources, which account for more than three-quarters of California's NO_X emissions. These measures are expected to bring the SCAQMD into attainment of the state annual average standard.

TABLE 2-11: SCAB 1-HOUR AVERAGE CONCENTRATION NO_2 TREND (BASED ON FEDERAL STANDARD)



Source: 2020 CARB, iADAM: Top Four Summary: CO 1-Hour Averages (1963-2020)

TABLE 2-12: SCAB 1-HOUR AVERAGE CONCENTRATION NO_2 TREND (BASED ON STATE STANDARD)



Source: 2020 CARB, iADAM: Top Four Summary: CO 1-Hour Averages (1963-2020)

2.9.1 TOXIC AIR CONTAMINANTS (TAC) TRENDS

In 1984, as a result of public concern for exposure to airborne carcinogens, CARB adopted regulations to reduce the amount of TAC emissions resulting from mobile and area sources, such as cars, trucks, stationary sources, and consumer products. According to the *Ambient and Emission Trends of Toxic Air Contaminants in California* journal article (22) which was prepared for CARB, results show that between 1990-2012, ambient concentration and emission trends for the seven TACs responsible for most of the known cancer risk associated with airborne exposure in California have declined significantly (between 1990 and 2012). The seven TACs studied include those that are derived from mobile sources: diesel particulate matter (DPM), benzene (C_6H_6), and 1,3-butadiene (C_4H_6); those that are derived from stationary sources: perchloroethylene (C_2Cl_4) and hexavalent chromium (Cr(VI)); and those derived from photochemical reactions of emitted VOCs: formaldehyde (CH_2O) and acetaldehyde (C_2H_4O)[2]. The decline in ambient concentration and emission trends of these TACs are a result of various regulations CARB has implemented to address cancer risk.

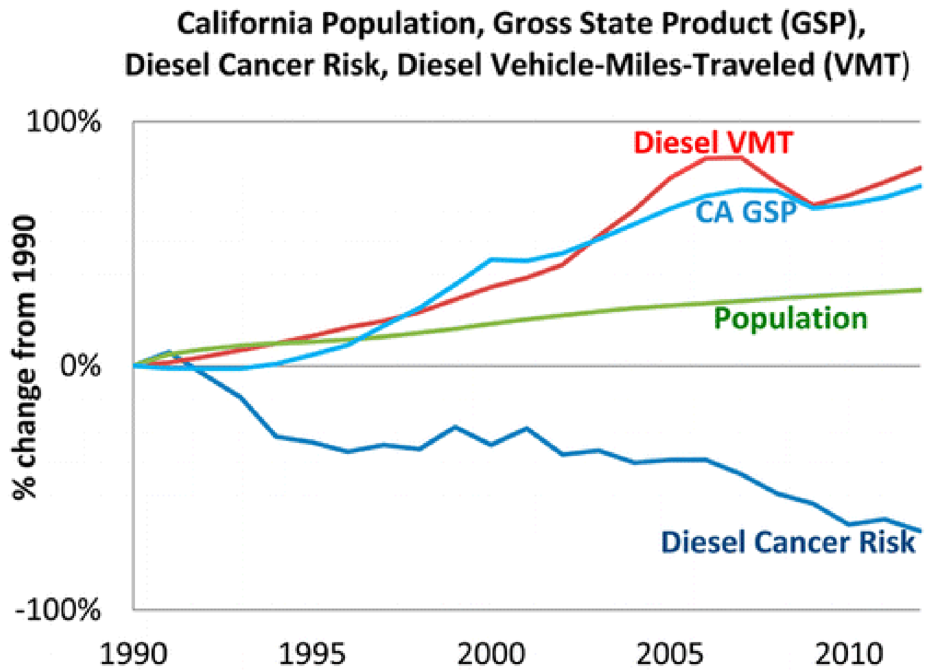
MOBILE SOURCE TACS

CARB introduced two programs that aimed at reducing mobile emissions for light and medium duty vehicles through vehicle emissions controls and cleaner fuel. In California, light-duty vehicles sold after 1996 are equipped with California's second-generation On-Board Diagnostic (OBD-II) system. The OBD-II system monitors virtually every component that can affect the emission performance of the vehicle to ensure that the vehicle remains as clean as possible over its entire life and assists repair technicians in diagnosing and fixing problems with the computerized engine controls. If a problem is detected, the OBD-II system illuminates a warning lamp on the vehicle instrument panel to alert the driver. This warning lamp typically contains the phrase "Check Engine" or "Service Engine Soon." The system would also store important information about the detected malfunction so that a repair technician can accurately find and fix the problem. CARB has recently developed similar OBD requirements for heavy-duty vehicles over 14,000 pounds (lbs). CARB's phase II Reformulated Gasoline Regulation (RFG-2), adopted in 1996, also led to a reduction of mobile source emissions. Through such regulations, benzene levels declined 88% from 1990-2012. 1,3-Butadiene concentrations also declined 85% from 1990-2012 as a result of the use of reformulated gasoline and motor vehicle regulations (22).

In 2000, CARB's Diesel Risk Reduction Plan (DRRP) recommended the replacement and retrofit of diesel-fueled engines and the use of ultra-low-sulfur (<15 ppm) diesel fuel. As a result of these measures, DPM concentrations have declined 68% since 2000, even though the state's population increased 31% and the amount of diesel vehicles miles traveled increased 81%, as shown on Exhibit 2-B. With the implementation of these diesel-related control regulations, CARB expects a DPM decline of 71% for 2000-2020.

[2] It should be noted that ambient DPM concentrations are not measured directly. Rather, a surrogate method using the coefficient of haze (COH) and elemental carbon (EC) is used to estimate DPM concentrations.

EXHIBIT 2-A: DPM AND DIESEL VEHICLE MILES TREND



Source: 2020 CARB

DIESEL REGULATIONS

CARB and the Ports of Los Angeles and Long Beach (POLA and POLB) have adopted several iterations of regulations for diesel trucks that are aimed at reducing DPM. More specifically, CARB Drayage Truck Regulation (23), CARB statewide On-road Truck and Bus Regulation (24), and the Ports of Los Angeles and Long Beach Clean Truck Program (CTP) require accelerated implementation of "clean trucks" into the statewide truck fleet (25). In other words, older more polluting trucks would be replaced with newer, cleaner trucks as a function of these regulatory requirements.

Moreover, the average statewide DPM emissions for Heavy Duty Trucks (HDT), in terms of grams of DPM generated per mile traveled, would dramatically be reduced due to the aforementioned regulatory requirements.

Diesel emissions identified in this analysis would therefore overstate future DPM emissions since not all the regulatory requirements are reflected in the modeling.

CANCER RISK TRENDS

Based on information available from CARB, overall cancer risk throughout the SCAB has had a declining trend since 1990. In 1998, following an exhaustive 10-year scientific assessment process, CARB identified particulate matter from diesel-fueled engines as a toxic air contaminant. The SCAQMD initiated a comprehensive urban toxic air pollution study called the Multiple Air Toxics Exposure Study (MATES). DPM accounts for more than 70% of the cancer risk.

In January 2018, as part of the overall effort to reduce air toxics exposure in the SCAB, SCAQMD began conducting the MATES V Program. MATES V field measurements were conducted at ten fixed sites (the same sites selected for MATES III and IV) to assess trends in air toxics levels. MATES V also included measurements of ultrafine particles (UFP) and black carbon (BC) concentrations, which can be compared to the UFP levels measured in MATES IV (26). The final report for the MATES V study was published August 2021. In addition to new measurements and updated modeling results, several key updates were implemented in MATES V. First, MATES V estimates cancer risks by taking into account multiple exposure pathways, which includes inhalation and non-inhalation pathways. This approach is consistent with how cancer risks are estimated in South Coast AQMD's programs such as permitting, Air Toxics Hot Spots (AB2588), and CEQA. Previous MATES studies quantified the cancer risks based on the inhalation pathway only. Second, along with cancer risk estimates, MATES V includes information on the chronic non-cancer risks from inhalation and non-inhalation pathways for the first time. Cancer risks and chronic non-cancer risks from MATES II through IV measurements have been re-examined using current Office of Environmental Health Hazard Assessment (OEHHA) and CalEPA risk assessment methodologies and modern statistical methods to examine the trends over time (27).

MATES-V calculated cancer risks based on monitoring data collected at ten fixed sites within the SCAB. None of the fixed monitoring sites are within the local area of the Project site. However, MATES-V has extrapolated the excess cancer risk levels throughout the SCAB by modeling the specific grids. The Project is located within a quadrant of the geographic grid of the MATES-V model which predicted a cancer risk of 359 in one million for the area containing the Project site. DPM is included in this cancer risk along with all other TAC sources. As in previous MATES iterations, diesel PM is the largest contributor to overall air toxics cancer risk. However, the average levels of diesel PM in MATES V are 53% lower at the 10 monitoring sites compared to MATES IV. Cumulative Project generated TACs are limited to DPM.

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3 REGULATORY BACKGROUND

3.1 FEDERAL REGULATIONS

The EPA is responsible for setting and enforcing the NAAQS for O_3, CO, NO_X, SO_2, PM_{10}, and Pb (28). The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters (Outer Continental Shelf). The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of CARB.

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years (1963, 1965, 1967, 1970, 1977, and 1990). The CAA establishes the federal air quality standards, the NAAQS, and specifies future dates for achieving compliance (29). The CAA also mandates that states submit and implement SIPs for local areas not meeting these standards. These plans must include pollution control measures that demonstrate how the standards will be met.

The 1990 amendments to the CAA that identify specific emission reduction goals for areas not meeting the NAAQS require a demonstration of reasonable further progress toward attainment and incorporate additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA most directly applicable to the development of the Project site include Title I (Non-Attainment Provisions) and Title II (Mobile Source Provisions) (30) (31). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O_3, NO_2, SO_2, PM_{10}, CO, $PM_{2.5}$, and Pb. The NAAQS were amended in July 1997 to include an additional standard for O_3 and to adopt a NAAQS for $PM_{2.5}$. Table 2-3 (previously presented) provides the NAAQS within the SCAB.

Mobile source emissions are regulated in accordance with Title II provisions. These provisions require the use of cleaner burning gasoline and other cleaner burning fuels such as methanol and natural gas. Automobile manufacturers are also required to reduce tailpipe emissions of hydrocarbons and NO_X. NO_X is a collective term that includes all forms of NO_X which are emitted as byproducts of the combustion process.

3.2 CALIFORNIA REGULATIONS

CARB

CARB, which became part of CalEPA in 1991, is responsible for ensuring implementation of the California Clean Air Act (AB 2595), responding to the federal CAA, and for regulating emissions from consumer products and motor vehicles. AB 2595 mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain the state ambient air quality standards by the earliest practical date. CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for SO_4, visibility, hydrogen sulfide (H_2S), and vinyl chloride (C_2H_3Cl). However, at this time, H_2S and C_2H_3Cl are not measured at any monitoring stations in the SCAB because they are not considered to be a regional air quality problem. Generally, the CAAQS are more stringent than the NAAQS (32) (28).

Local air quality management districts, such as the SCAQMD, regulate air emissions from stationary sources such as commercial and industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS.

Serious non-attainment areas are required to prepare Air Quality Management Plans (AQMP) that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g. motor vehicle use generated by residential and commercial development);
- A District permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and assuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a 5% or more annual reduction in emissions or 15% or more in a period of three years for ROGs, NO_X, CO and PM_{10}. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than 5% per year under certain circumstances.

TITLE 24 ENERGY EFFICIENCY STANDARDS AND CALIFORNIA GREEN BUILDING STANDARDS

California Code of Regulations (CCR) Title 24 Part 6: The California Energy Code was first adopted in 1978 in response to a legislative mandate to reduce California's energy consumption.

The standards are updated periodically to allow consideration and possible incorporation of new energy efficient technologies and methods. CCR, Title 24, Part 11: California Green Building Standards Code (CALGreen) is a comprehensive and uniform regulatory code for all residential, commercial, and school buildings that went in effect on August 1, 2009, and is administered by the California Building Standards Commission.

CALGreen is updated on a regular basis, with the most recent approved update consisting of the 2022 California Green Building Code Standards that will be effective on January 1, 2023. The CEC anticipates that the 2022 Energy Code will provide $1.5 billion in consumer benefits and reduce GHG emissions by 10 million metric tons (33). The Project would be required to comply with the applicable standards in place at the time plan check submittals are made. These require, among other items (34):

- Short-term bicycle parking. If the new project or an additional alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1.1).
- Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5% of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility (5.106.4.1.2).
- Designated parking for clean air vehicles. In new projects or additions to alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles as shown in Table 5.106.5.2 (5.106.5.2).
- EV charging stations. New construction shall facilitate the future installation of EV supply equipment. The compliance requires empty raceways for future conduit and documentation that the electrical system has adequate capacity for the future load. The number of spaces to be provided for is contained in Table 5.106. 5.3.3 (5.106.5.3). Additionally, Table 5.106.5.4.1 specifies requirements for the installation of raceway conduit and panel power requirements for medium- and heavy-duty electric vehicle supply equipment for warehouses, grocery stores, and retail stores.
- Outdoor light pollution reduction. Outdoor lighting systems shall be designed to meet the backlight, uplight and glare ratings per Table 5.106.8 (5.106.8).
- Construction waste management. Recycle and/or salvage for reuse a minimum of 65% of the nonhazardous construction and demolition waste in accordance with Section 5.408.1.1. 5.405.1.2, or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent (5.408.1).
- Excavated soil and land clearing debris. 100% of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reuse or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed (5.408.3).
- Recycling by Occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive (5.410.1).
- Water conserving plumbing fixtures and fittings. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:
    - Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush (5.303.3.1)
    - Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush (5.303.3.2.1). The effective flush volume of floor- mounted or other urinals shall not exceed 0.5 gallons per flush (5.303.3.2.2).
    - Showerheads. Single showerheads shall have a minimum flow rate of not more than 1.8 gallons per minute and 80 psi (5.303.3.3.1). When a shower is served by more than one showerhead, the combine flow rate of all showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi (5.303.3.3.2).

    - Faucets and fountains. Nonresidential lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi (5.303.3.4.1). Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute of 60 psi (5.303.3.4.2). Wash fountains shall have a maximum flow rate of not more than 1.8 gallons per minute (5.303.3.4.3). Metering faucets shall not deliver more than 0.20 gallons per cycle (5.303.3.4.4). Metering faucets for wash fountains shall have a maximum flow rate not more than 0.20 gallons per cycle (5.303.3.4.5).
  - Outdoor potable water uses in landscaped areas. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent (5.304.1).
  - Water meters. Separate submeters or metering devices shall be installed for new buildings or additions in excess of 50,000 sf or for excess consumption where any tenant within a new building or within an addition that is project to consume more than 1,000 gallons per day (GPD) (5.303.1.1 and 5.303.1.2).
  - Outdoor water uses in rehabilitated landscape projects equal or greater than 2,500 sf. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 2,500 sf requiring a building or landscape permit (5.304.3).
- Commissioning. For new buildings 10,000 sf and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements (5.410.2).

AIR QUALITY MANAGEMENT PLANNING (AQMP)

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards (19). AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy. A detailed discussion on the AQMP and Project consistency with the AQMP is provided in Section 5.8.

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4 SIGNIFICANCE THRESHOLDS

The criteria used to determine the significance of potential Project-related air quality impacts are taken from the *Initial Study Checklist in Appendix G of the State CEQA Guidelines* (14 CCR §§ 15000, et seq.). Based on these thresholds, a project would result in a significant impact related to air quality if it would (1):

- Conflict with or obstruct implementation of the applicable air quality plan.
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable federal or state ambient air quality standard.
- Expose sensitive receptors to substantial pollutant concentrations.
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

4.1 REGIONAL SIGNIFICANCE THRESHOLDS

The SCAQMD has also developed regional significance thresholds for other regulated pollutants, as summarized at Table 4-1 (35). The SCAQMD's *CEQA Air Quality Significance Thresholds* (April 2019) indicate that any projects in the SCAB with daily emissions that exceed any of the indicated thresholds should be considered as having an individually and cumulatively significant air quality impact.

TABLE 4-1: MAXIMUM DAILY REGIONAL EMISSIONS THRESHOLDS

Pollutant	Construction Regional Thresholds	Operational Regional Thresholds
NO_X	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_X	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Pb[3]	3 lbs/day	3 lbs/day

lbs/day = Pounds Per Day
Source: Regional Thresholds presented in this table are based on the SCAQMD Air Quality Significance Thresholds, April 2019

4.2 LOCALIZED SIGNIFICANCE THRESHOLDS

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (*LST Methodology*) (36). The SCAQMD has established that impacts to air

[3] Per the User Guide, CalEEMod quantifies all criteria pollutants except Pb, O_3, and NO_X. Pb is associated with some industrial sources and processes. Specific details to support broad quantification of these emissions are not currently available for CalEEMod. The Project is not expected to generate a quantifiable amount of Pb emissions and therefore further evaluation of Pb emissions is not warranted.

quality are significant if there is a potential to contribute or cause localized exceedances of the NAAQS and CAAQS. Collectively, these are referred to as Localized Significance Thresholds (LSTs).

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4[4]. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest residence or sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses.

LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects. The analysis makes use of methodology included in the *LST Methodology* (37).

4.2.1 APPLICABILITY OF LSTS FOR THE PROJECT

For this Project, the appropriate SRA for the LST analysis is Perris Valley (SRA 24). LSTs apply to CO, NO_X, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size, however the look-up tables can be applied as a screening criterion for larger projects (see additional discussion in Section 4.2.2).

In order to determine the appropriate methodology for determining localized impacts that could occur as a result of Project-related construction, the following process is undertaken:

- Identify the maximum daily on-site emissions that will occur during construction activity:
  - The maximum daily on-site emissions could be based on information provided by the Project Applicant; or
  - The SCAQMD's *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds* and CalEEMod User's Guide *Appendix A: Calculation Details for CalEEMod* can be used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod (38) (39).
- If the total acreage disturbed is less than or equal to 5 acres per day, then the SCAQMD's screening look-up tables are utilized to determine if a Project has the potential to result in a significant impact. The look-up tables establish a maximum daily emissions threshold in lbs/day that can be compared to CalEEMod outputs.
- If the total acreage disturbed is greater than 5 acres per day, then LST impacts may still be conservatively evaluated using the LST look-up tables for a 5-acre disturbance area. Use of the 5-acre disturbance area thresholds can be used to show that even if the daily emissions from all construction activity were emitted within a 5-acre area, and therefore concentrated over a smaller area which would result in greater site adjacent concentrations, the impacts would still be less than significant if the applicable 5-acre thresholds are utilized.

[4] The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "…equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

- The LST Methodology presents mass emission rates for each SRA, project sizes of 1, 2, and 5 acres, and nearest receptor distances of 25, 50, 100, 200, and 500 meters. For project sizes between the values given, or with receptors at distances between the given receptors, the methodology uses linear interpolation to determine the thresholds.

4.2.1.1 MAXIMUM DAILY DISTURBED-ACREAGE

As a conservative measure, it is assumed that a maximum of 20 acres per day can be actively disturbed. In CalEEMod, the Total Acres Graded (TAG) field represents the cumulative distance traversed on the property by the grading equipment. In order to properly grade a piece of land, multiple passes with grading equipment may be required. So even though the lot size is a fixed number of acres, the TAG could be an order of magnitude higher than the footprint of the lot (39). TAG is a function of the maximum acreage disturbed per day times the number of days of the subphase of construction. As such, the “Total Acres Graded” field in CalEEMod has been revised to 340 acres for site preparation (20 acres disturbed per day x 17 working days) and 640 acres for grading activities (20 acres disturbed per day x 32 working days) [5].

4.2.1.2 SENSITIVE RECEPTORS

As previously stated, LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable NAAQS and CAAQS at the nearest residence or sensitive receptor. Receptor locations are off-site locations where individuals may be exposed to emissions from Project activities.

RESIDENTIAL RECEPTORS

Some people are especially sensitive to air pollution and are given special consideration when evaluating air quality impacts from projects. These groups of people include children, the elderly, individuals with pre-existing respiratory or cardiovascular illness, and athletes and others who engage in frequent exercise. Structures that house these persons or places where they gather to exercise are defined as “sensitive receptors”. These structures typically include residences, hotels, hospitals, etc. as they are also known to be locations where an individual can remain for 24 hours. Consistent with the LST Methodology, the nearest land use where an individual could remain for 24 hours to the Project site (in this case the nearest residential land use) has been used to determine construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$, since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time.

NON-RESIDENTIAL RECEPTORS

As per the LST Methodology, commercial and industrial facilities are not included in the definition of sensitive receptor because employees and patrons do not typically remain onsite for a full 24 hours but are typically onsite for 8 hours or less. The LST Methodology explicitly states that “*LSTs based on shorter averaging periods, such as the NO_2 and CO LSTs, could also be applied to receptors such as industrial or commercial facilities since it is reasonable to assume that a worker at these sites could be present for periods of one to eight hours* (36).” For purposes of analysis, if an industrial/commercial use is located at a closer distance to the Project site than the nearest

[5] CalEEMod does not provide a “Total Acres Graded” field for Building Construction, Paving, or Architectural Coating activities.

residential use, the nearest industrial/commercial use will be utilized to determine construction and operational LST air impacts for emissions of NO_2 and CO an individual could be present at these sites for periods of 1 to 8 hours.

PROJECT-RELATED SENSITIVE RECEPTORS

Sensitive receptors in the Project study area are described below:

R1: Location R1 represents the existing residence at 24307 Carman Lane, approximately 3,140 feet northeast of the Project site. R1 is placed at the private outdoor living area (backyard) facing the Project site.

R2: Location R2 represents La Iglesia Misionera Cristiana at 16220 Indian Street, approximately 3,166 feet northeast of the Project site.

R3: Location R3 represents the existing residence at 16537 Libra Lane, approximately 2,777 feet east of the Project site. R3 is placed at the private outdoor living area (backyard) facing the Project site.

R4: Location R4 represents the existing residence at 16855 Baltic Court, approximately 2,730 feet east of the Project site. R4 is placed at the private outdoor living area (backyard) facing the Project site.

R5: Location R5 represents the DDI Distribution facility, located approximately 189 feet south of the Project site at 16875 Heacock Street. For purposes of analysis, receptor R6 is placed at the building façade.

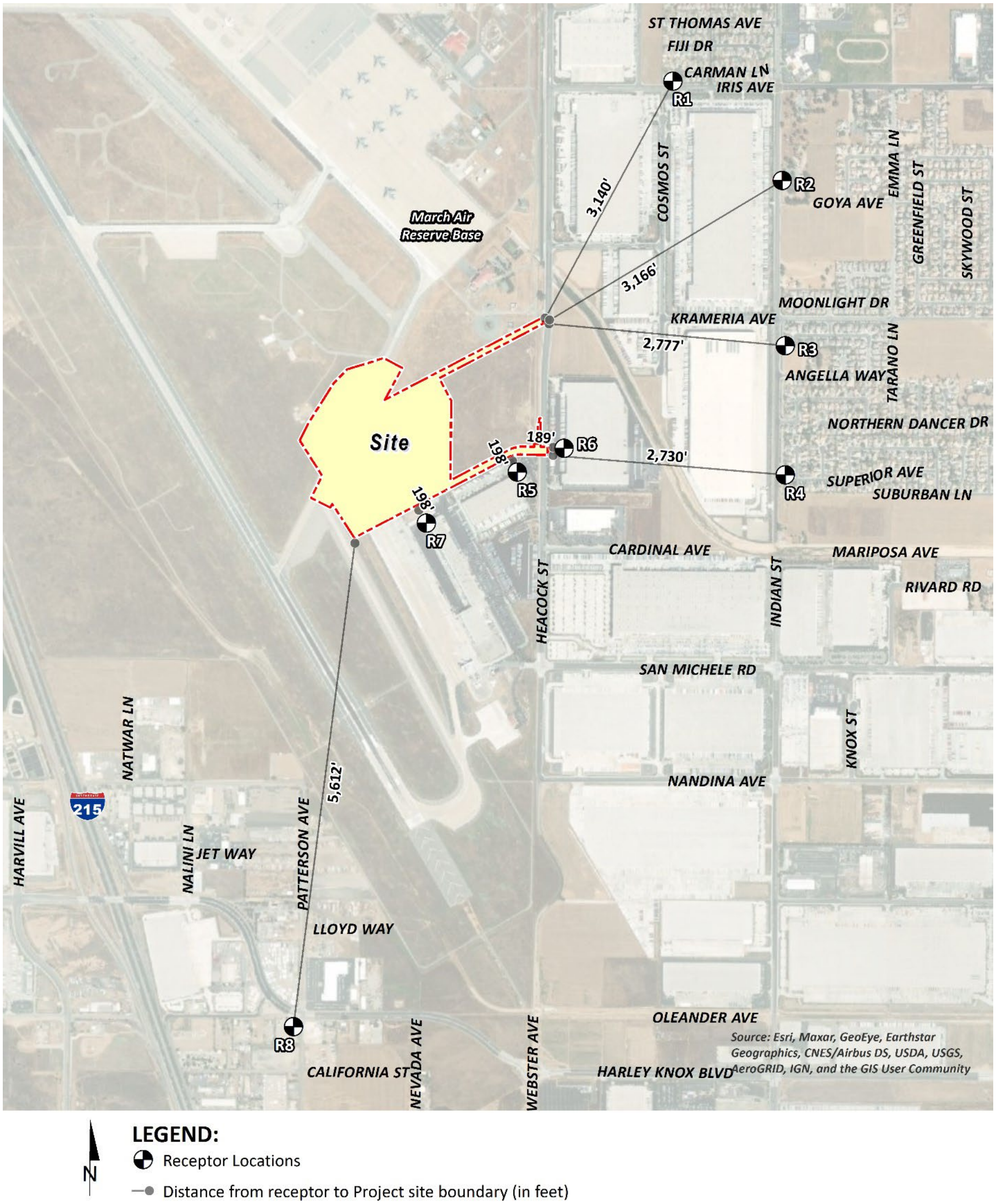
R6: Location R6 represents Lowe's warehouse located approximately 198 feet east of the Project site at 16850 Heacock Street. For purposes of analysis, receptor R6 is placed at the building façade.

R7: Location R7 represents the Amazon Air warehouse located approximately 198 feet east of the Project site at 17101 Heacock Street. For purposes of this analysis, receptor R7 is placed at the building façade.

R8: Location R8 represents the existing residence at 1221 West Oleander Avenue, approximately 5,612 feet south of the Project site. Because there are no private outdoor living areas facing the Project site, R8 is placed at the building façade.

The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Project's potential to cause an individual a cumulatively significant impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time). The nearest receptor used for evaluation of localized impacts of PM_{10} and $PM_{2.5}$ is represented by location R4 which represents the existing residence at 16855 Baltic Court, approximately 2,730 feet/832 meters south of the Project site. It should be noted that the look-up tables only identify thresholds up to a 500-meter distance. As a conservative measure, the 500-meter distance will be used in lieu of the 832-meter distance in order to evaluate localized PM_{10} and $PM_{2.5}$ emission impacts.

EXHIBIT 4-A: SENSITIVE RECEPTOR LOCATIONS



As previously stated, and consistent with LST Methodology, the nearest industrial/commercial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_X and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assumed that an individual could be present at these sites for periods of one to 8 hours. Thus, the nearest receptor used for evaluation of localized impacts of NO_X and CO is represented by location R5, the DDI Distribution facility, located 189 feet/58 meters south of the Project site. As such, the 58-meter distance will be used for evaluation of localized NO_X and CO emission impacts.

4.2.2 LOCALIZED THRESHOLDS FOR CONSTRUCTION ACTIVITY

As previously stated, this analysis conservatively assumes that more than five acres will be disturbed per day. It should be noted that the *LST Methodology* provides look-up tables for sites with an area with daily disturbance of 5 acres or less. For projects that exceed 5 acres, the 5-acre LST look-up tables can be used as a screening tool to determine which pollutants require additional detailed analysis. This approach is conservative as it assumes that all on-site emissions associated with the project would occur within a concentrated 5-acre area. This screening method would therefore over-predict potential localized impacts, because by assuming that on-site construction activities are occurring over a smaller area, the resulting concentrations of air pollutants are more highly concentrated once they reach the smaller site boundary than they would be for activities if they were spread out over a larger surface area. On a larger site, the same amount of air pollutants generated would disperse over a larger surface area and would result in a lower concentration once emissions reach the project-site boundary. As such, LSTs for a 5-acre site during construction are used as a screening tool to determine if further detailed analysis is required. The thresholds used in for the construction-source LST analysis are presented below in Table 4-2.

TABLE 4-2: MAXIMUM DAILY LOCALIZED CONSTRUCTION EMISSIONS THRESHOLDS

Construction Localized Thresholds			
NO_X	CO	PM_{10}	$PM_{2.5}$
314 lbs/day	2,379 lbs/day	207 lbs/day	105 lbs/day

Source: Localized Thresholds presented in this table are based on the SCAQMD *LST Methodology*, July 2008

4.2.3 LOCALIZED THRESHOLDS FOR OPERATIONAL ACTIVITY

The LST analysis is based on the proposed Project area. As previously stated, the Project site is approximately 56 acres. Similar to the approach taken in determining the localized thresholds for construction activity, operational LSTs for a 5-acre site are used as a screening tool to determine if further detailed analysis is required.

TABLE 4-3: MAXIMUM DAILY LOCALIZED OPERATIONAL EMISSIONS THRESHOLDS

Operational Localized Thresholds			
NO_X	**CO**	**PM_{10}**	**$PM_{2.5}$**
314 lbs/day	2,379 lbs/day	50 lbs/day	26 lbs/day

Source: Localized Thresholds presented in this table are based on the SCAQMD *LST Methodology*, July 2008

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5 AIR QUALITY IMPACTS

5.1 INTRODUCTION

The Project has been evaluated to determine if it will violate an air quality standard, contribute to an existing or projected air quality violation, or determine if it will result in a cumulatively considerable net increase of a criteria pollutant for which the SCAB is non-attainment under an applicable NAAQS and CAAQS. Additionally, the Project has been evaluated to determine consistency with the applicable AQMP, exposure of sensitive receptors to substantial pollutant concentrations, and the impacts of odors.

5.2 METHODOLOGY

5.2.1 CALEEMOD

Land uses such as the Project affect air quality through construction-source and operational-source emissions.

In May 2022, the SCAQMD, in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the CalEEMod Version 2022.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$) and GHG emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from MMs (40). Accordingly, the latest version of CalEEMod has been used for this Project to determine construction and operational air quality emissions. Output from the model runs for both construction and operational activity are provided in Appendices 5.1 through 5.4.

5.3 REGIONAL CONSTRUCTION EMISSIONS

5.3.1 CONSTRUCTION ACTIVITIES

Construction activities associated with the Project will result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Construction related emissions are expected from the following construction activities:

- Site Preparation/Demolition
- Grading
- Building Construction
- Paving
- Architectural Coating

DEMOLITION ACTIVITIES

Approximately 171,300 sf of existing tarmac located along the shoulder of Taxiway A and Taxiway G would be demolished to provide a tarmac expansion to accommodate aircraft access to the cargo facility. The demolished material will be used as fill and base materials. As a conservative measure, and in order to account for emissions that occur during demolition activities, this analysis assumes that demolition would occur concurrent with Site Preparation activities.

GRADING ACTIVITIES

Dust is typically a major concern during grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions". Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). CalEEMod was utilized to calculate fugitive dust emissions resulting from this phase of activity. Based on information provided by the Project Applicant, approximately 100,000 cubic yards (CY) of material will be imported from the South Campus site approximately 8.3 miles from the Project site.

OFF-SITE UTILITY AND INFRASTRUCTURE IMPROVEMENTS

Construction emissions associated with off-site utility and infrastructure improvements may occur, however at this time, a specific schedule of off-site utility and infrastructure improvements is unknown. However, impacts associated with these proposed activities are not expected to exceed the emissions identified for Project-related construction activities. As such, no impacts beyond what has already been identified in this report are expected to occur.

CONSTRUCTION WORKER VEHICLE TRIPS

Construction emissions for construction worker vehicles traveling to and from the Project site, as well as vendor trips (construction materials delivered to the Project site) were estimated based on information from CalEEMod defaults.

5.3.2 CONSTRUCTION DURATION

Construction is expected to commence in June 2023 and will last through March 2024. The construction schedule utilized in the analysis, shown in Table 5-1, represents a "worst-case" analysis scenario should construction occur any time after the respective dates since emission factors for construction decrease as time passes and the analysis year increases due to emission regulations becoming more stringent.[6] The duration of construction activity and associated equipment represents a reasonable approximation of the expected construction fleet as required per *CEQA Guidelines* (1).

[6] As shown in the CalEEMod User's Guide Version 2022.1, Section 4.3 "OFFROAD Equipment" as the analysis year increases, emission factors for the same equipment pieces decrease due to the natural turnover of older equipment being replaced by newer less polluting equipment and new regulatory requirements.

TABLE 5-1: CONSTRUCTION SCHEDULE

Construction Activity	Start Date	End Date	Days
Site Preparation/Demolition	06/01/2023	06/23/2023	17
Grading	07/01/2023	08/15/2023	32
Building Construction	08/01/2023	02/28/2024	152
Paving	12/01/2023	01/30/2024	43
Architectural Coating	02/15/2024	03/30/2024	32

5.3.3 CONSTRUCTION EQUIPMENT

Site specific construction fleet may vary due to specific project needs at the time of construction. A detailed summary of construction equipment assumptions by phase is provided at Table 5-2.

The March JPA has established limits to the hours of construction. Section 9.10.030 of the March JPA Development Code provides that noise-generating Project construction activities shall only occur between the hours of 7:00 a.m. and 7:00 p.m. As such, construction activities are permitted to occur up to 12 hours per day pursuant to the March JPA Development Code. Under Section 9.10.140 of the March JPA Development Code, outdoor construction and grading activities, including the operation of any tools or equipment associated with construction, drilling, repair, alteration, grading/grubbing or demolition work within 500 feet of the property line of a residential use, is further prohibited between 5:00 p.m. and 8:00 a.m. on Saturdays or at any time on Sunday or a Federal Holiday. However, it should be noted that the identified construction equipment would not be used during every hour of the day. Consistent with industry standards and typical construction practices, each piece of equipment listed in Table 5-4 will operate up to a total of eight (8) hours per day, or approximately two-thirds of the period during which construction activities are allowed pursuant to the code. It should be noted that most pieces of equipment would likely operate for fewer hours per day.

TABLE 5-2: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Construction Activity	Equipment	Amount	Hours Per Day	Horsepower	Load Factor
Site Preparation/ Demolition	Crawler Tractors	2	8	87	0.43
	Concrete/Industrial Saws	1	8	33	0.73
	Excavators	3	8	36	0.38
	Rubber Tired Dozers	6	8	367	0.40
Grading	Crawler Tractors	1	8	87	0.43
	Excavators	2	8	36	0.38
	Graders	3	8	148	0.41
	Rubber Tired Dozers	1	8	367	0.40
	Scrapers	2	8	423	0.48
Building Construction	Cranes	1	8	367	0.29
	Crawler Tractors	3	8	87	0.43
	Forklifts	3	8	82	0.20
	Generator Sets	1	8	14	0.74
	Welders	1	8	46	0.45
Paving	Pavers	2	8	81	0.42
	Paving Equipment	2	8	89	0.36
	Rollers	2	8	36	0.38
Architectural Coating	Air Compressors	1	8	37	0.48

5.3.4 ON-ROAD TRIPS

Construction generates on-road vehicle emissions from vehicle usage for workers, hauling, and vendors commuting to and from the site. The number of worker, hauling, and vendor trips are presented below in Table 5-3.

TABLE 5-3: CONSTRUCTION TRIP ASSUMPTIONS

Construction Activity	Worker Trips Per Day	Vendor Trips Per Day	Hauling Trips Per Day
Site Preparation/Demolition	46	3	24
Grading	23	5	391
Building Construction	75	20	0
Paving	15	0	0
Architectural Coating	15	4	0

5.3.5 CONSTRUCTION EMISSIONS SUMMARY

IMPACTS WITHOUT MITIGATION

CalEEMod calculates maximum daily emissions for summer and winter periods. As such, the estimated maximum daily construction emissions without mitigation for both summer and winter periods are summarized on Table 5-4. Detailed unmitigated construction model outputs are presented in Appendix 5.1. Under the assumed scenarios, emissions resulting from the Project construction will not exceed criteria pollutant thresholds established by the SCAQMD and no mitigation is required.

IMPACTS WITH MITIGATION

As previously stated, the Project will implement MM AQ-1. As shown in Table 5-5, implementation of MM AQ-1 would further reduce the Project construction-source emissions of NO_X. Detailed mitigated construction model outputs are presented in Appendix 5.2.

To further reduce the proposed Project's construction-source emissions, the proposed Project would incorporate MM AQ-2, however the resulting emission reductions are not quantifiable in CalEEMod, and as such, reductions are not reflected in the analysis.

TABLE 5-4: MAXIMUM DAILY CONSTRUCTION EMISSIONS – WITHOUT MITIGATION (1 OF 3)

Year	Construction Activity	Source	Total Construction-Source Emissions (lbs/day)					
			VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer								
2023	Site Preparation/ Demolition	Construction Equipment	9.44	90.20	75.60	0.10	11.13	6.92
		Worker, Vendor, Hauling Trips	0.26	1.35	4.52	0.00	0.11	0.03
	Site Preparation/Demolition Emissions Totals		**9.70**	**91.55**	**80.12**	**0.10**	**11.24**	**6.95**
	Grading	Construction Equipment	4.66	45.40	37.40	0.07	4.98	2.96
		Worker, Vendor, Hauling Trips	0.46	16.70	7.54	0.08	1.03	0.51
	Grading Emissions Totals		**5.12**	**62.10**	**44.94**	**0.15**	**6.01**	**3.47**
	Building Construction	Construction Equipment	2.07	18.3	16.2	0.03	1.14	1.05
		Worker, Vendor, Hauling Trips	0.62	5.47	4.84	0.01	0.34	0.31
	Building Construction Emissions Totals		**2.69**	**23.77**	**21.04**	**0.04**	**1.48**	**1.36**
	Paving	Construction Equipment	2.07	18.30	16.20	0.03	1.14	1.05
		Worker, Vendor, Hauling Trips	0.42	1.13	7.03	0.00	0.10	0.02
	Paving Emissions Totals		**2.49**	**19.43**	**23.23**	**0.03**	**1.24**	**1.07**
2024	Building Construction	Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, Vendor, Hauling Trips	0.00	0.00	0.00	0.00	0.00	0.00
	Building Construction Emissions Totals		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Paving	Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, Vendor, Hauling Trips	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Emissions Totals		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Architectural Coating	Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, Vendor, Hauling Trips	0.00	0.00	0.00	0.00	0.00	0.00
	Architectural Coating Emissions Totals		0.00	0.00	0.00	0.00	0.00	0.00

TABLE 5-4: MAXIMUM DAILY CONSTRUCTION EMISSIONS – WITHOUT MITIGATION (2 OF 3)

Year	Construction Activity	Source	Total Construction-Source Emissions (lbs/day)					
			VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Winter								
2023	Site Preparation/ Demolition	Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, Vendor, Hauling Trips	0.00	0.00	0.00	0.00	0.00	0.00
	Site Preparation/Demolition Emissions Totals		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Grading	Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, Vendor, Hauling Trips	0.00	0.00	0.00	0.00	0.00	0.00
	Grading Emissions Totals		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Building Construction	Construction Equipment	3.85	8.06	10.00	0.01	0.41	0.38
		Worker, Vendor, Hauling Trips	0.08	0.09	1.03	0.00	0.01	0.00
	Building Construction Emissions Totals		**3.93**	**8.15**	**11.03**	**0.01**	**0.42**	**0.38**
	Paving	Construction Equipment	2.07	18.30	16.20	0.03	1.14	1.05
		Worker, Vendor, Hauling Trips	0.40	1.23	5.39	0.00	0.10	0.02
	Paving Emissions Totals		**2.47**	**19.53**	**21.59**	**0.03**	**1.24**	**1.07**
2024	Building Construction	Construction Equipment	1.93	17.10	16.00	0.03	1.03	0.94
		Worker, Vendor, Hauling Trips	0.38	1.17	4.95	0.00	0.10	0.02
	Building Construction Emissions Totals		**2.31**	**18.27**	**20.95**	**0.03**	**1.13**	**0.96**
	Paving	Construction Equipment	3.82	7.81	10.00	0.01	0.39	0.36
		Worker, Vendor, Hauling Trips	0.07	0.09	0.95	0.00	0.01	0.00
	Paving Emissions Totals		**3.89**	**7.90**	**10.95**	**0.01**	**0.40**	**0.36**
	Architectural Coating	Construction Equipment	54.08	1.21	1.53	0.00	0.04	0.04
		Worker, Vendor, Hauling Trips	0.07	0.24	0.99	0.00	0.02	0.00
	Architectural Coating Emissions Totals		**54.15**	**1.45**	**2.52**	**0.00**	**0.06**	**0.04**

TABLE 5-4: MAXIMUM DAILY CONSTRUCTION EMISSIONS – WITHOUT MITIGATION (3 OF 3)

Year	Construction Activity	Source	Total Construction-Source Emissions (lbs/day)					
			VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions								
		Construction Maximum Daily Emissions (2023)	**17.31**	**91.50**	**148.29**	**0.28**	**18.49**	**11.49**
		Construction Maximum Daily Emissions (2024)	**60.35**	**27.62**	**34.42**	**0.04**	**1.59**	**1.36**
		SCAQMD Regional Threshold	75	100	550	150	150	55
		Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

TABLE 5-5: MAXIMUM DAILY CONSTRUCTION EMISSIONS – WITH MITIGATION (1 OF 3)

Year	Construction Activity	Source	Total Construction-Source Emissions (lbs/day)					
			VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Summer								
2023	Site Preparation/ Demolition	Construction Equipment	1.12	11.04	59.60	0.10	6.91	3.06
		Worker, Vendor, Hauling Trips	0.26	1.35	4.52	0.00	0.11	0.03
	Site Preparation/Demolition Emissions Totals		**1.38**	**12.39**	**64.12**	**0.10**	**7.02**	**3.09**
	Grading	Construction Equipment	0.72	4.87	41.70	0.07	2.99	1.14
		Worker, Vendor, Hauling Trips	0.46	16.70	7.54	0.08	1.03	0.51
	Grading Emissions Totals		**1.18**	**21.57**	**49.24**	**0.15**	**4.02**	**1.65**
	Building Construction	Construction Equipment	0.37	3.04	17.40	0.03	0.08	0.08
		Worker, Vendor, Hauling Trips	0.42	1.13	7.03	0.01	0.10	0.02
	Building Construction Emissions Totals		**0.79**	**4.17**	**24.43**	**0.04**	**0.18**	**0.10**
	Paving	Construction Equipment	0.37	3.04	17.40	0.03	0.08	0.08
		Worker, Vendor, Hauling Trips	0.42	1.13	7.03	0.00	0.10	0.02
	Paving Emissions Totals		**0.79**	**4.17**	**24.43**	**0.03**	**0.18**	**0.10**
2024	Building Construction	Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, Vendor, Hauling Trips	0.00	0.00	0.00	0.00	0.00	0.00
	Building Construction Emissions Totals		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Paving	Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, Vendor, Hauling Trips	0.00	0.00	0.00	0.00	0.00	0.00
	Paving Emissions Totals		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Architectural Coating	Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, Vendor, Hauling Trips	0.00	0.00	0.00	0.00	0.00	0.00
	Architectural Coating Emissions Totals		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

TABLE 5-5: MAXIMUM DAILY CONSTRUCTION EMISSIONS – WITH MITIGATION (2 OF 3)

Year	Construction Activity	Source	Total Construction-Source Emissions (lbs/day)					
			VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Winter								
2023	Site Preparation/ Demolition	Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, Vendor, Hauling Trips	0.00	0.00	0.00	0.00	0.00	0.00
	Site Preparation/Demolition Emissions Totals		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Grading	Construction Equipment	0.00	0.00	0.00	0.00	0.00	0.00
		Worker, Vendor, Hauling Trips	0.00	0.00	0.00	0.00	0.00	0.00
	Grading Emissions Totals		**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
	Building Construction	Construction Equipment	3.13	1.93	10.60	0.01	0.03	0.03
		Worker, Vendor, Hauling Trips	0.08	0.09	1.03	0.00	0.01	0.00
	Building Construction Emissions Totals		**3.21**	**2.02**	**11.63**	**0.01**	**0.04**	**0.03**
	Paving	Construction Equipment	0.37	3.04	17.40	0.03	0.08	0.08
		Worker, Vendor, Hauling Trips	0.40	1.23	5.39	0.00	0.10	0.02
	Paving Emissions Totals		**0.77**	**4.27**	**22.79**	**0.03**	**0.18**	**0.10**
2024	Building Construction	Construction Equipment	0.37	3.03	17.40	0.03	0.08	0.08
		Worker, Vendor, Hauling Trips	0.38	1.17	4.95	0.00	0.10	0.02
	Building Construction Emissions Totals		**0.75**	**4.20**	**22.35**	**0.03**	**0.18**	**0.10**
	Paving	Construction Equipment	3.13	1.93	10.60	0.01	0.03	0.03
		Worker, Vendor, Hauling Trips	0.07	0.09	0.95	0.00	0.01	0.00
	Paving Emissions Totals		**3.20**	**2.02**	**11.55**	**0.01**	**0.04**	**0.03**
	Architectural Coating	Construction Equipment	53.93	0.86	1.28	0.00	0.00	0.00
		Worker, Vendor, Hauling Trips	0.07	0.24	0.99	0.00	0.02	0.00
	Architectural Coating Emissions Totals		**54.00**	**1.10**	**2.27**	**0.00**	**0.02**	**0.00**

TABLE 5-5: MAXIMUM DAILY CONSTRUCTION EMISSIONS – WITH MITIGATION (3 OF 3)

Year	Construction Activity	Source	Total Construction-Source Emissions (lbs/day)					
			VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions								
		Construction Maximum Daily Emissions (2023)	**3.98**	**38.13**	**137.79**	**0.28**	**11.22**	**4.84**
		Construction Maximum Daily Emissions (2024)	**57.95**	**7.32**	**36.17**	**0.04**	**0.24**	**0.13**
		SCAQMD Regional Threshold	75	100	550	150	150	55
		Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

5.4 REGIONAL OPERATIONAL EMISSIONS

Operational activities associated with the Project will result in emissions of VOCs, NO_X, SO_X, CO, PM_{10}, and $PM_{2.5}$. Operational emissions would be expected from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- On-Site Cargo Handling Equipment Emissions
- Aircraft Emissions (On-Site and Off-Site)

5.4.1 AREA SOURCE EMISSIONS

CalEEMod estimates area source emissions for the following sources: architectural coating, consumer products, and landscape maintenance equipment. Detailed operational model outputs are presented in Appendices 5.3 and 5.4.

ARCHITECTURAL COATING

Over a period of time, the building that is a part of this Project will be subject to emissions resulting from the evaporation of solvents contained in paints, varnishes, primers, and other surface coatings as part of Project maintenance. The emissions associated with architectural coatings were calculated using CalEEMod.

CONSUMER PRODUCTS

Consumer products include, but are not limited to detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. Many of these products contain organic compounds which when released in the atmosphere can react to form O_3 and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within CalEEMod.

LANDSCAPE MAINTENANCE EQUIPMENT

Landscape maintenance equipment would generate emissions from fuel combustion and evaporation of unburned fuel. Equipment in this category would include lawnmowers, shedders/grinders, blowers, trimmers, chain saws, and hedge trimmers used to maintain the landscaping of the Project. It should be noted that as October 9, 2021, Governor Gavin Newsom signed AB 1346. The bill aims to ban the sale of new gasoline-powered equipment under 25 gross horsepower (known as small off-road engines [SOREs]) by 2024. For purposes of analysis, the emissions associated with landscape maintenance equipment were calculated based on assumptions provided in CalEEMod. It should be noted that the version of CalEEMod that was employed for this analysis does not account for AB 1346. As such, emissions associated with landscape maintenance equipment are conservative.

5.4.2 ENERGY SOURCE EMISSIONS

Electricity and natural gas are used by almost every project. Criteria pollutant emissions are emitted through the generation of electricity and consumption of natural gas. However, because electrical generating facilities for the Project area are located either outside the region (state) or offset through the use of pollution credits (RECLAIM) for generation within the SCAB, criteria pollutant emissions from offsite generation of electricity are generally excluded from the evaluation of significance and only natural gas use is considered. Detailed operational model outputs are presented in Appendices 5.3 and 5.4.

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by Southern California Gas (SoCalGas) and electricity would be supplied to the Project by Southern California Edison (SCE).

5.4.3 MOBILE SOURCE EMISSIONS

The Project related operational emissions derive primarily from vehicle trips generated by the Project. Trip characteristics available from the *Meridian D-1 Gateway Aviation Center Traffic Analysis* (TA) were utilized in this analysis (41). The mobile-source emissions were calculated based on trip rates, trip lengths, and emission factors from EMFAC2021. Detailed operational model outputs are presented in Appendices 5.3 and 5.4.

Per the TA, the Project is expected to generate a total of approximately 1,276 two-way vehicular trips per day (638 trips inbound and 638 trips outbound), including 276 two-way truck trips per day (138 truck trips inbound and 138 truck trips outbound) during non-peak operations and approximately 1,880 two-way vehicular trips per day (940 trips inbound and 940 trips outbound), including 408 two-way truck trips per day (204 truck trips inbound and 204 truck trips outbound) during peak operations (41).

5.4.3.1 APPROACH FOR ANALYSIS

TRIP RATES

The trip generation rates used for this analysis are consistent with the rates provided in the TA which are based upon information collected by the Institute of Transportation Engineers (ITE) as provided in the *Trip Generation Manual*, 10th Edition, 2017 (41).

TRIP LENGTHS

For passenger car trips (Light-Duty-Auto vehicles [LDA], Light-Duty Trucks [LDT1][7], Light-Duty Trucks [LDT2][8], Medium-Duty Trucks [MDV], Other Buses [OBUS[9]], Urban Buses [UBUS[10]], Motorcycle [MCY], School Buses [SBUS], and Motor Homes [MH]), a one-way trip length of 18.85 miles was used based on the project's VMT analysis (42).

The average trip length for light heavy-duty trucks (LHDT), medium heavy-duty trucks (MHDT) and heavy heavy-duty trucks (HHDT) used for this analysis has been obtained from the South Coast Air Quality Management District's (SCAQMD) Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce emissions (WAIRE) Program (May 2021) (43). SCAQMD's Rule 2305 is based on a 15.3-mile trip length for LHDT, 14.2-mile trip length for MHDT and 39.9-mile trip length for HHDT. As such, a weighted average one-way trip length for trucks of 28.54 and 28.55 miles was utilized for Non-Peak and Peak, respectively.

PASSENGER CAR FLEET MIX

It is important to note that although the TA does not breakdown passenger cars by type, this analysis assumes that passenger cars include LDA, LDT1, LDT2, and MDV vehicle types for the following uses:

TABLE 5-6: PASSENGER CAR FLEET MIX

Land Use	% Vehicle Type				
	LDA	LDT1	LDT2	MDV	MCY
Non-Peak Season, 48 Weeks	55.76%	4.52%	22.17%	15.30%	2.25%
Peak Season, 4 Weeks					

Note: The Project-specific passenger car fleet mix used in this analysis is based on a proportional split utilizing the default CalEEMod percentages assigned to LDA, LDT1, LDT2, MDV, and MCY vehicle types.

TRUCK FLEET MIX

In order to be consistent with the TA, trucks are broken down by truck type. The trucks are comprised of LHDT1, LHDT2, MHDT, and HHDT. In order to account for emissions generated by trucks, the following fleet mix was utilized in this analysis:

[7] Vehicles under the LDT1 category have a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs.

[8] Vehicles under the LDT2 category have a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs.

[9] OBUS vehicle classes refers to all other buses except school buses and urban buses.

[10] UBUS vehicle classes consist of natural gas buses, gasoline buses, and diesel buses.

TABLE 5-7: TRUCK FLEET MIX

Land Use	% Vehicle Type[11]			
	LHDT1	LHDT2	MHDT	HHDT
Non-Peak Season, 48 Weeks	7.91%	2.23%	34.06%	55.80%
Peak Season, 4 Weeks	8.03%	2.27%	33.82%	55.82%

Note: Project-specific truck fleet mix is based on the number of trips generated by each truck type (LHDT1, LHDT2, MHDT, and HHDT) relative to the total number of truck trips.

FUGITIVE DUST RELATED TO VEHICULAR TRAVEL

Vehicles traveling on paved roads would be a source of fugitive emissions due to the generation of road dust inclusive of brake and tire wear particulates. The emissions estimates for travel on paved roads were calculated using CalEEMod.

5.4.4 ON-SITE CARGO HANDLING EQUIPMENT EMISSIONS

It is common for cargo buildings to require the operation of exterior cargo handling equipment in the building's truck court areas. For this particular Project, on-site modeled operational equipment includes up to one (1) 200 horsepower (hp), compressed natural gas or gasoline-powered tractors/loaders/backhoes operating at 4 hours a day[12] for 365 days of the year.

5.4.5 AIRCRAFT EMISSIONS

As previously stated, emissions associated with the aviation activity for the proposed Project are based on Project-specific data and modeled using the FAA's AEDT version 3C.

Aircraft characteristics included 10,608 annual operations (5,304 arrivals and 5,304 departures) by the 767-300 as well as AEDT default ground service equipment and aircraft auxiliary power unit's usage.

5.4.6 OPERATIONAL EMISSIONS SUMMARY

NON-PEAK SEASON

Consistent with the TA, both Non-Peak and Peak seasons have been evaluated. As previously stated, CalEEMod utilizes summer and winter EMFAC2021 emission factors in order to derive vehicle emissions associated with Project operational activities, which vary by season. As such, non-peak operational activities for summer and winter scenarios are presented in Table 5-8. Detailed operational model outputs are presented in Appendices 5.3. As shown on Table 5-8, the Project's daily regional emissions from on-going non-peak operations would exceed the thresholds of significance for emissions of VOCs, NO_X, and CO. MM AQ-3 through MM AQ-6 are required to reduce VOC, NO_X, and CO emissions. However, there is no way to meaningfully

[11] Row totals may not equal 100% due to rounding.

[12] Based on Table II-3, Port and Rail Cargo Handling Equipment Demographics by Type, from CARB's Technology Assessment: Mobile Cargo Handling Equipment document, a single piece of equipment could operate up to 2 hours per day (Total Average Annual Activity divided by Total Number Pieces of Equipment). As such, the analysis conservatively assumes that the tractor/loader/backhoe would operate up to 4 hours per day.

quantify these reductions in CalEEMod, and therefore no numeric emissions credit has been taken in the analysis. As such, even with application of MM AQ-3 through MM AQ-6, Project operational-source emissions impacts would be significant and unavoidable. Additionally, it should be noted that the majority of emissions are aircraft related and there are no feasible mitigation measures that can be imposed by March JPA to reduce these emissions to less than significant levels.

TABLE 5-8: SUMMARY OF OPERATIONAL EMISSIONS – NON-PEAK SEASON

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Source	11.75	59.70	161.00	0.79	19.60	4.49
Area Source	12.22	0.14	15.72	0.00	0.02	0.02
Energy Source	0.10	1.86	1.56	0.02	0.14	0.14
On-Site Equipment Source	0.23	0.75	32.89	0.00	0.06	0.05
Aircraft Source	161.12	556.64	731.60	41.48	5.78	5.76
Total Maximum Daily Emissions	**185.42**	**619.09**	**942.77**	**42.29**	**25.60**	**10.46**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**NO**	**NO**

PEAK SEASON

Detailed operational model outputs are presented in Appendices 5.4. As shown on Table 5-9, the Project's daily regional emissions from on-going peak operations would exceed the thresholds of significance for emissions of VOCs, NO_X, and CO. MMs AQ-3 through AQ-6 are required to reduce NO_X emissions. However, there is no way to meaningfully quantify these reductions in CalEEMod, and therefore no numeric emissions credit has been taken in the analysis. As such, even with application of MM AQ-3 through MM AQ-6, Project operational-source emissions impacts would be significant and unavoidable.

TABLE 5-9: SUMMARY OF OPERATIONAL EMISSIONS – PEAK SEASON

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Source	11.22	62.80	132.80	0.76	19.60	4.49
Area Source[13]	9.64	0.00	0.00	0.00	0.00	0.00
Energy Source	0.10	1.86	1.56	0.02	0.14	0.14
On-Site Equipment Source	0.23	0.75	32.89	0.00	0.06	0.05
Aircraft Source	194.34	617.00	811.02	0.00	6.44	6.38
Total Maximum Daily Emissions	**215.53**	**682.41**	**978.27**	**0.78**	**26.24**	**11.06**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**NO**	**NO**	**NO**

5.5 CONSTRUCTION-SOURCE LOCALIZED EMISSIONS

IMPACTS WITHOUT MITIGATION

The on-site construction emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ are compared to the respective LSTs as previously shown in Table 4-2. As shown in Table 5-10, Project localized construction-source emissions would not exceed the applicable LSTs. Outputs from the model runs for construction LSTs are provided in Appendix 5.1.

IMPACTS WITH MITIGATION

The on-site construction emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ are compared to the respective LSTs as previously shown in Table 4-2. As previously stated, implementation of MM AQ-1 and MM AQ-2 would further reduce the Project's emissions. As shown in Table 5-11, Project localized construction-source emissions would not exceed the applicable LSTs. Outputs from the model runs for construction LSTs are provided in Appendix 5.2.

[13] Based on CalEEMod defaults, it is assumed that landscape maintenance equipment will not be used in the winter. It should be noted that the Project will utilize hardscape landscaping, and the use of landscaping equipment will likely be minimal.

TABLE 5-10: PROJECT LOCALIZED CONSTRUCTION EMISSIONS – WITHOUT MITIGATION

On-Site Emissions	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Site Preparation/Demolition				
Maximum Daily Emissions	**90.20**	**75.60**	**11.13**	**6.92**
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Grading				
Maximum Daily Emissions	**45.40**	**37.40**	**4.98**	**2.96**
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Building Construction				
Maximum Daily Emissions	**53.70**	**48.40**	**3.31**	**3.04**
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Paving				
Maximum Daily Emissions	**15.87**	**20.00**	**0.80**	**0.74**
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Architectural Coating				
Maximum Daily Emissions	**1.21**	**1.53**	**0.04**	**0.04**
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

TABLE 5-11: PROJECT LOCALIZED CONSTRUCTION EMISSIONS – WITH PROJECT DESIGN FEATURE

On-Site Emissions	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Site Preparation/Demolition				
Maximum Daily Emissions	**11.04**	**59.60**	**6.91**	**3.06**
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Grading				
Maximum Daily Emissions	**4.87**	**41.70**	**2.99**	**1.14**
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Building Construction				
Maximum Daily Emissions	**9.11**	**52.20**	**0.24**	**0.24**
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Paving				
Maximum Daily Emissions	**3.86**	**21.20**	**0.06**	**0.06**
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Architectural Coating				
Maximum Daily Emissions	**0.86**	**1.28**	**0.00**	**0.00**
SCAQMD Localized Threshold	314	2,379	207	105
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

5.6 OPERATIONAL-SOURCE LOCALIZED EMISSIONS

As noted previously, the *LST Methodology* provides look-up tables for sites with an area with daily disturbance of 5 acres or less. For projects that exceed 5 acres, the 5-acre LST look-up tables can be used as a screening tool to determine which pollutants require additional detailed analysis. This approach is conservative as it assumes that all on-site emissions associated with the project would occur within a concentrated 5-acre area. This screening method would therefore over-predict potential localized impacts, because by assuming that on-site operational activities are occurring over a smaller area, the resulting concentrations of air pollutants are more highly concentrated once they reach the smaller site boundary than they would be for activities if they were spread out over a larger surface area. On a larger site, the same amount of air pollutants generated would disperse over a larger surface area and would result in a lower concentration once emissions reach the project-site boundary. As such, LSTs for a 5-acre site during operations are used as a screening tool to determine if further detailed analysis is required.

The LST analysis includes on-site sources (area, energy, mobile, on-site cargo handling equipment, and aircraft emissions – which are previously discussed in Section 5.4 of this report). However, it should be noted that the CalEEMod outputs do not separate on-site and off-site emissions from mobile sources. As such, in an effort to establish a maximum potential impact scenario for analytic purposes, the emissions shown on Table 5-12 represent all on-site Project-related stationary (area) sources, Project-related mobile sources, and on-site aircraft sources. It is assumed that the maximum distance a passenger car and/or truck would make through the Project site is approximately 0.20 miles. As such, an on-site travel distance of approximately 0.20 mile for each passenger car (1.2% of passenger car mobile-source emissions) and truck trips (2.41% of truck mobile-source emissions) has been used as a conservative measure. Modeling based on these assumptions demonstrates that even within broad encompassing parameters, Project operational-source emissions would not exceed applicable LSTs.

SUMMARY OF OPERATIONAL LST IMPACTS

NON-PEAK SEASON

As shown on Table 5-12, the Project's localized emissions from on-going operations would not exceed the thresholds of significance for emissions of any criteria pollutant.

TABLE 5-12: PROJECT LOCALIZED OPERATIONAL EMISSIONS – NON-PEAK SEASON

Operational Activity	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**11.35**	**71.54**	**0.44**	**0.27**
SCAQMD Localized Threshold	314	2,379	50	26
Threshold Exceeded?	NO	NO	NO	NO

PEAK SEASON

As shown on Table 5-13, the Project's localized emissions from on-going operations would not exceed the thresholds of significance for emissions of any criteria pollutant.

TABLE 5-13: PROJECT LOCALIZED OPERATIONAL EMISSIONS –PEAK SEASON

Operational Activity	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**11.66**	**58.47**	**0.42**	**0.25**
SCAQMD Localized Threshold	314	2,379	50	26
Threshold Exceeded?	NO	NO	NO	NO

5.7 CO "HOT SPOT" ANALYSIS

As discussed below, the Project would not result in potentially adverse CO concentrations or "hotspots." Further, detailed modeling of Project-specific CO "hotspots" is not needed to reach this conclusion. An adverse CO concentration, known as a "hot spot", would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur. At the time of the SCAQMD's *CEQA Air Quality Handbook (1993)* (*1993 CEQA Handbook*), the SCAB was designated nonattainment under the CAAQS and NAAQS for CO (44). The determination of a potential CO hotspot is focused on the mobile-source vehicular activity that would occur at intersections in the Project-area. Aircraft-related emissions are not concentrated enough, in a particular location such that they would have a propensity to result in a CO hotspot and therefore aircraft emissions are not a consideration in determining CO hotspots.

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. In response, vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the SCAB is now designated as attainment.

To establish a more accurate record of baseline CO concentrations affecting the SCAB, a CO "hot spot" analysis was conducted in 2003 for four busy intersections in Los Angeles at the peak morning and afternoon time periods. This "hot spot" analysis did not predict any violation of CO standards, as shown on Table 5-14.

TABLE 5-14: CO MODEL RESULTS

Intersection Location	CO Concentrations (ppm)		
	Morning 1-hour	Afternoon 1-hour	8-hour
Wilshire Boulevard/ Veteran Avenue	4.6	3.5	3.7
Sunset Boulevard/ Highland Avenue	4	4.5	3.5
La Cienega Boulevard/ Century Boulevard	3.7	3.1	5.2
Long Beach Boulevard/ Imperial Highway	3	3.1	8.4

Source: 2003 AQMP, Appendix V: Modeling and Attainment Demonstrations
Notes: Federal 1-hour standard is 35 ppm and the deferral 8-hour standard is 9.0 ppm.

Based on the SCAQMD's 2003 AQMP and the 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan), peak carbon monoxide concentrations in the SCAB were a result of unusual meteorological and topographical conditions and not a result of traffic volumes and congestion at a particular intersection. As evidence of this, for example, 8.4 ppm 8-hr CO concentration measured at the Long Beach Blvd. and Imperial Hwy. intersection (highest CO generating intersection within the "hot spot" analysis), only 0.7 ppm was attributable to the traffic volumes and congestion at this intersection; the remaining 7.7 ppm were due to the ambient air measurements at the time the 2003 AQMP was prepared (45). In contrast, an adverse CO concentration, known as a "hot spot", would occur if an exceedance of the state one-hour standard of 20 parts per million (ppm) or the eight-hour standard of 9 ppm were to occur.

The ambient 1-hr and 8-hr CO concentration within the Project study area is estimated to be 1.9 ppm and 1.4 ppm, respectively (data from Perris Valley monitoring station for 2020). Therefore, even if the traffic volumes for the proposed Project were double or even triple of the traffic volumes generated at the Long Beach Blvd. and Imperial Hwy. intersection, coupled with the on-going improvements in ambient air quality, the Project would not be capable of resulting in a CO "hot spot" at any study area intersections.

For purposes of analysis, the 2003 AQMP was relied on to determine whether the Project would generate a CO "hot spot". The 2003 AQMP, and as previously shown in Table 5-14, estimated that the 1-hour concentration for the Wilshire Boulevard and Veteran Avenue intersection was 4.6 ppm; this indicates that, should the daily traffic volume increase four times to 400,000 vehicles per day, CO concentrations (4.6 ppm x 4= 18.4 ppm) would still not likely exceed the most stringent 1-hour CO standard (20.0 ppm).[14] As shown in the Traffic Analysis on Table 6-2, Opening Year Cumulative (2024) with Proposed Project (Non-Peak) Traffic Volumes, the highest number of trips on a segment of road is 54,548 vehicles per hour on Heacock Street and Cactus Avenue (41). As shown in the Traffic Analysis on Table 6-3, Opening Year Cumulative (2024) with Proposed Project (Peak) Traffic Volumes, the highest number of trips on a segment of road is 54,642 vehicles per hour on Heacock Street and Cactus Avenue (41).

Additionally, traffic volumes generating the CO concentrations for the "hot spot" analysis is shown on Table 5-15. The busiest intersection evaluated for traffic volumes was at La Cienega Boulevard and Century Boulevard, which has a traffic volume of approximately 8,674 vph (45). As shown on Table 5-16, the highest trips on a segment of road for the proposed Project during the non-peak season is 6,861 vph on Heacock Street and Cactus Avenue. During peak season, the highest trips on a segment of road is 6,873 vph on Heacock Street and Cactus Avenue, as shown on Table 5-17. As such, Project-related traffic volumes are less than the traffic volumes identified in the 2003 AQMP. The Project considered herein would not produce the volume of traffic required to generate a CO "hot spot" either in the context of the 2003 Los Angeles hot spot study or based on representative BAAQMD CO threshold considerations. Therefore, CO "hot spots" are not an environmental impact of concern for the Project.

[14] Based on the ratio of the CO standard (20.0 ppm) and the modeled value (4.6 ppm).

TABLE 5-15: TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Eastbound (AM/PM)	Westbound (AM/PM)	Southbound (AM/PM)	Northbound (AM/PM)	Total (AM/PM)
Wilshire Boulevard/ Veteran Avenue	4,954/2,069	1,830/3,317	721/1,400	560/933	8,062/7,719
Sunset Boulevard/ Highland Avenue	1,417/1,764	1,342/1,540	2,304/1,832	1,551/2,238	6,614/5,374
La Cienega Boulevard/ Century Boulevard	2,540/2,243	1,890/2,728	1,384/2,029	821/1,674	6,634/8,674
Long Beach Boulevard/ Imperial Highway	1,217/2,020	1,760/1,400	479/944	756/1,150	4,212/5,514

TABLE 5-16: OPENING YEAR CUMULATIVE (2024) WITH PROJECT (NON-PEAK) TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
I-215 Northbound Ramps/ Harley Knox Boulevard	332/364	0/0	1,511/1,069	1,465/1,833	3,308/3,266
Western Way/ Harley Knox Boulevard	3/6	52/143	1,433/1,045	1,494/1,733	2,982/2,927
Heacock Street/ Cactus Avenue	1,493/1,448	572/914	1,865/3,472	2,126/1,027	6,057/6,861
Heacock Street & Meyer Drive/ John F Kennedy Drive	1,064/1,157	916/1,475	191/558	466/304	2,637/3,494
Indian Avenue/ San Michele Road	1,861/1,084	146/509	558/2,239	1,007/747	3,572/4,579
Indian Avenue/ Nandina Avenue	2,056/896	501/1,507	192/663	95/266	2,845/3,332

TABLE 5-17: OPENING YEAR CUMULATIVE (2024) WITH PROJECT (PEAK) TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
I-215 Northbound Ramps/ Harley Knox Boulevard	340/365	0/0	1,519/1,076	1,475/1,849	3,334/3,290
Western Way/ Harley Knox Boulevard	3/6	51/143	1,449/1,053	1,505/1,750	3,008/2,952
Heacock Street/ Cactus Avenue	1,503/1,459	567/914	1,875/3,472	2,132/1,028	6,077/6,873
Heacock Street & Meyer Drive/ John F Kennedy Drive	1,073/1,168	923/1,475	191/558	468/304	2,655/3,505
Indian Avenue/ San Michele Road	1,879/1,084	146/509	569/2,250	1,012/747	3,606/4,590
Indian Avenue/ Nandina Avenue	2,078/904	509/1,516	196/673	95/266	2,879/3,359

5.8 AIR QUALITY MANAGEMENT PLANNING

The Project site is located within the SCAB, which is characterized by relatively poor air quality. The SCAQMD has jurisdiction over an approximately 10,743 square-mile area consisting of the four-county Basin and the Los Angeles County and Riverside County portions of what used to be referred to as the Southeast Desert Air Basin. In these areas, the SCAQMD is principally responsible for air pollution control, and works directly with the SCAG, county transportation commissions, local governments, as well as state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

Currently, these state and federal air quality standards are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of AQMPs to meet the state and federal ambient air quality standards. AQMPs are updated regularly in order to more effectively reduce emissions, accommodate growth, and to minimize any negative fiscal impacts of air pollution control on the economy.

In March 2017, the SCAQMD released the *2016 AQMP*. The *2016 AQMP* continues to evaluate current integrated strategies and control measures to meet the NAAQS, and to explore new and innovative methods to reach its goals. Some of these approaches include utilizing incentive programs, recognizing existing co-benefit programs from other sectors, and developing a strategy with fair-share reductions at the federal, state, and local levels (46). Similar to the 2012 AQMP, the *2016 AQMP* incorporates scientific and technological information and planning assumptions, including the *RTP/SCS*, a planning document that supports the integration of land use and transportation to help the region meet the federal Clean Air Act requirements (19). The Project's consistency with the AQMP will be determined using the *2016 AQMP* as discussed below.

The 2022 AQMP is currently being developed by SCAQMD to address the EPA's strengthened ozone standard. Development of the 2022 AQMP is in its early stages and no formal timeline for completion and adoption is currently known.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the *1993 CEQA Handbook* (47). These indicators are discussed below:

5.8.1 CONSISTENCY CRITERION NO. 1

The proposed Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.

The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if regional or localized significance thresholds were exceeded.

Construction Impacts – Consistency Criterion 1

As evaluated, the Project's regional and localized construction-source emissions would not exceed applicable regional significance threshold and LST thresholds and emissions would be further reduced after implementation of MM AQ-1 and MM AQ-2. As such, a less than significant impact is expected.

Operational Impacts – Consistency Criterion 1

The Project would not exceed the applicable LSTs for operational activity. However, the Project's operational-source emissions are anticipated to exceed the regional thresholds of significance for VOC, NO_X, and CO emissions. Aircraft emissions comprise the vast majority of the Project's emissions and there are no feasible mitigation measures to reduce aircraft emissions. The Project will implement MM AQ-3 through MM AQ-6, which will reduce the Project's VOC, NO_x and CO emissions, but it is not possible to quantify the reductions. As such, the Project has the potential to result in a significant impact with respect to this criterion and the Project would have the potential to conflict with the AQMP according to this criterion.

On the basis of the preceding discussion, the Project is determined to be inconsistent with the first criterion.

5.8.2 CONSISTENCY CRITERION NO. 2

The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

The 2016 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in March JPA General Plan is considered to be consistent with the AQMP.

Construction Impacts – Consistency Criterion 2

Peak day emissions generated by construction activities are largely independent of land use assignments, but rather are a function of development scope and maximum area of disturbance. Irrespective of the site's land use designation, development of the site to its maximum potential would likely occur, with disturbance of the entire site occurring during construction activities.

Operational Impacts – Consistency Criterion 2

The Project will operate within portions of two parcels, designated as Assessor's Parcel Numbers (APNs) 294-170-010 and 294-170-006. The Project site is owned by March JPA and is designated Aviation under the March JPA General Plan. The primary purpose of the Aviation designation is to provide for the development of uses which are related to the operation of air cargo and passenger service aircraft such as: aircraft maintenance, aircraft hangars, air cargo distribution facilities, and other uses which are related to airport operations (48).

As previously stated, the proposed Project includes the development of a gateway air freight cargo center, which consists of the construction of a development of a gateway air freight cargo center, which consists of construction of a 180,800 square foot cargo building with 9 at-grade (ground level) loading doors, 31 dock-high door positions, and 37 trailer storage positions. The cargo building would contain approximately 9,000 square feet of office space. The cargo building would be constructed to a maximum height of 45-feet. The Project would also construct a tarmac and parking apron sized to accommodate commercial cargo airplanes, allowing for aircraft to access 4 proposed parking gates along the northern side of the cargo building. The Project would have a parking apron sized to accommodate commercial cargo airplanes, paved to meet FAA standards and utilize the existing taxiway to access the March Inland port Airport runway.

However, as the Project's operational-source air pollutant emissions would exceed the regional thresholds, the Project is determined to conflict with the second criterion.

5.8.3 AQMP CONSISTENCY CONCLUSION

The Project has the potential to result in or cause NAAQS or CAAQS violations. Operational-source emissions would exceed the applicable SCAQMD regional thresholds for VOC, NO_X, and CO. As such, the Project is considered to have the potential to conflict with the AQMP and a potential significant impact would occur with respect to this threshold.

5.9 RTP/SCS CONSISTENCY

The proposed Project would increase regional employment by approximately 150 jobs (42). According to SCAG's *2016-2040 RTP/SCS*, which is the basis for the 2016 AQMP, employment within Riverside County in 2015 is approximately 742,000 jobs with an anticipated increase to approximately 1,175,000 jobs by 2040, a growth of approximately 433,000 jobs (49). The proposed Project represents 0.04% of the anticipated increase in jobs, and therefore, would not result in long-term operational employment growth that exceeds planned growth projections in the RTP/SCS or the AQMP, or result in employment growth that would substantially add to traffic congestion.

Furthermore, according to SCAG's *2020-2045 RTP/SCS*, employment within Riverside County in 2019 is approximately 812,800 jobs with an anticipated increase to approximately 1,063,800 jobs by 2045, a growth of approximately 251,000 jobs (50). The proposed Project represents 0.06% of the anticipated increase in jobs, and therefore, would not result in long-term operational employment growth that exceeds planned growth projections in the RTP/SCS or the AQMP, or result in employment growth that would substantially add to traffic congestion.

5.10 POTENTIAL IMPACTS TO SENSITIVE RECEPTORS

The potential impact of Project-generated air pollutant emissions on sensitive receptors has also been considered. Sensitive receptors can include uses such as long-term health care facilities, rehabilitation centers, and retirement homes. Residences, schools, playgrounds, childcare centers, and athletic facilities can also be considered as sensitive receptors.

Results of the LST analysis indicate that the Project would not exceed the SCAQMD localized significance thresholds during construction. Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations during Project construction.

Results of the LST analysis indicate that the Project would not exceed the SCAQMD localized significance thresholds during operational activity. Further Project traffic would not create or result in a CO "hotspot." Therefore, sensitive receptors would not be exposed to substantial pollutant concentrations as the result of Project operations.

5.10.1 TOXIC AIR CONTAMINANTS

The Project would have a significant impact if it results in a maximum incremental cancer risk ≥10 in one million and/or a chronic & acute hazard index that is ≥1.0.

A Health Risk Assessment (HRA) has been prepared by Urban Crossroads, Inc. under a separate cover. The results of the *Meridian D-1 Gateway Aviation Center Mobile Source Health Risk Assessment* (Urban Crossroads, Inc.) indicate that the Project would not result in any significant health risk impacts from exposure to TACs resulting from the Project.

5.11 ODORS

The potential for the Project to generate objectionable odors has also been considered. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities. Standard construction requirements (i.e., use of SCAQMD-compliant coatings and paving materials) would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction would be less than significant and no mitigation is required (51).

According to the SCAQMD, land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The proposed Project does not include any uses identified by the SCAQMD as being associated with emitting objectionable odors. As the proposed Project operational activities do not include these sources of odors, potential odor impacts would be less than significant.

5.12 CUMULATIVE IMPACTS

As previously shown in Table 2-3, the CAAQS designate the SCAB as nonattainment for O_3, PM_{10}, and $PM_{2.5}$ while the NAAQS designates the SCAB as nonattainment for O_3 and $PM_{2.5}$.

The SCAQMD has published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (52). In this report the SCAQMD clearly states (Page D-3):

> *…the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for TAC emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.*
>
> *Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.*

Therefore, this analysis assumes that individual projects that do not generate operational or construction emissions that exceed the SCAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. Alternatively, individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable.

CONSTRUCTION IMPACTS

As discussed herein, all construction-source criteria pollutant emissions impacts would be less-than-significant at the Project level, and would therefore per SCAQMD criteria, not be cumulatively significant.

OPERATIONAL-SOURCE EMISSIONS

The proposed Project has the potential to result in cumulative impacts associated with on-going operations for emissions of VOC, NO_X, and CO. Therefore, the proposed Project would have the potential to result in a cumulatively considerable significant impact with respect to operational activity.

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7 CERTIFICATIONS

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Meridian D-1 Gateway Aviation Center. The information contained in this air quality impact assessment report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at hqureshi@urbanxroads.com.

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Master of Science in Environmental Studies
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AEP – Association of Environmental Planners
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Planned Communities and Urban Infill – Urban Land Institute • June 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April 2008
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APPENDIX 2.1:

STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS

APPENDIX C

MAPS AND TABLES OF AREA DESIGNATIONS FOR STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS

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APPENDIX C

MAPS AND TABLES OF AREA DESIGNATIONS FOR STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS

This attachment fulfills the requirement of Health and Safety Code section 40718 for CARB to publish maps that identify areas where one or more violations of any State ambient air quality standard (State standard) or national ambient air quality standard (national standard) have been measured. The national standards are those promulgated under section 109 of the federal Clean Air Act (42 U.S.C. 7409).

This attachment is divided into three parts. The first part comprises a table showing the levels, averaging times, and measurement methods for each of the State and national standards. This is followed by a section containing maps and tables showing the area designations for each pollutant for which there is a State standard in the California Code of Regulations, title 17, section 70200. The last section contains maps and tables showing the most current area designations for the national standards.

Ambient Air Quality Standards

(Updated 5/4/16)

Pollutant	Averaging Time	California Standards [1]		National Standards [2]		
		Concentration [3]	Method [4]	Primary [3,5]	Secondary [3,6]	Method [7]
Ozone (O_3)[8]	1 Hour	0.09 ppm (180 $\mu g/m^3$)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 $\mu g/m^3$)		0.070 ppm (137 $\mu g/m^3$)		
Respirable Particulate Matter (PM10)[9]	24 Hour	50 $\mu g/m^3$	Gravimetric or Beta Attenuation	150 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 $\mu g/m^3$		—		
Fine Particulate Matter (PM2.5)[9]	24 Hour	—	—	35 $\mu g/m^3$	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 $\mu g/m^3$	Gravimetric or Beta Attenuation	12.0 $\mu g/m^3$	15 $\mu g/m^3$	
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m^3)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m^3)		9 ppm (10 mg/m^3)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m^3)		—	—	
Nitrogen Dioxide (NO_2)[10]	1 Hour	0.18 ppm (339 $\mu g/m^3$)	Gas Phase Chemiluminescence	100 ppb (188 $\mu g/m^3$)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 $\mu g/m^3$)		0.053 ppm (100 $\mu g/m^3$)	Same as Primary Standard	
Sulfur Dioxide (SO_2)[11]	1 Hour	0.25 ppm (655 $\mu g/m^3$)	Ultraviolet Fluorescence	75 ppb (196 $\mu g/m^3$)	—	Ultraviolet Flourescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 $\mu g/m^3$)	
	24 Hour	0.04 ppm (105 $\mu g/m^3$)		0.14 ppm (for certain areas)[11]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[11]	—	
Lead[12,13]	30 Day Average	1.5 $\mu g/m^3$	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 $\mu g/m^3$ (for certain areas)[12]	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 $\mu g/m^3$		
Visibility Reducing Particles[14]	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 $\mu g/m^3$	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 $\mu g/m^3$)	Ultraviolet Fluorescence			
Vinyl Chloride[12]	24 Hour	0.01 ppm (26 $\mu g/m^3$)	Gas Chromatography			

See footnotes on next page …

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, and particulate matter (PM10, PM2.5, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 μg/m^3 is equal to or less than one. For PM2.5, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent measurement method which can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.

8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.

9. On December 14, 2012, the national annual PM2.5 primary standard was lowered from 15 μg/m^3 to 12.0 μg/m^3. The existing national 24-hour PM2.5 standards (primary and secondary) were retained at 35 μg/m^3, as was the annual secondary standard of 15 μg/m^3. The existing 24-hour PM10 standards (primary and secondary) of 150 μg/m^3 also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

    Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.

12. The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 μg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

14. In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

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Area Designations for the State Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a State standard set forth in the California Code of Regulations, title 17, section 60200. Each area is identified as attainment, nonattainment, nonattainment-transitional, or unclassified for each pollutant, as shown below:

Attainment	A
Nonattainment	N
Nonattainment-Transitional	NA-T
Unclassified	U

In general, CARB designates areas by air basin for pollutants with a regional impact and by county for pollutants with a more local impact. However, when there are areas within an air basin or county with distinctly different air quality deriving from sources and conditions not affecting the entire air basin or county, CARB may designate a smaller area. Generally, when boundaries of the designated area differ from the air basin or county boundaries, the description of the specific area is referenced at the bottom of the summary table.

FIGURE 1

2018
Area Designations for State
Ambient Air Quality Standards
OZONE
N
0 50 100 200
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Humboldt
Trinity
Tehema
SACRAMENTO VALLEY
Plumas
SUTTER BUTTES
Butte
Glenn
Mendocino
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
LAKE COUNTY
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sac
Alpine
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
San Joaquin
Contra Costa
Tuolumne
Mono
San Francisco
GREAT BASIN VALLEYS
Alameda
Mariposa
San Mateo
Stanislaus
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Los Angeles
MOJAVE DESERT
Ventura
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
SALTON SEA
Unclassified
Attainment
Nonattainment-Transitional
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 1

California Ambient Air Quality Standards
Area Designations for Ozone (1)

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN					NORTHEAST PLATEAU AIR BASIN				X
Alpine County			X		SACRAMENTO VALLEY AIR BASIN				
Inyo County	X				Colusa and Glenn Counties				X
Mono County	X				Sutter/Yuba Counties				
LAKE COUNTY AIR BASIN				X	Sutter Buttes	X			
LAKE TAHOE AIR BASIN				X	Remainder of Sutter County				X
MOJAVE DESERT AIR BASIN	X				Yuba County				X
MOUNTAIN COUNTIES AIR BASIN					Yolo/Solano Counties		X		
Amador County	X				Remainder of Air Basin	X			
Calaveras County	X				SALTON SEA AIR BASIN	X			
El Dorado County (portion)	X				SAN DIEGO AIR BASIN	X			
Mariposa County	X				SAN FRANCISCO BAY AREA AIR BASIN	X			
Nevada County	X				SAN JOAQUIN VALLEY AIR BASIN	X			
Placer County (portion)	X				SOUTH CENTRAL COAST AIR BASIN				
Plumas County			X		San Luis Obispo County	X			
Sierra County			X		Santa Barbara County		X		
Tuolumne County	X				Ventura County	X			
NORTH CENTRAL COAST AIR BASIN		X			SOUTH COAST AIR BASIN	X			
NORTH COAST AIR BASIN				X					

(1) AB 3048 (Olberg) and AB 2525 (Miller) signed into law in 1996, made changes to Health and Safety Code, section 40925.5. One of the changes allows nonattainment districts to become nonattainment-transitional for ozone by operation of law.

FIGURE 2

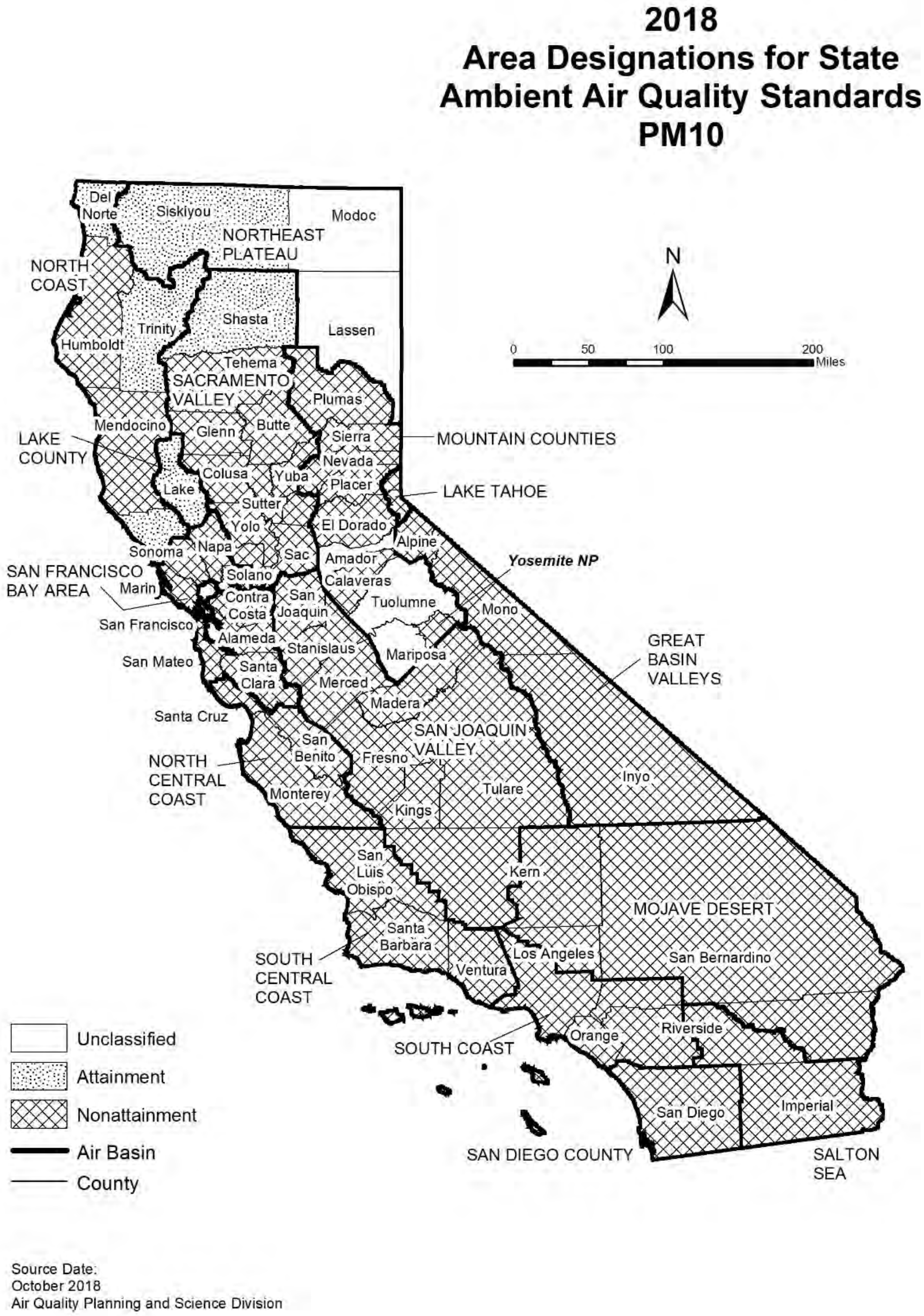

2018
Area Designations for State
Ambient Air Quality Standards
PM10
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
LAKE COUNTY
Nevada
Colusa
Yuba
Placer
Lake
LAKE TAHOE
Sutter
Yolo
El Dorado
Alpine
Sonoma
Napa
Sac
Amador
Yosemite NP
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
San Francisco
Alameda
Stanislaus
Mariposa
GREAT BASIN VALLEYS
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
NORTH CENTRAL COAST
Fresno
Inyo
Monterey
Tulare
Kings
San Luis Obispo
Kern
MOJAVE DESERT
Santa Barbara
Los Angeles
San Bernardino
Ventura
SOUTH CENTRAL COAST
Orange
Riverside
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
SALTON SEA
N
0
50
100
200
Miles
Unclassified
Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 2

California Ambient Air Quality Standards
Area Designation for Suspended Particulate Matter (PM10)

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN	X			NORTH CENTRAL COAST AIR BASIN	X		
LAKE COUNTY AIR BASIN			X	NORTH COAST AIR BASIN			
LAKE TAHOE AIR BASIN	X			Del Norte, Sonoma (portion) and Trinity Counties			X
MOJAVE DESERT AIR BASIN	X			Remainder of Air Basin	X		
MOUNTAIN COUNTIES AIR BASIN				NORTHEAST PLATEAU AIR BASIN			
Amador County		X		Siskiyou County			X
Calaveras County	X			Remainder of Air Basin		X	
El Dorado County (portion)	X			SACRAMENTO VALLEY AIR BASIN			
Mariposa County				Shasta County			X
- Yosemite National Park	X			Remainder of Air Basin	X		
- Remainder of County		X		SALTON SEA AIR BASIN	X		
Nevada County	X			SAN DIEGO AIR BASIN	X		
Placer County (portion)	X			SAN FRANCISCO BAY AREA AIR BASIN	X		
Plumas County	X			SAN JOAQUIN VALLEY AIR BASIN	X		
Sierra County	X			SOUTH CENTRAL COAST AIR BASIN	X		
Tuolumne County		X		SOUTH COAST AIR BASIN	X		

FIGURE 3

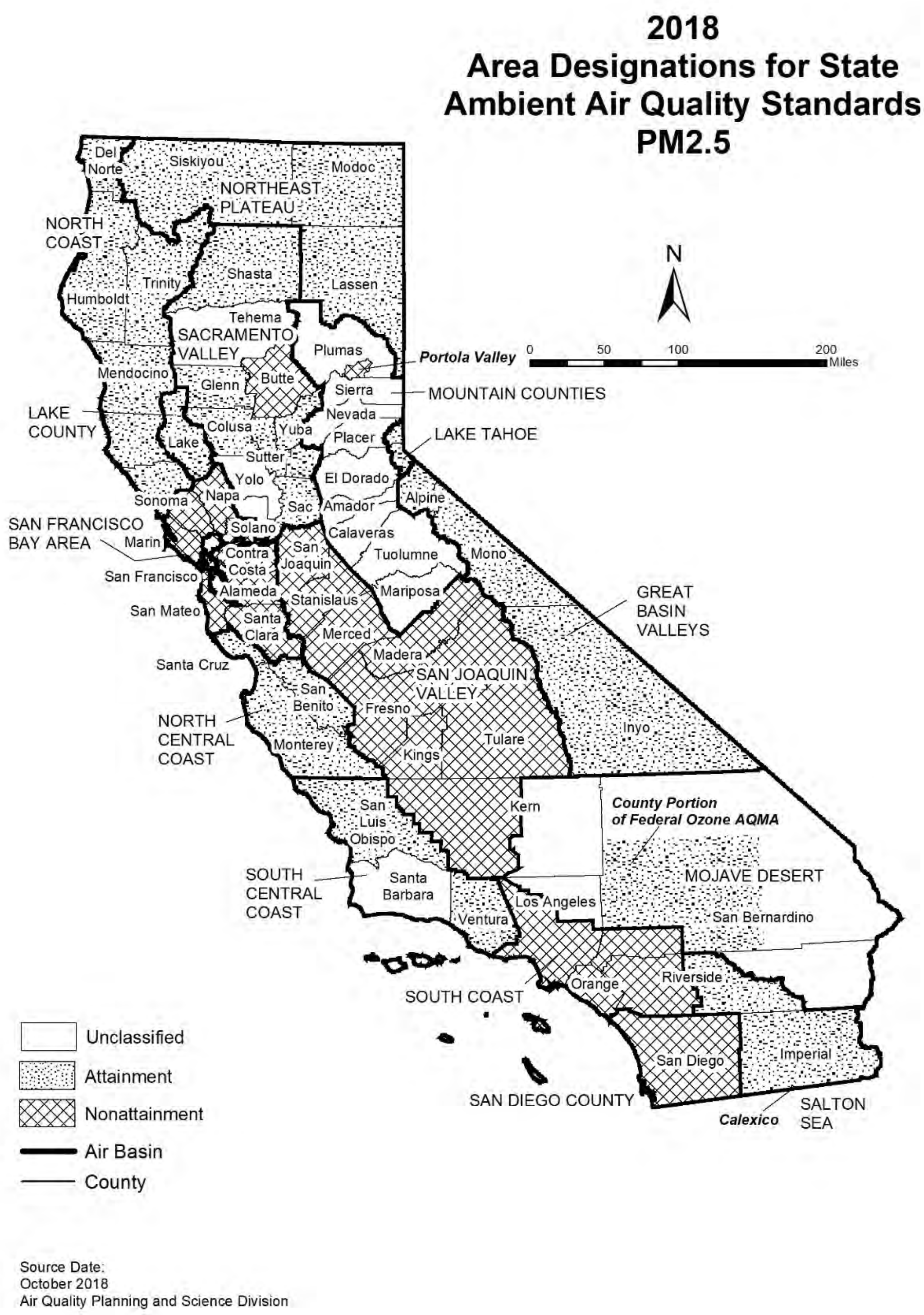

2018
Area Designations for State
Ambient Air Quality Standards
PM2.5
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Portola Valley
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Colusa
Yuba
Lake
Placer
LAKE TAHOE
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
San Francisco
Alameda
Stanislaus
Mariposa
GREAT BASIN VALLEYS
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
Inyo
NORTH CENTRAL COAST
Monterey
Kings
Tulare
San Luis Obispo
Kern
County Portion of Federal Ozone AQMA
MOJAVE DESERT
SOUTH CENTRAL COAST
Santa Barbara
Los Angeles
Ventura
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Calexico
SALTON SEA
N
0
50
100
200
Miles
Unclassified
Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 3

California Ambient Air Quality Standards
Area Designations for Fine Particulate Matter (PM2.5)

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SALTON SEA AIR BASIN			
LAKE COUNTY AIR BASIN			X	Imperial County			
LAKE TAHOE AIR BASIN			X	- City of Calexico (3)	X		
MOJAVE DESERT AIR BASIN				Remainder of Air Basin			X
San Bernardino County				SAN DIEGO AIR BASIN	X		
- County portion of federal Southeast Desert Modified AQMA for Ozone (1)			X	SAN FRANCISCO BAY AREA AIR BASIN	X		
				SAN JOAQUIN VALLEY AIR BASIN	X		
Remainder of Air Basin		X		SOUTH CENTRAL COAST AIR BASIN			
MOUNTAIN COUNTIES AIR BASIN				San Luis Obispo County			X
Plumas County				Santa Barbara County		X	
- Portola Valley (2)	X			Ventura County			X
Remainder of Air Basin		X		SOUTH COAST AIR BASIN	X		
NORTH CENTRAL COAST AIR BASIN			X				
NORTH COAST AIR BASIN			X				
NORTHEAST PLATEAU AIR BASIN			X				
SACRAMENTO VALLEY AIR BASIN							
Butte County	X						
Colusa County			X				
Glenn County			X				
Placer County (portion)			X				
Sacramento County			X				
Shasta County			X				
Sutter and Yuba Counties			X				
Remainder of Air Basin		X					

(1) California Code of Regulations, title 17, section 60200(b)

(2) California Code of Regulations, title 17, section 60200(c)

(3) California Code of Regulations, title 17, section 60200(a)

FIGURE 4


2018
Area Designations for State
Ambient Air Quality Standards
CARBON MONOXIDE
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
LAKE COUNTY
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Placer
LAKE TAHOE
Lake
Sutter
Yolo
El Dorado
Sonoma
Napa
Sac
Amador
Alpine
Marin
Solano
Calaveras
SAN FRANCISCO BAY AREA
Contra Costa
San Joaquin
Tuolumne
Mono
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
GREAT BASIN VALLEYS
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Monterey
Kings
Tulare
Inyo
San Luis Obispo
Kern
MOJAVE DESERT
Santa Barbara
SOUTH CENTRAL COAST
Ventura
Los Angeles
San Bernardino
Orange
Riverside
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
SALTON SEA
N
0 50 100 200 Miles
Unclassified
Attainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 4

California Ambient Air Quality Standards
Area Designation for Carbon Monoxide*

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN					SACRAMENTO VALLEY AIR BASIN				
Alpine County			X		Butte County				X
Inyo County				X	Colusa County			X	
Mono County				X	Glenn County			X	
LAKE COUNTY AIR BASIN				X	Placer County (portion)				X
LAKE TAHOE AIR BASIN				X	Sacramento County				X
MOJAVE DESERT AIR BASIN					Shasta County			X	
Kern County (portion)			X		Solano County (portion)				X
Los Angeles County (portion)				X	Sutter County				X
Riverside County (portion)			X		Tehama County			X	
San Bernardino County (portion)				X	Yolo County				X
MOUNTAIN COUNTIES AIR BASIN					Yuba County			X	
Amador County			X		SALTON SEA AIR BASIN				X
Calaveras County			X		SAN DIEGO AIR BASIN				X
El Dorado County (portion)			X		SAN FRANCISCO BAY AREA AIR BASIN				X
Mariposa County			X		SAN JOAQUIN VALLEY AIR BASIN				
Nevada County			X		Fresno County				X
Placer County (portion)			X		Kern County (portion)				X
Plumas County				X	Kings County			X	
Sierra County			X		Madera County			X	
Tuolumne County				X	Merced County			X	
NORTH CENTRAL COAST AIR BASIN					San Joaquin County				X
Monterey County				X	Stanislaus County				X
San Benito County			X		Tulare County				X
Santa Cruz County			X		SOUTH CENTRAL COAST AIR BASIN				X
NORTH COAST AIR BASIN					SOUTH COAST AIR BASIN				X
Del Norte County			X						
Humboldt County				X					
Mendocino County				X					
Sonoma County (portion)			X						
Trinity County			X						
NORTHEAST PLATEAU AIR BASIN			X						

* The area designated for carbon monoxide is a county or portion of a county

FIGURE 5

2018
Area Designations for State Ambient Air Quality Standards NITROGEN DIOXIDE

Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 5

California Ambient Air Quality Standards
Area Designation for Nitrogen Dioxide

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SACRAMENTO VALLEY AIR BASIN			X
LAKE COUNTY AIR BASIN			X	SALTON SEA AIR BASIN			X
LAKE TAHOE AIR BASIN			X	SAN DIEGO AIR BASIN			X
MOJAVE DESERT AIR BASIN			X	SAN FRANCISCO BAY AREA AIR BASIN			X
MOUNTAIN COUNTIES AIR BASIN			X	SAN JOAQUIN VALLEY AIR BASIN			X
NORTH CENTRAL COAST AIR BASIN			X	SOUTH CENTRAL COAST AIR BASIN			X
NORTH COAST AIR BASIN			X	SOUTH COAST AIR BASIN			
NORTHEAST PLATEAU AIR BASIN			X	CA 60 Near-road Portion of San Bernardino, Riverside, and Los Angeles Counties	X		
				Remainder of Air Basin			X

FIGURE 6

Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 6

California Ambient Air Quality Standards
Area Designation for Sulfur Dioxide*

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN		X
LAKE COUNTY AIR BASIN		X	SALTON SEA AIR BASIN		X
LAKE TAHOE AIR BASIN		X	SAN DIEGO AIR BASIN		X
MOJAVE DESERT AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X			

* The area designated for sulfur dioxide is a county or portion of a county

FIGURE 7

Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 7

California Ambient Air Quality Standards
Area Designation for Sulfates

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SACRAMENTO VALLEY AIR BASIN			X
LAKE COUNTY AIR BASIN			X	SALTON SEA AIR BASIN			X
LAKE TAHOE AIR BASIN			X	SAN DIEGO AIR BASIN			X
MOJAVE DESERT AIR BASIN			X	SAN FRANCISCO BAY AREA AIR BASIN			X
MOUNTAIN COUNTIES AIR BASIN			X	SAN JOAQUIN VALLEY AIR BASIN			X
NORTH CENTRAL COAST AIR BASIN			X	SOUTH CENTRAL COAST AIR BASIN			X
NORTH COAST AIR BASIN			X	SOUTH COAST AIR BASIN			X
NORTHEAST PLATEAU AIR BASIN			X				

FIGURE 8


2018
Area Designations for State
Ambient Air Quality Standards
LEAD
N
0
50
100
200
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Humboldt
Trinity
Shasta
Lassen
Tehama
SACRAMENTO VALLEY
Plumas
Butte
Glenn
Mendocino
Sierra
MOUNTAIN COUNTIES
LAKE COUNTY
Nevada
Colusa
Yuba
Placer
LAKE TAHOE
Lake
El Dorado
Yolo
Sonoma
Alpine
Napa
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Tuolumne
San Joaquin
Mono
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
GREAT BASIN VALLEYS
Santa Cruz
Fresno
SAN JOAQUIN VALLEY
San Benito
Inyo
NORTH CENTRAL COAST
Tulare
Monterey
Kings
San Luis Obispo
Kern
MOJAVE DESERT
Santa Barbara
San Bernardino
SOUTH CENTRAL COAST
Ventura
Los Angeles
SOUTH COAST
Orange
Riverside
San Diego
Imperial
SAN DIEGO COUNTY
SALTON SEA
Attainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 8

California Ambient Air Quality Standards
Area Designations for Lead (particulate)*

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN			X	SALTON SEA AIR BASIN			X
LAKE COUNTY AIR BASIN			X	SAN DIEGO AIR BASIN			X
LAKE TAHOE AIR BASIN			X	SAN FRANCISCO BAY AREA AIR BASIN			X
MOJAVE DESERT AIR BASIN			X	SAN JOAQUIN VALLEY AIR BASIN			X
MOUNTAIN COUNTIES AIR BASIN			X	SOUTH CENTRAL COAST AIR BASIN			X
NORTH CENTRAL COAST AIR BASIN			X	SOUTH COAST AIR BASIN			X
NORTH COAST AIR BASIN			X				
NORTHEAST PLATEAU AIR BASIN			X				
SACRAMENTO VALLEY AIR BASIN			X				

* The area designated for lead is a county or portion of a county. Since all areas in the State are in attainment for this standard, air basins are indicated here for simplicity.

FIGURE 9

2018
Area Designations for State Ambient Air Quality Standards
HYDROGEN SULFIDE

Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 9

California Ambient Air Quality Standards
Area Designation for Hydrogen Sulfide*

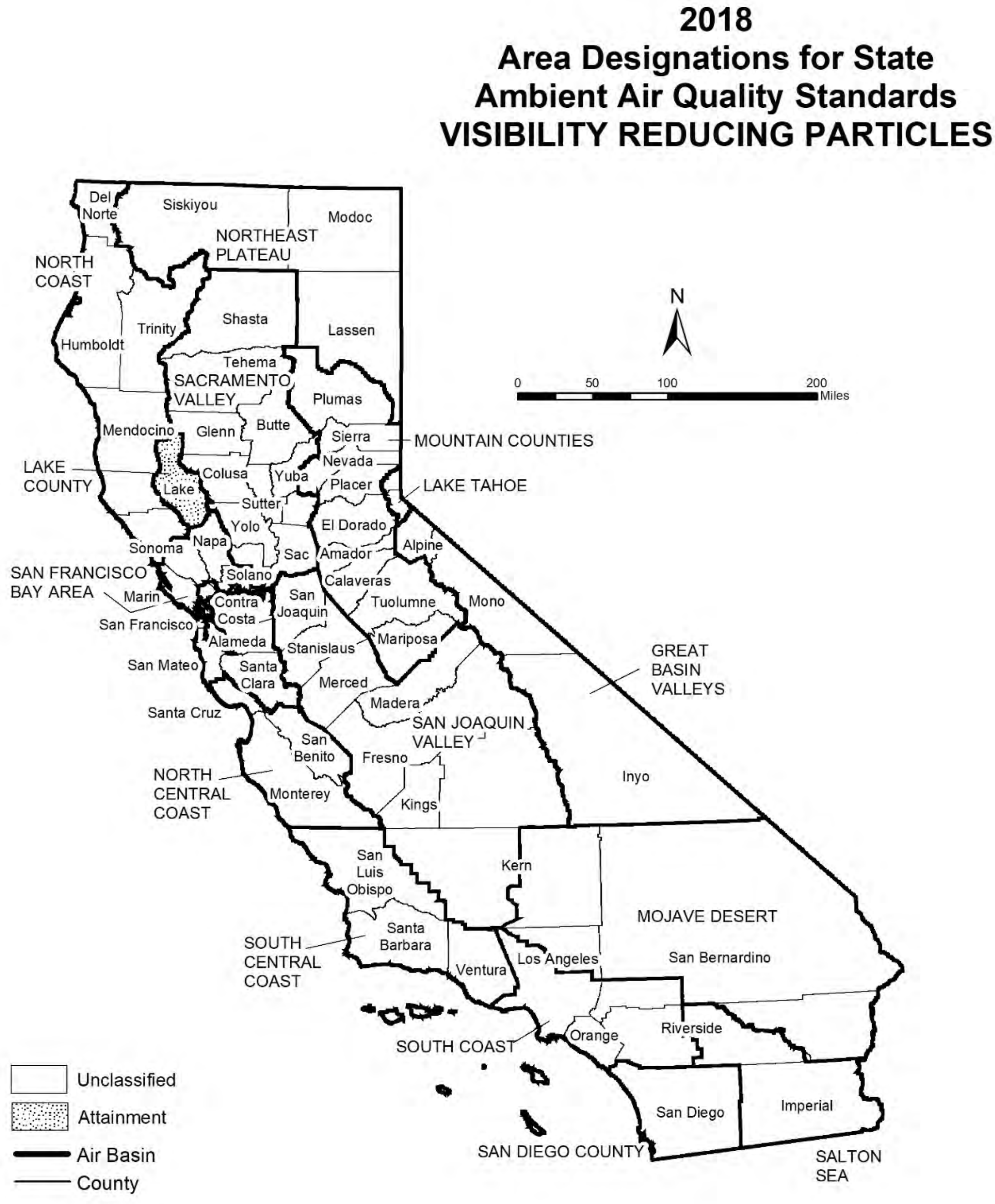
	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN					NORTH CENTRAL COAST AIR BASIN			X	
Alpine County			X		NORTH COAST AIR BASIN				
Inyo County				X	Del Norte County			X	
Mono County				X	Humboldt County				X
LAKE COUNTY AIR BASIN				X	Mendocino County			X	
LAKE TAHOE AIR BASIN			X		Sonoma County (portion)				
MOJAVE DESERT AIR BASIN					- Geyser Geothermal Area (2)				X
Kern County (portion)			X		- Remainder of County			X	
Los Angeles County (portion)			X		Trinity County			X	
Riverside County (portion)			X		NORTHEAST PLATEAU AIR BASIN			X	
San Bernardino County (portion)					SACRAMENTO VALLEY AIR BASIN			X	
- Searles Valley Planning Area (1)	X				SALTON SEA AIR BASIN			X	
- Remainder of County			X		SAN DIEGO AIR BASIN			X	
MOUNTAIN COUNTIES AIR BASIN					SAN FRANCISCO BAY AREA AIR BASIN			X	
Amador County					SAN JOAQUIN VALLEY AIR BASIN			X	
- City of Sutter Creek	X				SOUTH CENTRAL COAST AIR BASIN				
- Remainder of County			X		San Luis Obispo County				X
Calaveras County			X		Santa Barbara County				X
El Dorado County (portion)			X		Ventura County			X	
Mariposa County			X		SOUTH COAST AIR BASIN			X	
Nevada County			X						
Placer County (portion)			X						
Plumas County			X						
Sierra County			X						
Tuolumne County			X						

* The area designated for hydrogen sulfide is a county or portion of a county

(1) 52 Federal Register 29384 (August 7, 1987)

(2) California Code of Regulations, title 17, section 60200(d)

FIGURE 10



Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 10

California Ambient Air Quality Standards
Area Designation for Visibility Reducing Particles

	N	NA-T	U	A		N	NA-T	U	A
GREAT BASIN VALLEYS AIR BASIN			X		SACRAMENTO VALLEY AIR BASIN			X	
LAKE COUNTY AIR BASIN				X	SALTON SEA AIR BASIN			X	
LAKE TAHOE AIR BASIN			X		SAN DIEGO AIR BASIN			X	
MOJAVE DESERT AIR BASIN			X		SAN FRANCISCO BAY AREA AIR BASIN			X	
MOUNTAIN COUNTIES AIR BASIN			X		SAN JOAQUIN VALLEY AIR BASIN			X	
NORTH CENTRAL COAST AIR BASIN			X		SOUTH CENTRAL COAST AIR BASIN			X	
NORTH COAST AIR BASIN			X		SOUTH COAST AIR BASIN			X	
NORTHEAST PLATEAU AIR BASIN			X						

Area Designations for the National Ambient Air Quality Standards

The following maps and tables show the area designations for each pollutant with a national ambient air quality standard. Additional information about the federal area designations is available on the U.S. EPA website:

https://www.epa.gov/green-book

Over the last several years, U.S. EPA has been reviewing the levels of the various national standards. The agency has already promulgated new standard levels for some pollutants and is considering revising the levels for others. Information about the status of these reviews is available on the U.S. EPA website:

https://www.epa.gov/criteria-air-pollutants

<u>Designation Categories</u>

Suspended Particulate Matter (PM_{10}). The U.S. EPA uses three categories to designate areas with respect to PM_{10}:

- Attainment
- Nonattainment
- Unclassifiable

Ozone, Fine Suspended Particulate Matter ($PM_{2.5}$), Carbon Monoxide (CO), and Nitrogen Dioxide (NO_2). The U.S. EPA uses two categories to designate areas with respect to these standards:

- Nonattainment
- Unclassifiable/Attainment

The national 1-hour ozone standard was revoked effective June 15, 2005, and the area designations map reflects the 2015 national 8-hour ozone standard of 0.070 ppm. Original designations were finalized on August 3, 2018.

On December 14, 2012, the U.S. EPA established a new national annual primary $PM_{2.5}$ standard of 12.0 $\mu g/m^3$. New area designations reflecting this revised standard became final in December 2014. The current designation map reflects the most recently revised (2012) annual average standard of 12.0 $\mu g/m^3$ as well as the 24-hour standard of 35 $\mu g/m^3$, revised in 2006.

On January 22, 2010, the U.S. EPA established a new national 1-hour NO_2 standard of 100 parts per billion (ppb) and retained the annual average standard of 53 ppb. Designations for the primary NO_2 standard became effective on February 29, 2012. All areas of California meet this standard.

Sulfur Dioxide (SO_2). The U.S. EPA uses three categories to designate areas with respect to the 24-hour and annual average sulfur dioxide standards. These designation categories are:

- Nonattainment,
- Unclassifiable, and
- Attainment/Unclassifiable.

On June 2, 2010, the U.S. EPA established a new primary 1-hour SO_2 standard of 75 parts per billion (ppb). At the same time, U.S. EPA revoked the 24-hour and annual average standards. Area designations for the 1-hour SO_2 standard were finalized on December 21, 2017 and are reflected in the area designations map.

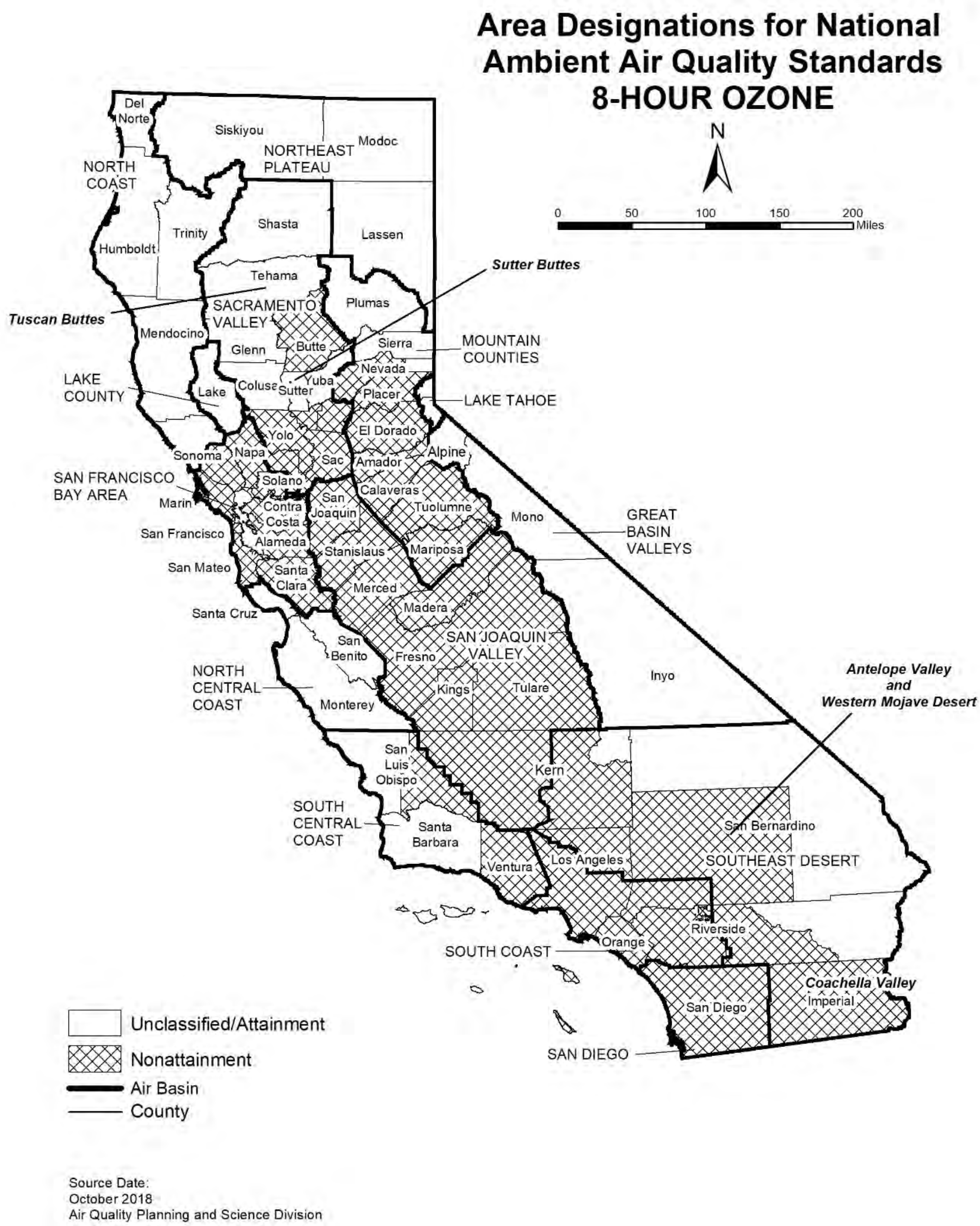
Lead (particulate). The U.S. EPA promulgated a new rolling 3-month average lead standard in October 2008 of 0.15 µg/m^3. Designations were made for this standard in November 2010.

Designation Areas

From time to time, the boundaries of the California air basins have been changed to facilitate the planning process. CARB generally initiates these changes, and they are not always reflected in the U.S. EPA's area designations. For purposes of consistency, the maps in this attachment reflect area designation boundaries and nomenclature as promulgated by the U.S. EPA. In some cases, these may not be the same as those adopted by CARB. For example, the national area designations reflect the former Southeast Desert Air Basin. In accordance with Health and Safety Code section 39606.1, CARB redefined this area in 1996 to be the Mojave Desert Air Basin and Salton Sea Air Basin. The definitions and boundaries for all areas designated for the national standards can be found in Title 40, Code of Federal Regulations (CFR), Chapter I, Subchapter C, Part 81.305. They are available on the web at:

https://ecfr.io/Title-40/se40.20.81_1305

FIGURE 11



Area Designations for National
Ambient Air Quality Standards
8-HOUR OZONE
N
0
50
100
150
200
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Trinity
Shasta
Lassen
Humboldt
Tehama
Sutter Buttes
Tuscan Buttes
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
LAKE COUNTY
Lake
Colusa
Yuba
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sac
Alpine
Amador
SAN FRANCISCO BAY AREA
Solano
Marin
Calaveras
San Joaquin
Contra Costa
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
San Benito
SAN JOAQUIN VALLEY
Fresno
NORTH CENTRAL COAST
Kings
Tulare
Inyo
Antelope Valley and Western Mojave Desert
Monterey
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
San Bernardino
Ventura
Los Angeles
SOUTHEAST DESERT
Riverside
SOUTH COAST
Orange
Coachella Valley
San Diego
Imperial
SAN DIEGO
Unclassified/Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 11

National Ambient Air Quality Standards
Area Designations for 8-Hour Ozone*

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN (cont.)		
LAKE COUNTY AIR BASIN		X	Yolo County (2)	X	
LAKE TAHOE AIR BASIN		X	Yuba County		X
MOUNTAIN COUNTIES AIR BASIN			SAN DIEGO COUNTY	X	
Amador County	X		SAN FRANCISCO BAY AREA AIR BASIN	X	
Calaveras County	X		SAN JOAQUIN VALLEY AIR BASIN	X	
El Dorado County (portion) (2)	X		SOUTH CENTRAL COAST AIR BASIN (1)		
Mariposa County	X		San Luis Obispo County		
Nevada County			- Eastern San Luis Obispo County	X	
- Western Nevada County	X		- Remainder of County		X
- Remainder of County		X	Santa Barbara County		X
Placer County (portion) (2)	X		Ventura County		
Plumas County		X	- Area excluding Anacapa and San Nicolas Islands	X	
Sierra County		X	- Channel Islands (1)		X
Tuolumne County	X		SOUTH COAST AIR BASIN (1)	X	
NORTH CENTRAL COAST AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		
NORTH COAST AIR BASIN		X	Kern County (portion)	X	
NORTHEAST PLATEAU AIR BASIN		X	- Indian Wells Valley		X
SACRAMENTO VALLEY AIR BASIN			Imperial County	X	
Butte County	X		Los Angeles County (portion)	X	
Colusa County		X	Riverside County (portion)		
Glenn County		X	- Coachella Valley	X	
Sacramento Metro Area (2)	X		- Non-AQMA portion		X
Shasta County		X	San Bernardino County		
Sutter County			- Western portion (AQMA)	X	
- Sutter Buttes	X		- Eastern portion (non-AQMA)		X
- Southern portion of Sutter County (2)	X				
- Remainder of Sutter County		X			
Tehama County					
- Tuscan Buttes	X				
- Remainder of Tehama County		X			

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

NOTE: This map and table reflect the 2015 8-hour ozone standard of 0.070 ppm.

(1) South Central Coast Air Basin Channel Islands:
Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.
Ventura County includes Anacapa and San Nicolas Islands.
South Coast Air Basin:
Los Angeles County includes San Clemente and Santa Catalina Islands.

(2) For this purpose, the Sacramento Metro Area comprises all of Sacramento and Yolo Counties, the Sacramento Valley Air Basin portion of Solano County, the southern portion of Sutter County, and the Sacramento Valley and Mountain Counties Air Basins portions of Placer and El Dorado counties.

FIGURE 12

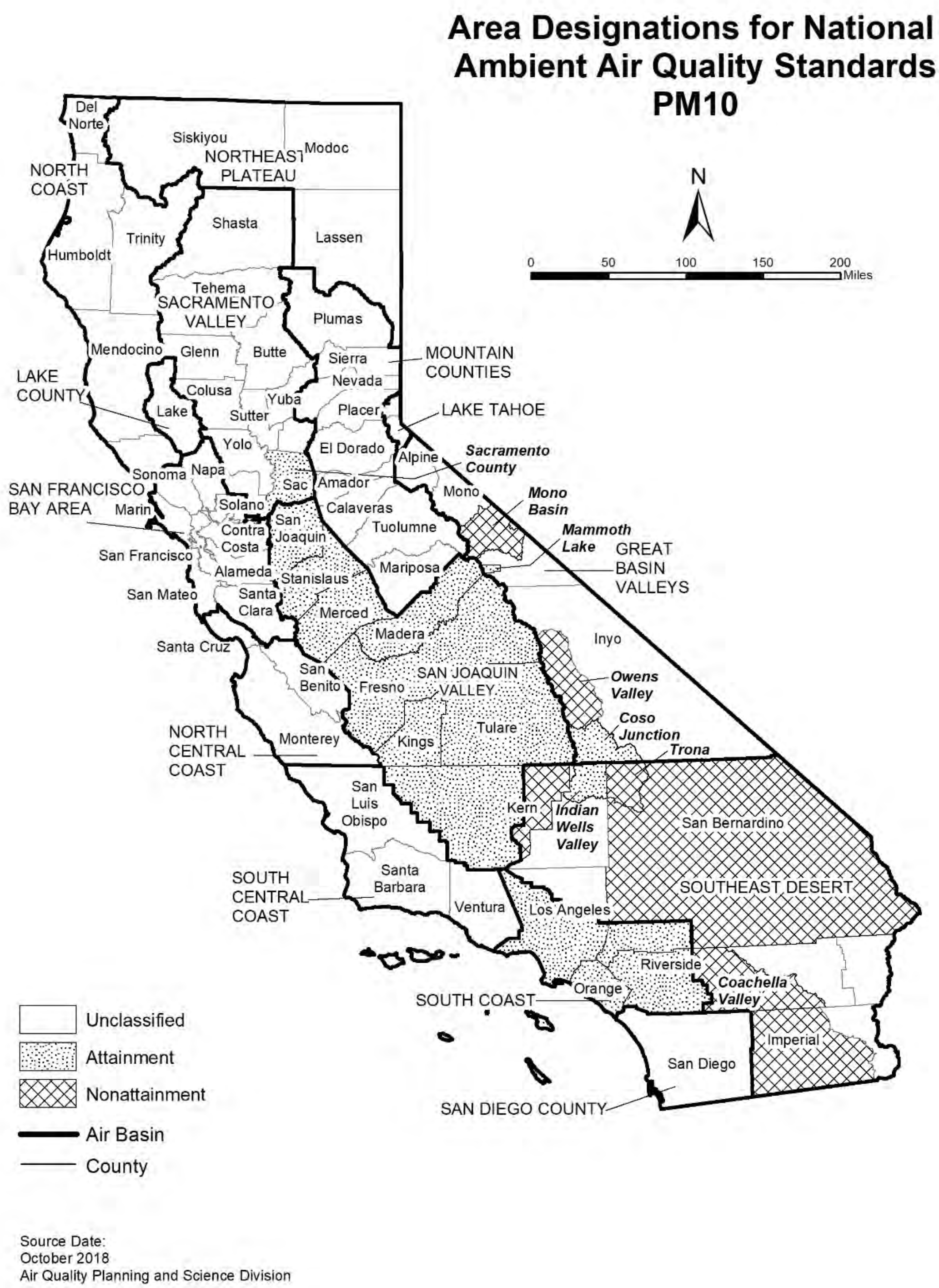

Area Designations for National Ambient Air Quality Standards PM10
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehema
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
Nevada
MOUNTAIN COUNTIES
LAKE COUNTY
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Alpine
Sacramento County
Sonoma
Napa
Sac
Amador
SAN FRANCISCO BAY AREA
Marin
Solano
Mono
Mono Basin
Calaveras
San Joaquin
Contra Costa
Tuolumne
Mammoth Lake
San Francisco
GREAT BASIN VALLEYS
Alameda
Mariposa
Stanislaus
San Mateo
Santa Clara
Merced
Madera
Inyo
Santa Cruz
San Benito
Fresno
SAN JOAQUIN VALLEY
Owens Valley
Tulare
Coso Junction
NORTH CENTRAL COAST
Monterey
Kings
Trona
San Luis Obispo
Kern
Indian Wells Valley
San Bernardino
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
Riverside
Coachella Valley
SOUTH COAST
Orange
Imperial
San Diego
SAN DIEGO COUNTY
Unclassified
Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 12

National Ambient Air Quality Standards
Area Designations for Suspended Particulate Matter (PM10)*

	N	U	A		N	U	A
GREAT BASIN VALLEYS AIR BASIN				SAN DIEGO COUNTY		X	
Alpine County		X		SAN FRANCISCO BAY AREA AIR BASIN		X	
Inyo County				SAN JOAQUIN VALLEY AIR BASIN			X
- Owens Valley Planning Area	X			SOUTH CENTRAL COAST AIR BASIN		X	
- Coso Junction			X	SOUTH COAST AIR BASIN			X
- Remainder of County		X		SOUTHEAST DESERT AIR BASIN			
Mono County				Eastern Kern County			
- Mammoth Lake Planning Area			X	- Indian Wells Valley			X
- Mono Lake Basin	X			- Portion within San Joaquin Valley Planning Area	X		
- Remainder of County		X		- Remainder of County		X	
LAKE COUNTY AIR BASIN		X		Imperial County			
LAKE TAHOE AIR BASIN		X		- Imperial Valley Planning Area	X		
MOUNTAIN COUNTIES AIR BASIN				- Remainder of County		X	
Placer County (portion) (2)		X		Los Angeles County (portion)		X	
Remainder of Air Basin		X		Riverside County (portion)			
NORTH CENTRAL COAST AIR BASIN		X		- Coachella Valley (3)	X		
NORTH COAST AIR BASIN		X		- Non-AQMA portion		X	
NORTHEAST PLATEAU AIR BASIN		X		San Bernardino County			
SACRAMENTO VALLEY AIR BASIN				- Trona	X		
Butte County		X		- Remainder of County	X		
Colusa County		X					
Glenn County		X					
Placer County (portion) (2)		X					
Sacramento County (1)			X				
Shasta County		X					
Solano County (portion)		X					
Sutter County		X					
Tehama County		X					
Yolo County		X					
Yuba County		X					

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.
(1) Air quality in Sacramento County meets the national PM10 standards. The request for redesignation to attainment was approved by U.S. EPA in September 2013.
(2) U.S. EPA designation puts the Sacramento Valley Air Basin portion of Placer County in the Mountain Counties Air Basin.
(3) Air quality in Coachella Valley meets the national PM10 standards. A request for redesignation to attainment has been submitted to U.S. EPA.

FIGURE 13


Area Designations for National Ambient Air Quality Standards PM2.5
N
0 50 100 150 200 Miles
NORTH COAST
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
Humboldt
Trinity
Shasta
Lassen
Tehama
SACRAMENTO VALLEY
Glenn
Butte
Plumas
Sierra
MOUNTAIN COUNTIES
Mendocino
Nevada
LAKE COUNTY
Colusa
Yuba
Placer
Lake
Sutter
LAKE TAHOE
Yolo
El Dorado
Sonoma
Napa
Sacramento
Alpine
Amador
Solano
Calaveras
SAN FRANCISCO BAY AREA
Marin
Tuolumne
Contra Costa
San Joaquin
Mono
GREAT BASIN VALLEYS
Alameda
Stanislaus
Mariposa
San Mateo
Merced
Santa Clara
Madera
Santa Cruz
Fresno
NORTH CENTRAL COAST
San Benito
SAN JOAQUIN VALLEY
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
San Bernardino
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 13

National Ambient Air Quality Standards
Area Designations for Fine Particulate Matter (PM2.5)*

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE COUNTY AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN (2)	X	
LAKE TAHOE AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN	X	
MOUNTAIN COUNTIES AIR BASIN			SOUTH CENTRAL COAST AIR BASIN		X
Plumas County			SOUTH COAST AIR BASIN (3)	X	
- Portola Valley Portion of Plumas	X		SOUTHEAST DESERT AIR BASIN		
- Remainder of Plumas County		X	Imperial County (portion) (4)	X	
Remainder of Air Basin		X	Remainder of Air Basin		X
NORTH CENTRAL COAST AIR BASIN		X			
NORTH COAST AIR BASIN		X			
NORTHEAST PLATEAU AIR BASIN		X			
SACRAMENTO VALLEY AIR BASIN					
Sacramento Metro Area (1)	X				
Sutter County		X			
Yuba County (portion)		X			
Remainder of Air Basin		X			

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305. This map reflects the 2006 24-hour PM2.5 standard as well as the 1997 and 2012 PM2.5 annual standards.

(1) For this purpose, Sacramento Metro Area comprises all of Sacramento and portions of El Dorado, Placer, Solano, and Yolo Counties. Air quality in this area meets the national PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

(2) Air quality in this area meets the national PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

(3) Those lands of the Santa Rosa Band of Cahulla Mission Indians in Riverside County are designated Unclassifiable/Attainment.

(4) That portion of Imperial County encompassing the urban and surrounding areas of Brawley, Calexico, El Centro, Heber, Holtville, Imperial, Seeley, and Westmorland. Air quality in this area meets the national PM2.5 standards. A Determination of Attainment for the 2006 24-hour PM2.5 standard was made by U.S. EPA in June 2017.

FIGURE 14

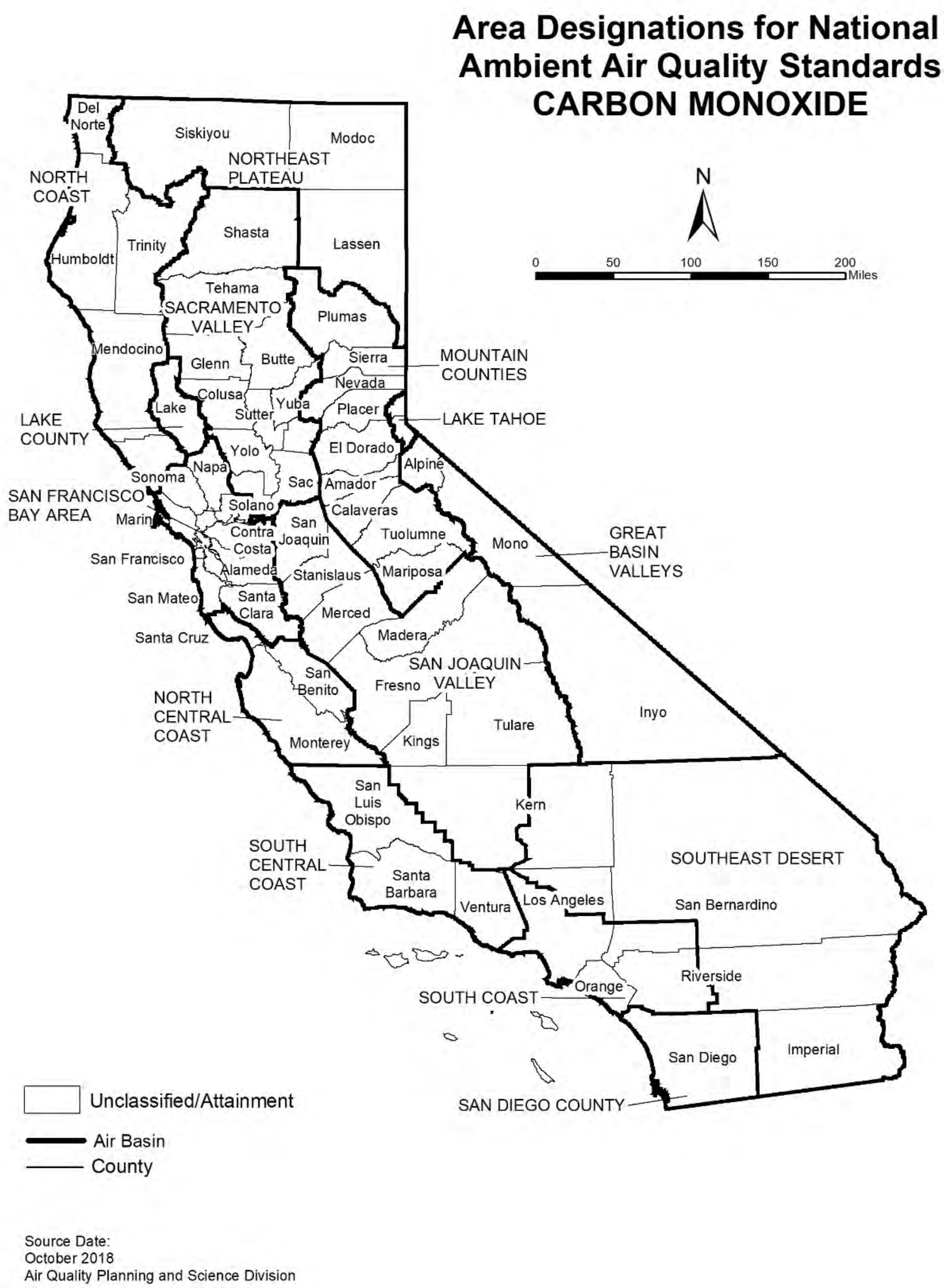

Area Designations for National Ambient Air Quality Standards
CARBON MONOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
LAKE COUNTY
Yolo
El Dorado
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
Contra Costa
San Joaquin
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 14

National Ambient Air Quality Standards
Area Designations for Carbon Monoxide*

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN		X
LAKE COUNTY AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE TAHOE AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		X

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

FIGURE 15


Area Designations for National Ambient Air Quality Standards NITROGEN DIOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehema
Plumas
SACRAMENTO VALLEY
Mendocino
Glenn
Butte
Sierra
Nevada
MOUNTAIN COUNTIES
Colusa
Yuba
LAKE COUNTY
Lake
Sutter
Placer
LAKE TAHOE
Yolo
El Dorado
Napa
Sonoma
Alpine
Sac
Amador
SAN FRANCISCO BAY AREA
Marin
Solano
Contra Costa
San Joaquin
Calaveras
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
NORTH CENTRAL COAST
Fresno
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Los Angeles
San Bernardino
Ventura
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

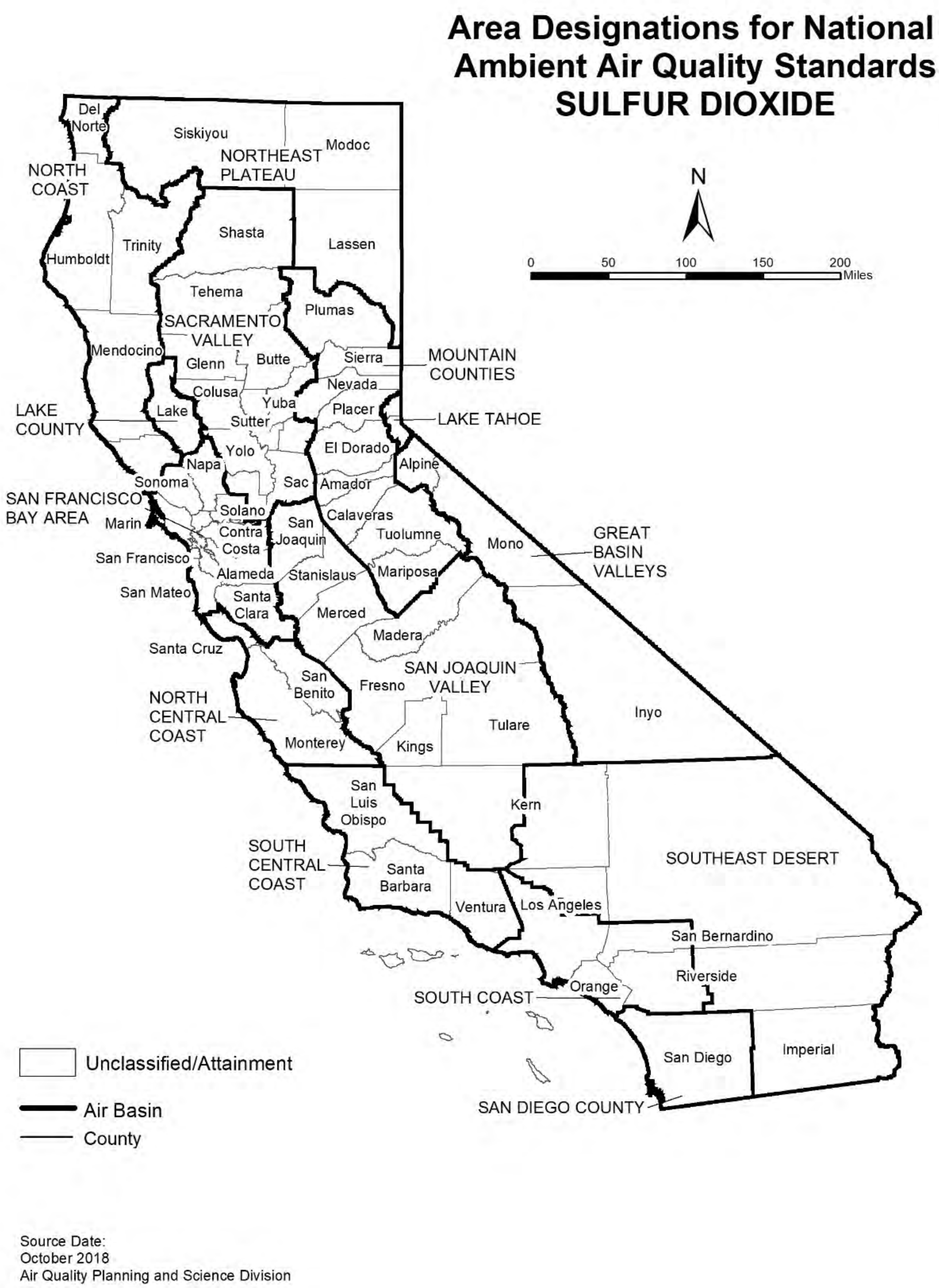
TABLE 15

National Ambient Air Quality Standards
Area Designations for Nitrogen Dioxide*

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SACRAMENTO VALLEY AIR BASIN		X
LAKE COUNTY AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE TAHOE AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		X

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

FIGURE 16



Area Designations for National Ambient Air Quality Standards SULFUR DIOXIDE
N
0 50 100 150 200 Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehema
Plumas
SACRAMENTO VALLEY
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Placer
LAKE COUNTY
Lake
Sutter
LAKE TAHOE
El Dorado
Yolo
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Marin
Calaveras
San Joaquin
Contra Costa
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Madera
Santa Cruz
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
Santa Barbara
SOUTHEAST DESERT
Ventura
Los Angeles
San Bernardino
Riverside
SOUTH COAST
Orange
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 16

National Ambient Air Quality Standards
Area Designations for Sulfur Dioxide*

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		
LAKE COUNTY AIR BASIN		X	San Luis Obispo County		X
LAKE TAHOE AIR BASIN		X	Santa Barbara County		X
MOUNTAIN COUNTIES AIR BASIN		X	Ventura County		X
NORTH CENTRAL COAST AIR BASIN		X	Channel Islands (1)		X
NORTH COAST AIR BASIN		X	SOUTH COAST AIR BASIN		X
NORTHEAST PLATEAU AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		
SACRAMENTO VALLEY AIR BASIN		X	Imperial County		X
SAN DIEGO COUNTY		X	Remainder of Air Basin		X
SAN FRANCISCO BAY AREA AIR BASIN		X			
SAN JOAQUIN VALLEY AIR BASIN					
Fresno County		X			
Kern County (portion)		X			
Kings County		X			
Madera County		X			
Merced County		X			
San Joaquin County		X			
Stanislaus County		X			
Tulare County		X			

* Definitions and references for all areas can be found in 40 CFR, Chapter I, Part 81.305.

NOTE: This map and table reflect the 2010 1-hour SO_2 standard of 75 ppb.

(1) South Central Coast Air Basin Channel Islands:

Santa Barbara County includes Santa Cruz, San Miguel, Santa Rosa, and Santa Barbara Islands.

Ventura County includes Anacapa and San Nicolas Islands.

Note that the San Clemente and Santa Catalina Islands are considered part of Los Angeles County, and therefore, are included as part of the South Coast Air Basin.

FIGURE 17

Area Designations for National Ambient Air Quality Standards
LEAD
N
0
50
100
150
200
Miles
Del Norte
Siskiyou
Modoc
NORTHEAST PLATEAU
NORTH COAST
Shasta
Lassen
Trinity
Humboldt
Tehama
SACRAMENTO VALLEY
Plumas
Mendocino
Glenn
Butte
Sierra
MOUNTAIN COUNTIES
Nevada
Colusa
Yuba
Lake
Sutter
Placer
LAKE TAHOE
LAKE COUNTY
El Dorado
Yolo
Napa
Alpine
Sonoma
Sac
Amador
SAN FRANCISCO BAY AREA
Solano
Calaveras
Marin
San Joaquin
Contra Costa
Tuolumne
Mono
GREAT BASIN VALLEYS
San Francisco
Alameda
Stanislaus
Mariposa
San Mateo
Santa Clara
Merced
Santa Cruz
Madera
SAN JOAQUIN VALLEY
San Benito
Fresno
NORTH CENTRAL COAST
Inyo
Tulare
Monterey
Kings
San Luis Obispo
Kern
SOUTH CENTRAL COAST
SOUTHEAST DESERT
Santa Barbara
Ventura
Los Angeles
San Bernardino
Riverside
Orange
SOUTH COAST
San Diego
Imperial
SAN DIEGO COUNTY
Unclassified/Attainment
Nonattainment
Air Basin
County
Source Date:
October 2018
Air Quality Planning and Science Division

TABLE 17

National Ambient Air Quality Standards
Area Designations for Lead (particulate)

	N	U/A		N	U/A
GREAT BASIN VALLEYS AIR BASIN		X	SAN DIEGO COUNTY		X
LAKE COUNTY AIR BASIN		X	SAN FRANCISCO BAY AREA AIR BASIN		X
LAKE TAHOE AIR BASIN		X	SAN JOAQUIN VALLEY AIR BASIN		X
MOUNTAIN COUNTIES AIR BASIN		X	SOUTH CENTRAL COAST AIR BASIN		X
NORTH CENTRAL COAST AIR BASIN		X	SOUTH COAST AIR BASIN		
NORTH COAST AIR BASIN		X	Los Angeles County (portion) (1)	X	
NORTHEAST PLATEAU AIR BASIN		X	Remainder of Air Basin		X
SACRAMENTO VALLEY AIR BASIN		X	SOUTHEAST DESERT AIR BASIN		X

(1) Portion of County in Air Basin, not including Channel Islands

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APPENDIX 5.1:

CALEEMOD CONSTRUCTION (UNMITIGATED) EMISSIONS MODEL OUTPUTS

Meridian D-1 Gateway Aviation Center (Construction - Unmitigated) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Meridian D-1 Gateway Aviation Center (Construction - Unmitigated)
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	10.0
Location	33.87742536966998, -117.24692914631906
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5480
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	181	1000sqft	7.20	180,800	133,625	0.00	—	—
Parking Lot	122	Space	1.12	0.00	0.00	0.00	—	—

Other Asphalt Surfaces	2,077	1000sqft	47.7	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.6	9.70	91.5	80.2	0.18	4.42	7.51	11.9	4.07	3.05	7.13	—	24,428	24,428	0.79	2.14	32.5	25,118
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.05	56.5	27.7	32.6	0.05	1.56	1.38	2.91	1.44	0.33	1.76	—	6,161	6,161	0.25	0.18	0.19	6,219
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.04	5.25	16.1	14.8	0.03	0.78	1.24	2.02	0.72	0.39	1.11	—	3,762	3,762	0.13	0.23	1.94	3,836
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.37	0.96	2.94	2.70	0.01	0.14	0.23	0.37	0.13	0.07	0.20	—	623	623	0.02	0.04	0.32	635

2.2. Construction Emissions by Year, Unmitigated

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

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

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	11.6	9.70	91.5	80.2	0.18	4.42	7.51	11.9	4.07	3.05	7.13	—	24,428	24,428	0.79	2.14	32.5	25,118
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	4.05	6.39	27.7	32.6	0.05	1.56	1.35	2.91	1.44	0.32	1.76	—	6,161	6,161	0.25	0.17	0.19	6,219
2024	3.83	56.5	26.1	31.9	0.05	1.42	1.38	2.77	1.31	0.33	1.63	—	6,129	6,129	0.25	0.18	0.19	6,187
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	2.04	1.87	16.1	14.8	0.03	0.78	1.24	2.02	0.72	0.39	1.11	—	3,762	3,762	0.13	0.23	1.94	3,836
2024	0.41	5.25	2.70	3.32	< 0.005	0.15	0.16	0.31	0.13	0.04	0.17	—	656	656	0.03	0.02	0.37	664
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.37	0.34	2.94	2.70	0.01	0.14	0.23	0.37	0.13	0.07	0.20	—	623	623	0.02	0.04	0.32	635
2024	0.07	0.96	0.49	0.61	< 0.005	0.03	0.03	0.06	0.02	0.01	0.03	—	109	109	< 0.005	< 0.005	0.06	110

3. Construction Emissions Details

3.1. Demolition (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.62	4.72	45.1	37.8	0.05	2.21	—	2.21	2.03	—	2.03	—	5,501	5,501	0.22	0.04	—	5,520
Demolition	—	—	—	—	—	—	1.32	1.32	—	0.20	0.20	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.10	1.76	< 0.005	0.10	—	0.10	0.09	—	0.09	—	256	256	0.01	< 0.005	—	257
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.32	< 0.005	0.02	—	0.02	0.02	—	0.02	—	42.4	42.4	< 0.005	< 0.005	—	42.6
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.08	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	338	338	0.01	0.01	1.45	343
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	0.02	1.00	0.33	< 0.005	0.01	0.05	0.06	0.01	0.02	0.03	—	725	725	0.02	0.12	1.47	761
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	14.6	14.6	< 0.005	< 0.005	0.03	14.8

Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	33.8	33.8	< 0.005	0.01	0.03	35.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.59	5.59	< 0.005	< 0.005	< 0.005	5.87

3.3. Site Preparation (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.62	4.72	45.1	37.8	0.05	2.21	—	2.21	2.03	—	2.03	—	5,501	5,501	0.22	0.04	—	5,520
Dust From Material Movement	—	—	—	—	—	—	5.39	5.39	—	2.66	2.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.10	1.76	< 0.005	0.10	—	0.10	0.09	—	0.09	—	256	256	0.01	< 0.005	—	257

Dust From Material Movemen:	—	—	—	—	—	—	0.25	0.25	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.32	< 0.005	0.02	—	0.02	0.02	—	0.02	—	42.4	42.4	< 0.005	< 0.005	—	42.6
Dust From Material Movemen:	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.08	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	338	338	0.01	0.01	1.45	343
Vendor	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	94.2	94.2	< 0.005	0.01	0.26	98.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	14.6	14.6	< 0.005	< 0.005	0.03	14.8
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.39	4.39	< 0.005	< 0.005	0.01	4.59
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.46
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.73	0.73	< 0.005	< 0.005	< 0.005	0.76

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.55	4.66	45.4	37.4	0.07	2.13	—	2.13	1.96	—	1.96	—	7,501	7,501	0.30	0.06	—	7,527
Dust From Material Movement	—	—	—	—	—	—	2.85	2.85	—	1.00	1.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.98	3.28	0.01	0.19	—	0.19	0.17	—	0.17	—	658	658	0.03	0.01	—	660
Dust From Material Movement	—	—	—	—	—	—	0.25	0.25	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.73	0.60	< 0.005	0.03	—	0.03	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109

Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.08	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	338	338	0.01	0.01	1.45	343
Vendor	0.01	< 0.005	0.18	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	157	157	< 0.005	0.02	0.44	165
Hauling	0.73	0.34	16.4	5.40	0.08	0.21	0.79	1.00	0.21	0.29	0.50	—	11,896	11,896	0.30	1.89	24.1	12,491
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	27.6	27.6	< 0.005	< 0.005	0.05	28.0
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	0.02	14.4
Hauling	0.06	0.03	1.50	0.48	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,043	1,043	0.03	0.17	0.91	1,094
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.56	4.56	< 0.005	< 0.005	0.01	4.63
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.28	2.28	< 0.005	< 0.005	< 0.005	2.39
Hauling	0.01	0.01	0.27	0.09	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	—	173	173	< 0.005	0.03	0.15	181

3.7. Building Construction (2023) - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.47	2.07	18.3	16.2	0.03	1.14	—	1.14	1.05	—	1.05	—	2,806	2,806	0.11	0.02	—	2,815
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.47	2.07	18.3	16.2	0.03	1.14	—	1.14	1.05	—	1.05	—	2,806	2,806	0.11	0.02	—	2,815
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	5.47	4.84	0.01	0.34	—	0.34	0.31	—	0.31	—	840	840	0.03	0.01	—	843
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13	0.11	1.00	0.88	< 0.005	0.06	—	0.06	0.06	—	0.06	—	139	139	0.01	< 0.005	—	140
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.40	0.40	6.80	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	1,102	1,102	0.05	0.04	4.72	1,119
Vendor	0.03	0.02	0.73	0.23	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	—	628	628	0.01	0.09	1.75	658
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.38	0.46	5.16	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	1,012	1,012	0.05	0.04	0.12	1,025
Vendor	0.03	0.02	0.77	0.23	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	—	629	629	0.01	0.09	0.05	657
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.14	1.62	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	307	307	0.01	0.01	0.61	311
Vendor	0.01	0.01	0.23	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	188	188	< 0.005	0.03	0.23	197
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.30	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	50.8	50.8	< 0.005	< 0.005	0.10	51.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.1	31.1	< 0.005	< 0.005	0.04	32.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.31	1.93	17.1	16.0	0.03	1.03	—	1.03	0.94	—	0.94	—	2,805	2,805	0.11	0.02	—	2,815
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.22	1.97	1.85	< 0.005	0.12	—	0.12	0.11	—	0.11	—	324	324	0.01	< 0.005	—	325
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.36	0.34	< 0.005	0.02	—	0.02	0.02	—	0.02	—	53.6	53.6	< 0.005	< 0.005	—	53.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.43	4.73	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	992	992	0.05	0.04	0.11	1,004
Vendor	0.03	0.02	0.74	0.22	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	—	621	621	0.01	0.09	0.05	650
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.58	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	116	116	0.01	< 0.005	0.21	118
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	71.7	71.7	< 0.005	0.01	0.09	75.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	19.2	19.2	< 0.005	< 0.005	0.04	19.5
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.01	12.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	0.88	8.06	10.0	0.01	0.41	—	0.41	0.38	—	0.38	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	2.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.49	0.61	< 0.005	0.03	—	0.03	0.02	—	0.02	—	91.7	91.7	< 0.005	< 0.005	—	92.0
Paving	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.2	15.2	< 0.005	< 0.005	—	15.2
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.09	1.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	202	202	0.01	0.01	0.02	205
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	12.4	12.4	< 0.005	< 0.005	0.02	12.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.06	2.06	< 0.005	< 0.005	< 0.005	2.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	2.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.46	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	88.7	88.7	< 0.005	< 0.005	—	89.0
Paving	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.7	14.7	< 0.005	< 0.005	—	14.7
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	0.95	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	198	198	0.01	0.01	0.02	201
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	11.8	11.8	< 0.005	< 0.005	0.02	12.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.95	1.95	< 0.005	< 0.005	< 0.005	1.98

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

3.15. Architectural Coating (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.22	0.18	1.21	1.53	< 0.005	0.04	—	0.04	0.04	—	0.04	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	53.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.6	15.6	< 0.005	< 0.005	—	15.7
Architectural Coatings	—	4.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.58	2.58	< 0.005	< 0.005	—	2.59

Architect Coatings	—	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	0.95	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	198	198	0.01	0.01	0.02	201
Vendor	0.01	< 0.005	0.15	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	124	124	< 0.005	0.02	0.01	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	17.6	17.6	< 0.005	< 0.005	0.03	17.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.01	11.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.92	2.92	< 0.005	< 0.005	0.01	2.96
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	6/1/2023	6/23/2023	5.00	17.0	—
Site Preparation	Site Preparation	6/1/2023	6/23/2023	5.00	17.0	—
Grading	Grading	7/1/2023	8/15/2023	5.00	32.0	—
Building Construction	Building Construction	8/1/2023	2/28/2024	5.00	152	—
Paving	Paving	12/1/2023	1/30/2024	5.00	43.0	—
Architectural Coating	Architectural Coating	2/15/2024	3/30/2024	5.00	32.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Graders	Diesel	Average	3.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74

Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Demolition	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Site Preparation	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Site Preparation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Building Construction	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	23.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	3.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	0.00	HHDT
Grading	—	—	—	—

Grading	Worker	23.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	5.00	10.2	HHDT,MHDT
Grading	Hauling	391	8.30	HHDT
Grading	Onsite truck	0.00	0.00	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	75.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	15.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	23.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	23.8	8.30	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	366,880	122,293	127,574

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	1,619	—
Site Preparation	0.00	0.00	340	0.00	—
Grading	100,000	0.00	640	0.00	—
Paving	0.00	0.00	0.00	0.00	48.8

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Parking Lot	1.12	100%

Other Asphalt Surfaces	47.7	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	532	0.03	< 0.005
2024	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.0	annual days of extreme heat
Extreme Precipitation	2.05	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	7.76	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.6

AQ-PM	59.8
AQ-DPM	40.3
Drinking Water	70.7
Lead Risk Housing	53.6
Pesticides	13.2
Toxic Releases	64.0
Traffic	82.0
Effect Indicators	—
CleanUp Sites	82.5
Groundwater	97.9
Haz Waste Facilities/Generators	87.9
Impaired Water Bodies	0.00
Solid Waste	84.9
Sensitive Population	—
Asthma	71.5
Cardio-vascular	86.8
Low Birth Weights	97.0
Socioeconomic Factor Indicators	—
Education	82.5
Housing	59.7
Linguistic	82.8
Poverty	89.3
Unemployment	81.0

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract

Economic	—
Above Poverty	8.353650712
Employed	6.480174516
Education	—
Bachelor's or higher	30.14243552
High school enrollment	100
Preschool enrollment	10.97138458
Transportation	—
Auto Access	10.29128705
Active commuting	87.46310792
Social	—
2-parent households	6.223533941
Voting	6.13370974
Neighborhood	—
Alcohol availability	44.43731554
Park access	43.37225715
Retail density	18.60644168
Supermarket access	67.43231105
Tree canopy	3.977928911
Housing	—
Homeownership	8.353650712
Housing habitability	10.4452714
Low-inc homeowner severe housing cost burden	45.06608495
Low-inc renter severe housing cost burden	46.23379956
Uncrowded housing	21.62196843
Health Outcomes	—
Insured adults	12.4085718

Arthritis	51.7
Asthma ER Admissions	24.0
High Blood Pressure	30.0
Cancer (excluding skin)	80.0
Asthma	9.8
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	31.9
Life Expectancy at Birth	7.4
Cognitively Disabled	15.9
Physically Disabled	19.5
Heart Attack ER Admissions	20.1
Mental Health Not Good	14.9
Chronic Kidney Disease	35.4
Obesity	8.3
Pedestrian Injuries	77.2
Physical Health Not Good	20.0
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	63.5
Current Smoker	15.5
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	18.1
Elderly	24.3

English Speaking	44.9
Foreign-born	53.3
Outdoor Workers	18.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	73.9
Traffic Density	76.9
Traffic Access	61.5
Other Indices	—
Hardship	89.9
Other Decision Support	—
2016 Voting	11.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	98.0
Healthy Places Index Score for Project Location (b)	5.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Land Use	Total Project area is 56.03 acres
Construction: Construction Phases	Construction anticipated to end in 2024
Construction: Off-Road Equipment	Equipment based on construction of similar industrial project needs
Construction: Dust From Material Movement	Analysis conservatively assumes that up to 20 acres can be disturbed per day
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, Building Construction, and Architectural Coating
Construction: Architectural Coatings	Rule 1113

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APPENDIX 5.2:

CALEEMOD CONSTRUCTION (MITIGATED) EMISSIONS MODEL OUTPUTS

Meridian D-1 Gateway Aviation Center (Construction - Mitigated) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Meridian D-1 Gateway Aviation Center (Construction - Mitigated)
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	10.0
Location	33.87742536966998, -117.24692914631906
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5480
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	181	1000sqft	7.20	180,800	133,625	0.00	—	—
Parking Lot	122	Space	1.12	0.00	0.00	0.00	—	—

Other Asphalt Surfaces	2,077	1000sqft	47.7	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

Sector	#	Measure Title
Construction	C-5	Use Advanced Engine Tiers

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	11.6	9.70	91.5	80.2	0.18	4.42	7.51	11.9	4.07	3.05	7.13	—	24,428	24,428	0.79	2.14	32.5	25,118
Mit.	2.45	1.98	25.7	73.7	0.18	0.45	7.51	7.73	0.45	3.05	3.27	—	24,428	24,428	0.79	2.14	32.5	25,118
% Reduced	79%	80%	72%	8%	—	90%	—	35%	89%	—	54%	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.05	56.5	27.7	32.6	0.05	1.56	1.38	2.91	1.44	0.33	1.76	—	6,161	6,161	0.25	0.18	0.19	6,219
Mit.	1.08	54.8	6.29	34.5	0.05	0.12	1.38	1.48	0.12	0.33	0.44	—	6,161	6,161	0.25	0.18	0.19	6,219
% Reduced	73%	3%	77%	-6%	—	92%	—	49%	92%	—	75%	—	—	—	—	—	—	—
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.04	5.25	16.1	14.8	0.03	0.78	1.24	2.02	0.72	0.39	1.11	—	3,762	3,762	0.13	0.23	1.94	3,836

Mit.	0.47	5.01	3.94	14.8	0.03	0.07	1.24	1.31	0.07	0.39	0.46	—	3,762	3,762	0.13	0.23	1.94	3,836
% Reduced	77%	4%	76%	> -0.5%	—	91%	—	35%	90%	—	58%	—	—	—	—	—	—	—
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.37	0.96	2.94	2.70	0.01	0.14	0.23	0.37	0.13	0.07	0.20	—	623	623	0.02	0.04	0.32	635
Mit.	0.09	0.91	0.72	2.71	0.01	0.01	0.23	0.24	0.01	0.07	0.08	—	623	623	0.02	0.04	0.32	635
% Reduced	77%	4%	76%	> -0.5%	—	91%	—	35%	90%	—	58%	—	—	—	—	—	—	—

2.2. Construction Emissions by Year, Unmitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	11.6	9.70	91.5	80.2	0.18	4.42	7.51	11.9	4.07	3.05	7.13	—	24,428	24,428	0.79	2.14	32.5	25,118
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	4.05	6.39	27.7	32.6	0.05	1.56	1.35	2.91	1.44	0.32	1.76	—	6,161	6,161	0.25	0.17	0.19	6,219
2024	3.83	56.5	26.1	31.9	0.05	1.42	1.38	2.77	1.31	0.33	1.63	—	6,129	6,129	0.25	0.18	0.19	6,187
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	2.04	1.87	16.1	14.8	0.03	0.78	1.24	2.02	0.72	0.39	1.11	—	3,762	3,762	0.13	0.23	1.94	3,836
2024	0.41	5.25	2.70	3.32	< 0.005	0.15	0.16	0.31	0.13	0.04	0.17	—	656	656	0.03	0.02	0.37	664
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.37	0.34	2.94	2.70	0.01	0.14	0.23	0.37	0.13	0.07	0.20	—	623	623	0.02	0.04	0.32	635
2024	0.07	0.96	0.49	0.61	< 0.005	0.03	0.03	0.06	0.02	0.01	0.03	—	109	109	< 0.005	< 0.005	0.06	110

2.3. Construction Emissions by Year, Mitigated

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

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	2.45	1.98	25.7	73.7	0.18	0.45	7.51	7.73	0.45	3.05	3.27	—	24,428	24,428	0.79	2.14	32.5	25,118
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	1.08	3.98	6.29	34.5	0.05	0.12	1.35	1.47	0.12	0.32	0.44	—	6,161	6,161	0.25	0.17	0.19	6,219
2024	1.06	54.8	6.21	33.9	0.05	0.12	1.38	1.48	0.12	0.33	0.44	—	6,129	6,129	0.25	0.18	0.19	6,187
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.47	0.59	3.94	14.8	0.03	0.07	1.24	1.31	0.07	0.39	0.46	—	3,762	3,762	0.13	0.23	1.94	3,836
2024	0.12	5.01	0.70	3.50	< 0.005	0.01	0.16	0.18	0.01	0.04	0.05	—	656	656	0.03	0.02	0.37	664
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2023	0.09	0.11	0.72	2.71	0.01	0.01	0.23	0.24	0.01	0.07	0.08	—	623	623	0.02	0.04	0.32	635
2024	0.02	0.91	0.13	0.64	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	109	109	< 0.005	< 0.005	0.06	110

3. Construction Emissions Details

3.1. Demolition (2023) - Unmitigated

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

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

Off-Road Equipment	5.62	4.72	45.1	37.8	0.05	2.21	—	2.21	2.03	—	2.03	—	5,501	5,501	0.22	0.04	—	5,520
Demolition	—	—	—	—	—	—	1.32	1.32	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.10	1.76	< 0.005	0.10	—	0.10	0.09	—	0.09	—	256	256	0.01	< 0.005	—	257
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.32	< 0.005	0.02	—	0.02	0.02	—	0.02	—	42.4	42.4	< 0.005	< 0.005	—	42.6
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.08	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	338	338	0.01	0.01	1.45	343
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	0.02	1.00	0.33	< 0.005	0.01	0.05	0.06	0.01	0.02	0.03	—	725	725	0.02	0.12	1.47	761

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	14.6	14.6	< 0.005	< 0.005	0.03	14.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	33.8	33.8	< 0.005	0.01	0.03	35.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.59	5.59	< 0.005	< 0.005	< 0.005	5.87

3.2. Demolition (2023) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	5.52	29.8	0.05	0.10	—	0.10	0.10	—	0.10	—	5,501	5,501	0.22	0.04	—	5,520
Demolition	—	—	—	—	—	—	1.32	1.32	—	0.20	0.20	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.03	0.03	0.26	1.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	256	256	0.01	< 0.005	—	257
Demolition	—	—	—	—	—	—	0.06	0.06	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.4	42.4	< 0.005	< 0.005	—	42.6
Demolition	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.08	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	338	338	0.01	0.01	1.45	343
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.04	0.02	1.00	0.33	< 0.005	0.01	0.05	0.06	0.01	0.02	0.03	—	725	725	0.02	0.12	1.47	761
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	14.6	14.6	< 0.005	< 0.005	0.03	14.8
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.05	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	33.8	33.8	< 0.005	0.01	0.03	35.4
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.46
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	5.59	5.59	< 0.005	< 0.005	< 0.005	5.87

3.3. Site Preparation (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.62	4.72	45.1	37.8	0.05	2.21	—	2.21	2.03	—	2.03	—	5,501	5,501	0.22	0.04	—	5,520
Dust From Material Movement	—	—	—	—	—	—	5.39	5.39	—	2.66	2.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.26	0.22	2.10	1.76	< 0.005	0.10	—	0.10	0.09	—	0.09	—	256	256	0.01	< 0.005	—	257
Dust From Material Movement	—	—	—	—	—	—	0.25	0.25	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.38	0.32	< 0.005	0.02	—	0.02	0.02	—	0.02	—	42.4	42.4	< 0.005	< 0.005	—	42.6

Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.08	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	338	338	0.01	0.01	1.45	343
Vendor	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	94.2	94.2	< 0.005	0.01	0.26	98.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	14.6	14.6	< 0.005	< 0.005	0.03	14.8
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.39	4.39	< 0.005	< 0.005	0.01	4.59
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.46
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.73	0.73	< 0.005	< 0.005	< 0.005	0.76
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.4. Site Preparation (2023) - Mitigated

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

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

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.56	0.56	5.52	29.8	0.05	0.10	—	0.10	0.10	—	0.10	—	5,501	5,501	0.22	0.04	—	5,520
Dust From Material Movement	—	—	—	—	—	—	5.39	5.39	—	2.66	2.66	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.26	1.39	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	256	256	0.01	< 0.005	—	257
Dust From Material Movement	—	—	—	—	—	—	0.25	0.25	—	0.12	0.12	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.05	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	42.4	42.4	< 0.005	< 0.005	—	42.6
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.08	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	338	338	0.01	0.01	1.45	343
Vendor	< 0.005	< 0.005	0.11	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	94.2	94.2	< 0.005	0.01	0.26	98.7
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	14.6	14.6	< 0.005	< 0.005	0.03	14.8
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.39	4.39	< 0.005	< 0.005	0.01	4.59
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.42	2.42	< 0.005	< 0.005	< 0.005	2.46
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	0.73	0.73	< 0.005	< 0.005	< 0.005	0.76
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	5.55	4.66	45.4	37.4	0.07	2.13	—	2.13	1.96	—	1.96	—	7,501	7,501	0.30	0.06	—	7,527

Dust From Material Movement	—	—	—	—	—	—	2.85	2.85	—	1.00	1.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.98	3.28	0.01	0.19	—	0.19	0.17	—	0.17	—	658	658	0.03	0.01	—	660
Dust From Material Movement	—	—	—	—	—	—	0.25	0.25	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.09	0.07	0.73	0.60	< 0.005	0.03	—	0.03	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.08	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	338	338	0.01	0.01	1.45	343
Vendor	0.01	< 0.005	0.18	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	157	157	< 0.005	0.02	0.44	165
Hauling	0.73	0.34	16.4	5.40	0.08	0.21	0.79	1.00	0.21	0.29	0.50	—	11,896	11,896	0.30	1.89	24.1	12,491

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	27.6	27.6	< 0.005	< 0.005	0.05	28.0
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	0.02	14.4
Hauling	0.06	0.03	1.50	0.48	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,043	1,043	0.03	0.17	0.91	1,094
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.56	4.56	< 0.005	< 0.005	0.01	4.63
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.28	2.28	< 0.005	< 0.005	< 0.005	2.39
Hauling	0.01	0.01	0.27	0.09	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	—	173	173	< 0.005	0.03	0.15	181

3.6. Grading (2023) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.72	0.72	4.87	41.7	0.07	0.14	—	0.14	0.14	—	0.14	—	7,501	7,501	0.30	0.06	—	7,527
Dust From Material Movement	—	—	—	—	—	—	2.85	2.85	—	1.00	1.00	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.06	0.43	3.65	0.01	0.01	—	0.01	0.01	—	0.01	—	658	658	0.03	0.01	—	660
Dust From Material Movement	—	—	—	—	—	—	0.25	0.25	—	0.09	0.09	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.67	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	109	109	< 0.005	< 0.005	—	109
Dust From Material Movement	—	—	—	—	—	—	0.05	0.05	—	0.02	0.02	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.13	0.12	0.12	2.08	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	338	338	0.01	0.01	1.45	343
Vendor	0.01	< 0.005	0.18	0.06	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	157	157	< 0.005	0.02	0.44	165
Hauling	0.73	0.34	16.4	5.40	0.08	0.21	0.79	1.00	0.21	0.29	0.50	—	11,896	11,896	0.30	1.89	24.1	12,491
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	27.6	27.6	< 0.005	< 0.005	0.05	28.0
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	13.8	13.8	< 0.005	< 0.005	0.02	14.4

Hauling	0.06	0.03	1.50	0.48	0.01	0.02	0.07	0.09	0.02	0.03	0.04	—	1,043	1,043	0.03	0.17	0.91	1,094
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	4.56	4.56	< 0.005	< 0.005	0.01	4.63
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.28	2.28	< 0.005	< 0.005	< 0.005	2.39
Hauling	0.01	0.01	0.27	0.09	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	—	173	173	< 0.005	0.03	0.15	181

3.7. Building Construction (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.47	2.07	18.3	16.2	0.03	1.14	—	1.14	1.05	—	1.05	—	2,806	2,806	0.11	0.02	—	2,815
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.47	2.07	18.3	16.2	0.03	1.14	—	1.14	1.05	—	1.05	—	2,806	2,806	0.11	0.02	—	2,815
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.74	0.62	5.47	4.84	0.01	0.34	—	0.34	0.31	—	0.31	—	840	840	0.03	0.01	—	843
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.13	0.11	1.00	0.88	< 0.005	0.06	—	0.06	0.06	—	0.06	—	139	139	0.01	< 0.005	—	140
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.40	0.40	6.80	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	1,102	1,102	0.05	0.04	4.72	1,119
Vendor	0.03	0.02	0.73	0.23	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	—	628	628	0.01	0.09	1.75	658
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.38	0.46	5.16	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	1,012	1,012	0.05	0.04	0.12	1,025
Vendor	0.03	0.02	0.77	0.23	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	—	629	629	0.01	0.09	0.05	657
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.14	1.62	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	307	307	0.01	0.01	0.61	311
Vendor	0.01	0.01	0.23	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	188	188	< 0.005	0.03	0.23	197
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.30	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	50.8	50.8	< 0.005	< 0.005	0.10	51.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.1	31.1	< 0.005	< 0.005	0.04	32.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.8. Building Construction (2023) - Mitigated

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

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

Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.37	3.04	17.4	0.03	0.08	—	0.08	0.08	—	0.08	—	2,806	2,806	0.11	0.02	—	2,815
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.37	3.04	17.4	0.03	0.08	—	0.08	0.08	—	0.08	—	2,806	2,806	0.11	0.02	—	2,815
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.11	0.91	5.22	0.01	0.03	—	0.03	0.02	—	0.02	—	840	840	0.03	0.01	—	843
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.95	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	139	139	0.01	< 0.005	—	140
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.44	0.40	0.40	6.80	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	1,102	1,102	0.05	0.04	4.72	1,119
Vendor	0.03	0.02	0.73	0.23	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	—	628	628	0.01	0.09	1.75	658
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.42	0.38	0.46	5.16	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	1,012	1,012	0.05	0.04	0.12	1,025
Vendor	0.03	0.02	0.77	0.23	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	—	629	629	0.01	0.09	0.05	657
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.12	0.11	0.14	1.62	0.00	0.00	0.02	0.02	0.00	0.00	0.00	—	307	307	0.01	0.01	0.61	311
Vendor	0.01	0.01	0.23	0.07	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	188	188	< 0.005	0.03	0.23	197
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.03	0.30	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	50.8	50.8	< 0.005	< 0.005	0.10	51.5
Vendor	< 0.005	< 0.005	0.04	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	31.1	31.1	< 0.005	< 0.005	0.04	32.6
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	2.31	1.93	17.1	16.0	0.03	1.03	—	1.03	0.94	—	0.94	—	2,805	2,805	0.11	0.02	—	2,815
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.27	0.22	1.97	1.85	< 0.005	0.12	—	0.12	0.11	—	0.11	—	324	324	0.01	< 0.005	—	325
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05	0.04	0.36	0.34	< 0.005	0.02	—	0.02	0.02	—	0.02	—	53.6	53.6	< 0.005	< 0.005	—	53.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.40	0.36	0.43	4.73	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	992	992	0.05	0.04	0.11	1,004
Vendor	0.03	0.02	0.74	0.22	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	—	621	621	0.01	0.09	0.05	650
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.58	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	116	116	0.01	< 0.005	0.21	118
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	71.7	71.7	< 0.005	0.01	0.09	75.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	19.2	19.2	< 0.005	< 0.005	0.04	19.5
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.01	12.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.10. Building Construction (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.39	0.37	3.03	17.4	0.03	0.08	—	0.08	0.08	—	0.08	—	2,805	2,805	0.11	0.02	—	2,815
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.35	2.01	< 0.005	0.01	—	0.01	0.01	—	0.01	—	324	324	0.01	< 0.005	—	325
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	53.6	53.6	< 0.005	< 0.005	—	53.8
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.40	0.36	0.43	4.73	0.00	0.00	0.06	0.06	0.00	0.00	0.00	—	992	992	0.05	0.04	0.11	1,004
Vendor	0.03	0.02	0.74	0.22	< 0.005	0.01	0.04	0.04	0.01	0.01	0.02	—	621	621	0.01	0.09	0.05	650
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.58	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	116	116	0.01	< 0.005	0.21	118
Vendor	< 0.005	< 0.005	0.08	0.03	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	71.7	71.7	< 0.005	0.01	0.09	75.0
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.11	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	19.2	19.2	< 0.005	< 0.005	0.04	19.5
Vendor	< 0.005	< 0.005	0.02	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	11.9	11.9	< 0.005	< 0.005	0.01	12.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2023) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.04	0.88	8.06	10.0	0.01	0.41	—	0.41	0.38	—	0.38	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	2.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.06	0.05	0.49	0.61	< 0.005	0.03	—	0.03	0.02	—	0.02	—	91.7	91.7	< 0.005	< 0.005	—	92.0
Paving	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.09	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.2	15.2	< 0.005	< 0.005	—	15.2
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.09	1.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	202	202	0.01	0.01	0.02	205
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	12.4	12.4	< 0.005	< 0.005	0.02	12.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.06	2.06	< 0.005	< 0.005	< 0.005	2.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.12. Paving (2023) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	2.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.12	0.64	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	91.7	91.7	< 0.005	< 0.005	—	92.0
Paving	—	0.18	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.12	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.2	15.2	< 0.005	< 0.005	—	15.2
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.08	0.09	1.03	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	202	202	0.01	0.01	0.02	205
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	12.4	12.4	< 0.005	< 0.005	0.02	12.6
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.06	2.06	< 0.005	< 0.005	< 0.005	2.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Paving (2024) - Unmitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.01	0.85	7.81	10.0	0.01	0.39	—	0.39	0.36	—	0.36	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	2.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.46	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	88.7	88.7	< 0.005	< 0.005	—	89.0
Paving	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.7	14.7	< 0.005	< 0.005	—	14.7
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	0.95	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	198	198	0.01	0.01	0.02	201
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	11.8	11.8	< 0.005	< 0.005	0.02	12.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.95	1.95	< 0.005	< 0.005	< 0.005	1.98

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

3.14. Paving (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.16	0.16	1.93	10.6	0.01	0.03	—	0.03	0.03	—	0.03	—	1,512	1,512	0.06	0.01	—	1,517
Paving	—	2.97	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.11	0.62	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	88.7	88.7	< 0.005	< 0.005	—	89.0
Paving	—	0.17	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	14.7	14.7	< 0.005	< 0.005	—	14.7
Paving	—	0.03	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	0.95	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	198	198	0.01	0.01	0.02	201
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	0.01	0.06	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	11.8	11.8	< 0.005	< 0.005	0.02	12.0
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	1.95	1.95	< 0.005	< 0.005	< 0.005	1.98
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.15. Architectural Coating (2024) - Unmitigated

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

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

Off-Road Equipment	0.22	0.18	1.21	1.53	< 0.005	0.04	—	0.04	0.04	—	0.04	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	53.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.11	0.13	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.6	15.6	< 0.005	< 0.005	—	15.7
Architectural Coatings	—	4.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.58	2.58	< 0.005	< 0.005	—	2.59
Architectural Coatings	—	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	0.95	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	198	198	0.01	0.01	0.02	201
Vendor	0.01	< 0.005	0.15	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	124	124	< 0.005	0.02	0.01	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	17.6	17.6	< 0.005	< 0.005	0.03	17.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.01	11.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.92	2.92	< 0.005	< 0.005	0.01	2.96
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.16. Architectural Coating (2024) - Mitigated

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

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.03	0.03	0.86	1.28	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	178	178	0.01	< 0.005	—	179
Architectural Coatings	—	53.9	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.08	0.11	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	15.6	15.6	< 0.005	< 0.005	—	15.7

Architect Coatings	—	4.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	2.58	2.58	< 0.005	< 0.005	—	2.59
Architectural Coatings	—	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.08	0.07	0.09	0.95	0.00	0.00	0.01	0.01	0.00	0.00	0.00	—	198	198	0.01	0.01	0.02	201
Vendor	0.01	< 0.005	0.15	0.04	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	124	124	< 0.005	0.02	0.01	130
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.09	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	17.6	17.6	< 0.005	< 0.005	0.03	17.9
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	10.9	10.9	< 0.005	< 0.005	0.01	11.4
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	0.00	0.00	—	2.92	2.92	< 0.005	< 0.005	0.01	2.96
Vendor	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.80	1.80	< 0.005	< 0.005	< 0.005	1.89
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

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

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

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

4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

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

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

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

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

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

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

4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

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

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

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

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	6/1/2023	6/23/2023	5.00	17.0	—
Site Preparation	Site Preparation	6/1/2023	6/23/2023	5.00	17.0	—
Grading	Grading	7/1/2023	8/15/2023	5.00	32.0	—
Building Construction	Building Construction	8/1/2023	2/28/2024	5.00	152	—
Paving	Paving	12/1/2023	1/30/2024	5.00	43.0	—
Architectural Coating	Architectural Coating	2/15/2024	3/30/2024	5.00	32.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Grading	Graders	Diesel	Average	3.00	8.00	148	0.41
Grading	Excavators	Diesel	Average	2.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Average	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Average	1.00	8.00	367	0.29
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	8.00	37.0	0.48
Demolition	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Site Preparation	Crawler Tractors	Diesel	Average	2.00	8.00	87.0	0.43
Site Preparation	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Site Preparation	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Crawler Tractors	Diesel	Average	1.00	8.00	87.0	0.43
Building Construction	Crawler Tractors	Diesel	Average	3.00	8.00	87.0	0.43

5.2.2. Mitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Site Preparation	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Grading	Graders	Diesel	Tier 4 Final	3.00	8.00	148	0.41
Grading	Excavators	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Grading	Scrapers	Diesel	Tier 4 Final	2.00	8.00	423	0.48
Grading	Rubber Tired Dozers	Diesel	Tier 4 Final	1.00	8.00	367	0.40
Building Construction	Forklifts	Diesel	Tier 4 Final	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Cranes	Diesel	Tier 4 Final	1.00	8.00	367	0.29
Building Construction	Welders	Diesel	Tier 4 Final	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Tier 4 Final	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Tier 4 Final	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Tier 4 Final	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Tier 4 Final	1.00	8.00	37.0	0.48
Demolition	Rubber Tired Dozers	Diesel	Tier 4 Final	3.00	8.00	367	0.40
Demolition	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Demolition	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Demolition	Crawler Tractors	Diesel	Tier 4 Final	2.00	8.00	87.0	0.43
Site Preparation	Crawler Tractors	Diesel	Tier 4 Final	2.00	8.00	87.0	0.43
Site Preparation	Excavators	Diesel	Tier 4 Final	3.00	8.00	36.0	0.38
Site Preparation	Concrete/Industrial Saws	Diesel	Tier 4 Final	1.00	8.00	33.0	0.73
Grading	Crawler Tractors	Diesel	Tier 4 Final	1.00	8.00	87.0	0.43
Building Construction	Crawler Tractors	Diesel	Tier 4 Final	3.00	8.00	87.0	0.43

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	23.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	3.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	0.00	HHDT
Grading	—	—	—	—
Grading	Worker	23.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	5.00	10.2	HHDT,MHDT
Grading	Hauling	391	8.30	HHDT
Grading	Onsite truck	0.00	0.00	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	75.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	15.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	4.00	10.2	HHDT,MHDT

Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	23.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	23.8	8.30	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT

5.3.2. Mitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Site Preparation	—	—	—	—
Site Preparation	Worker	23.0	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	3.00	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	0.00	0.00	HHDT
Grading	—	—	—	—
Grading	Worker	23.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	5.00	10.2	HHDT,MHDT
Grading	Hauling	391	8.30	HHDT
Grading	Onsite truck	0.00	0.00	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	75.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	20.0	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	0.00	0.00	HHDT
Paving	—	—	—	—
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2

Paving	Vendor	0.00	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	0.00	0.00	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	15.0	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	4.00	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	0.00	0.00	HHDT
Demolition	—	—	—	—
Demolition	Worker	23.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	0.00	10.2	HHDT,MHDT
Demolition	Hauling	23.8	8.30	HHDT
Demolition	Onsite truck	0.00	0.00	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	366,880	122,293	127,574

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)

Demolition	0.00	0.00	0.00	1,619	—
Site Preparation	0.00	0.00	340	0.00	—
Grading	100,000	0.00	640	0.00	—
Paving	0.00	0.00	0.00	0.00	48.8

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	3	74%	74%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Unrefrigerated Warehouse-No Rail	0.00	0%
Parking Lot	1.12	100%
Other Asphalt Surfaces	47.7	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2023	0.00	532	0.03	< 0.005
2024	0.00	532	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.1.2. Mitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

5.18.2.2. Mitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.0	annual days of extreme heat
Extreme Precipitation	2.05	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	7.76	annual hectares burned

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

6.2. Initial Climate Risk Scores

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

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

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

6.3. Adjusted Climate Risk Scores

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

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.6
AQ-PM	59.8
AQ-DPM	40.3

Drinking Water	70.7
Lead Risk Housing	53.6
Pesticides	13.2
Toxic Releases	64.0
Traffic	82.0
Effect Indicators	—
CleanUp Sites	82.5
Groundwater	97.9
Haz Waste Facilities/Generators	87.9
Impaired Water Bodies	0.00
Solid Waste	84.9
Sensitive Population	—
Asthma	71.5
Cardio-vascular	86.8
Low Birth Weights	97.0
Socioeconomic Factor Indicators	—
Education	82.5
Housing	59.7
Linguistic	82.8
Poverty	89.3
Unemployment	81.0

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	8.353650712

Employed	6.480174516
Education	—
Bachelor's or higher	30.14243552
High school enrollment	100
Preschool enrollment	10.97138458
Transportation	—
Auto Access	10.29128705
Active commuting	87.46310792
Social	—
2-parent households	6.223533941
Voting	6.13370974
Neighborhood	—
Alcohol availability	44.43731554
Park access	43.37225715
Retail density	18.60644168
Supermarket access	67.43231105
Tree canopy	3.977928911
Housing	—
Homeownership	8.353650712
Housing habitability	10.4452714
Low-inc homeowner severe housing cost burden	45.06608495
Low-inc renter severe housing cost burden	46.23379956
Uncrowded housing	21.62196843
Health Outcomes	—
Insured adults	12.4085718
Arthritis	51.7
Asthma ER Admissions	24.0

High Blood Pressure	30.0
Cancer (excluding skin)	80.0
Asthma	9.8
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	31.9
Life Expectancy at Birth	7.4
Cognitively Disabled	15.9
Physically Disabled	19.5
Heart Attack ER Admissions	20.1
Mental Health Not Good	14.9
Chronic Kidney Disease	35.4
Obesity	8.3
Pedestrian Injuries	77.2
Physical Health Not Good	20.0
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	63.5
Current Smoker	15.5
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	18.1
Elderly	24.3
English Speaking	44.9
Foreign-born	53.3

Outdoor Workers	18.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	73.9
Traffic Density	76.9
Traffic Access	61.5
Other Indices	—
Hardship	89.9
Other Decision Support	—
2016 Voting	11.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	98.0
Healthy Places Index Score for Project Location (b)	5.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification

Land Use	Total Project area is 56.03 acres
Construction: Construction Phases	Construction anticipated to end in 2024
Construction: Off-Road Equipment	Equipment based on construction of similar industrial project needs
Construction: Dust From Material Movement	Analysis conservatively assumes that up to 20 acres can be disturbed per day
Construction: Trips and VMT	Vendor Trips adjusted based on CalEEMod defaults for Building Construction and number of days for Site Preparation, Grading, Building Construction, and Architectural Coating
Construction: Architectural Coatings	Rule 1113

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APPENDIX 5.3:

CALEEMOD NON-PEAK OPERATIONAL EMISSIONS MODEL OUTPUTS

Meridian D-1 Gateway Aviation Center (Non-Peak Operations) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Meridian D-1 Gateway Aviation Center (Non-Peak Operations)
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	10.0
Location	33.87742536966998, -117.24692914631906
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5480
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	181	1000sqft	7.22	180,800	133,625	0.00	—	—
Parking Lot	122	Space	1.12	0.00	0.00	0.00	—	—

Other Asphalt Surfaces	2,077	1000sqft	47.7	0.00	0.00	0.00	—	—
User Defined Industrial	181	User Defined Unit	0.00	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.08	10.9	25.0	73.8	0.32	0.45	7.53	7.98	0.44	1.46	1.90	172	35,592	35,763	18.3	3.60	293	37,586
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.47	9.41	26.2	54.5	0.31	0.44	7.53	7.97	0.43	1.46	1.88	172	34,577	34,749	18.3	3.62	187	36,473
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.41	10.3	26.6	61.9	0.32	0.45	7.53	7.98	0.44	1.46	1.89	172	34,739	34,911	18.3	3.63	231	36,681
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.17	1.87	4.86	11.3	0.06	0.08	1.37	1.46	0.08	0.27	0.35	28.4	5,752	5,780	3.03	0.60	38.3	6,073

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.58	4.75	24.1	65.1	0.32	0.37	7.53	7.90	0.36	1.46	1.81	—	33,273	33,273	0.73	3.39	109	34,409
Area	1.40	6.11	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	7.08	10.9	25.0	73.8	0.32	0.45	7.53	7.98	0.44	1.46	1.90	172	35,592	35,763	18.3	3.60	293	37,586
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.36	4.54	25.3	53.7	0.31	0.37	7.53	7.90	0.36	1.46	1.81	—	32,292	32,292	0.75	3.41	2.82	33,329
Area	—	4.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	5.47	9.41	26.2	54.5	0.31	0.44	7.53	7.97	0.43	1.46	1.88	172	34,577	34,749	18.3	3.62	187	36,473
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.35	4.52	25.6	55.7	0.31	0.37	7.53	7.90	0.36	1.46	1.81	—	32,431	32,431	0.75	3.42	47.0	33,515
Area	0.96	5.70	0.05	5.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184

Total	6.41	10.3	26.6	61.9	0.32	0.45	7.53	7.98	0.44	1.46	1.89	172	34,739	34,911	18.3	3.63	231	36,681
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.98	0.82	4.68	10.2	0.06	0.07	1.37	1.44	0.06	0.27	0.33	—	5,369	5,369	0.12	0.57	7.78	5,549
Area	0.17	1.04	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68
Energy	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	332	332	0.03	< 0.005	—	333
Water	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104
Waste	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5
Total	1.17	1.87	4.86	11.3	0.06	0.08	1.37	1.46	0.08	0.27	0.35	28.4	5,752	5,780	3.03	0.60	38.3	6,073

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	4.75	4.28	2.96	59.4	0.13	0.06	0.58	0.63	0.05	0.17	0.22	—	12,700	12,700	0.41	0.30	50.5	12,849
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

User Defined Industrial	0.83	0.47	21.1	5.68	0.19	0.32	1.37	1.69	0.30	0.44	0.75	—	20,573	20,573	0.32	3.09	58.4	21,561
Total	5.58	4.75	24.1	65.1	0.32	0.37	1.95	2.32	0.36	0.61	0.97	—	33,273	33,273	0.73	3.39	109	34,409
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	4.55	4.09	3.29	48.0	0.12	0.06	0.58	0.63	0.05	0.17	0.22	—	11,712	11,712	0.43	0.32	1.31	11,819
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.81	0.45	22.0	5.74	0.19	0.32	1.37	1.69	0.31	0.44	0.75	—	20,579	20,579	0.32	3.09	1.52	21,510
Total	5.36	4.54	25.3	53.7	0.31	0.37	1.95	2.32	0.36	0.61	0.97	—	32,292	32,292	0.75	3.41	2.82	33,329
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.83	0.74	0.62	9.13	0.02	0.01	0.11	0.12	0.01	0.03	0.04	—	1,963	1,963	0.07	0.05	3.61	1,984
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.15	0.08	4.06	1.04	0.04	0.06	0.25	0.31	0.06	0.08	0.14	—	3,407	3,407	0.05	0.51	4.18	3,565
Total	0.98	0.82	4.68	10.2	0.06	0.07	0.36	0.42	0.06	0.11	0.18	—	5,369	5,369	0.12	0.57	7.78	5,549

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	795	795	0.08	0.01	—	799
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	102	102	0.01	< 0.005	—	103
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	897	897	0.08	0.01	—	902
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	795	795	0.08	0.01	—	799
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	102	102	0.01	< 0.005	—	103

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	897	897	0.08	0.01	—	902
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	132	132	0.01	< 0.005	—	132
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	16.9	16.9	< 0.005	< 0.005	—	17.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	148	148	0.01	< 0.005	—	149

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.02	< 0.005	—	184
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.02	< 0.005	—	184

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.40	1.29	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Total	1.40	6.11	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	4.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.17	0.16	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68
Total	0.17	1.04	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	1,000	1,000	1,000	365,002	17,024	17,024	17,024	6,213,607
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	276	276	276	100,737	7,051	7,051	7,051	2,573,775

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	366,880	122,293	127,574

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	832,105	349	0.0330	0.0040	3,451,866
Parking Lot	106,872	349	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	349	0.0330	0.0040	0.00
User Defined Industrial	0.00	349	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	41,810,000	2,118,719
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	170	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.0	annual days of extreme heat
Extreme Precipitation	2.05	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	7.76	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.6
AQ-PM	59.8
AQ-DPM	40.3
Drinking Water	70.7
Lead Risk Housing	53.6
Pesticides	13.2
Toxic Releases	64.0
Traffic	82.0
Effect Indicators	—
CleanUp Sites	82.5
Groundwater	97.9
Haz Waste Facilities/Generators	87.9

Impaired Water Bodies	0.00
Solid Waste	84.9
Sensitive Population	—
Asthma	71.5
Cardio-vascular	86.8
Low Birth Weights	97.0
Socioeconomic Factor Indicators	—
Education	82.5
Housing	59.7
Linguistic	82.8
Poverty	89.3
Unemployment	81.0

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	8.353650712
Employed	6.480174516
Education	—
Bachelor's or higher	30.14243552
High school enrollment	100
Preschool enrollment	10.97138458
Transportation	—
Auto Access	10.29128705
Active commuting	87.46310792
Social	—

2-parent households	6.223533941
Voting	6.13370974
Neighborhood	—
Alcohol availability	44.43731554
Park access	43.37225715
Retail density	18.60644168
Supermarket access	67.43231105
Tree canopy	3.977928911
Housing	—
Homeownership	8.353650712
Housing habitability	10.4452714
Low-inc homeowner severe housing cost burden	45.06608495
Low-inc renter severe housing cost burden	46.23379956
Uncrowded housing	21.62196843
Health Outcomes	—
Insured adults	12.4085718
Arthritis	51.7
Asthma ER Admissions	24.0
High Blood Pressure	30.0
Cancer (excluding skin)	80.0
Asthma	9.8
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	31.9
Life Expectancy at Birth	7.4
Cognitively Disabled	15.9
Physically Disabled	19.5

Heart Attack ER Admissions	20.1
Mental Health Not Good	14.9
Chronic Kidney Disease	35.4
Obesity	8.3
Pedestrian Injuries	77.2
Physical Health Not Good	20.0
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	63.5
Current Smoker	15.5
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	18.1
Elderly	24.3
English Speaking	44.9
Foreign-born	53.3
Outdoor Workers	18.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	73.9
Traffic Density	76.9
Traffic Access	61.5
Other Indices	—
Hardship	89.9
Other Decision Support	—
2016 Voting	11.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	98.0
Healthy Places Index Score for Project Location (b)	5.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Land Use	Total Project area is 56.03 acres
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic analysis
Operations: Fleet Mix	Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater.

Meridian D-1 Gateway Aviation Center (Non-Peak Localized Operations) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Meridian D-1 Gateway Aviation Center (Non-Peak Localized Operations)
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	10.0
Location	33.87742536966998, -117.24692914631906
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5480
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	181	1000sqft	7.22	180,800	133,625	0.00	—	—
Parking Lot	122	Space	1.12	0.00	0.00	0.00	—	—

Other Asphalt Surfaces	2,077	1000sqft	47.7	0.00	0.00	0.00	—	—
User Defined Industrial	181	User Defined Unit	0.00	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.70	9.21	4.46	17.3	0.01	0.09	0.08	0.17	0.09	0.01	0.11	172	3,083	3,255	17.8	0.36	185	3,992
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	3.12	7.73	4.57	10.5	0.01	0.08	0.08	0.16	0.08	0.01	0.09	172	3,047	3,219	17.8	0.36	184	3,957
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.05	8.58	4.55	15.9	0.01	0.09	0.08	0.16	0.09	0.01	0.10	172	3,068	3,240	17.8	0.36	185	3,978
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.74	1.57	0.83	2.90	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	28.4	508	536	2.95	0.06	30.6	659

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.20	3.05	3.46	8.64	0.01	0.01	0.08	0.09	0.01	0.01	0.02	—	765	765	0.22	0.15	1.05	815
Area	1.40	6.11	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	4.70	9.21	4.46	17.3	0.01	0.09	0.08	0.17	0.09	0.01	0.11	172	3,083	3,255	17.8	0.36	185	3,992
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.02	2.86	3.64	9.68	0.01	0.01	0.08	0.09	0.01	0.01	0.02	—	762	762	0.25	0.15	0.03	813
Area	—	4.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	3.12	7.73	4.57	10.5	0.01	0.08	0.08	0.16	0.08	0.01	0.09	172	3,047	3,219	17.8	0.36	184	3,957
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	2.99	2.83	3.58	9.73	0.01	0.01	0.08	0.09	0.01	0.01	0.02	—	760	760	0.25	0.15	0.45	811
Area	0.96	5.70	0.05	5.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184

Total	4.05	8.58	4.55	15.9	0.01	0.09	0.08	0.16	0.09	0.01	0.10	172	3,068	3,240	17.8	0.36	185	3,978
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.55	0.52	0.65	1.77	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	—	126	126	0.04	0.02	0.08	134
Area	0.17	1.04	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68
Energy	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	332	332	0.03	< 0.005	—	333
Water	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104
Waste	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5
Total	0.74	1.57	0.83	2.90	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	28.4	508	536	2.95	0.06	30.6	659

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	2.97	2.90	0.61	6.71	< 0.005	0.01	0.01	0.01	< 0.005	< 0.005	0.01	—	316	316	0.15	0.07	0.59	343
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

User Defined Industrial	0.23	0.15	2.85	1.92	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	449	449	0.07	0.07	0.46	473
Total	3.20	3.05	3.46	8.64	0.01	0.01	0.02	0.03	0.01	0.01	0.01	—	765	765	0.22	0.15	1.05	815
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	2.81	2.72	0.65	7.68	< 0.005	0.01	0.01	0.01	< 0.005	< 0.005	0.01	—	307	307	0.18	0.08	0.02	334
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.21	0.13	2.99	2.00	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	0.01	—	455	455	0.07	0.07	0.01	479
Total	3.02	2.86	3.64	9.68	0.01	0.01	0.02	0.03	0.01	0.01	0.01	—	762	762	0.25	0.15	0.03	813
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.51	0.49	0.12	1.42	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	51.0	51.0	0.03	0.01	0.04	55.6
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.04	0.03	0.53	0.36	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	74.8	74.8	0.01	0.01	0.03	78.7
Total	0.55	0.52	0.65	1.77	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	126	126	0.04	0.02	0.08	134

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	795	795	0.08	0.01	—	799
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	102	102	0.01	< 0.005	—	103
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	897	897	0.08	0.01	—	902
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	795	795	0.08	0.01	—	799
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	102	102	0.01	< 0.005	—	103

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	897	897	0.08	0.01	—	902
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	132	132	0.01	< 0.005	—	132
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	16.9	16.9	< 0.005	< 0.005	—	17.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	148	148	0.01	< 0.005	—	149

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.02	< 0.005	—	184
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.02	< 0.005	—	184

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.40	1.29	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Total	1.40	6.11	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	4.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.17	0.16	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68
Total	0.17	1.04	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	1,000	1,000	1,000	365,002	200	200	200	73,000
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	276	276	276	100,737	55.2	55.2	55.2	20,147

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	366,880	122,293	127,574

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	832,105	349	0.0330	0.0040	3,451,866
Parking Lot	106,872	349	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	349	0.0330	0.0040	0.00
User Defined Industrial	0.00	349	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	41,810,000	2,118,719
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	170	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.0	annual days of extreme heat
Extreme Precipitation	2.05	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	7.76	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.6
AQ-PM	59.8
AQ-DPM	40.3
Drinking Water	70.7
Lead Risk Housing	53.6
Pesticides	13.2
Toxic Releases	64.0
Traffic	82.0
Effect Indicators	—
CleanUp Sites	82.5
Groundwater	97.9
Haz Waste Facilities/Generators	87.9

Impaired Water Bodies	0.00
Solid Waste	84.9
Sensitive Population	—
Asthma	71.5
Cardio-vascular	86.8
Low Birth Weights	97.0
Socioeconomic Factor Indicators	—
Education	82.5
Housing	59.7
Linguistic	82.8
Poverty	89.3
Unemployment	81.0

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	8.353650712
Employed	6.480174516
Education	—
Bachelor's or higher	30.14243552
High school enrollment	100
Preschool enrollment	10.97138458
Transportation	—
Auto Access	10.29128705
Active commuting	87.46310792
Social	—

2-parent households	6.223533941
Voting	6.13370974
Neighborhood	—
Alcohol availability	44.43731554
Park access	43.37225715
Retail density	18.60644168
Supermarket access	67.43231105
Tree canopy	3.977928911
Housing	—
Homeownership	8.353650712
Housing habitability	10.4452714
Low-inc homeowner severe housing cost burden	45.06608495
Low-inc renter severe housing cost burden	46.23379956
Uncrowded housing	21.62196843
Health Outcomes	—
Insured adults	12.4085718
Arthritis	51.7
Asthma ER Admissions	24.0
High Blood Pressure	30.0
Cancer (excluding skin)	80.0
Asthma	9.8
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	31.9
Life Expectancy at Birth	7.4
Cognitively Disabled	15.9
Physically Disabled	19.5

Heart Attack ER Admissions	20.1
Mental Health Not Good	14.9
Chronic Kidney Disease	35.4
Obesity	8.3
Pedestrian Injuries	77.2
Physical Health Not Good	20.0
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	63.5
Current Smoker	15.5
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	18.1
Elderly	24.3
English Speaking	44.9
Foreign-born	53.3
Outdoor Workers	18.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	73.9
Traffic Density	76.9
Traffic Access	61.5
Other Indices	—
Hardship	89.9
Other Decision Support	—
2016 Voting	11.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	98.0
Healthy Places Index Score for Project Location (b)	5.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Land Use	Total Project area is 56.03 acres
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic analysis
Operations: Fleet Mix	Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater.

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APPENDIX 5.4:

CALEEMOD PEAK OPERATIONAL EMISSIONS MODEL OUTPUTS

Meridian D-1 Gateway Aviation Center (Peak Operations) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Meridian D-1 Gateway Aviation Center (Peak Operations)
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	10.0
Location	33.87742536966998, -117.24692914631906
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5480
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	181	1000sqft	7.22	180,800	133,625	0.00	—	—
Parking Lot	122	Space	1.12	0.00	0.00	0.00	—	—

Other Asphalt Surfaces	2,077	1000sqft	47.7	0.00	0.00	0.00	—	—
User Defined Industrial	181	User Defined Unit	0.00	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	9.72	13.2	36.6	105	0.48	0.63	11.1	11.7	0.61	2.15	2.76	172	51,456	51,628	18.7	5.22	345	53,994
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.01	11.6	38.4	79.9	0.46	0.62	11.1	11.7	0.60	2.15	2.75	172	49,978	50,150	18.7	5.25	188	52,371
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.94	12.4	38.9	88.2	0.46	0.63	11.1	11.7	0.61	2.15	2.76	172	50,206	50,378	18.7	5.26	254	52,667
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.63	2.26	7.10	16.1	0.08	0.12	2.03	2.14	0.11	0.39	0.50	28.4	8,312	8,341	3.09	0.87	42.0	8,720

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	8.22	7.00	35.6	95.9	0.47	0.55	11.1	11.7	0.53	2.15	2.68	—	49,138	49,138	1.08	5.01	161	50,817
Area	1.40	6.11	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	9.72	13.2	36.6	105	0.48	0.63	11.1	11.7	0.61	2.15	2.76	172	51,456	51,628	18.7	5.22	345	53,994
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.91	6.68	37.5	79.1	0.45	0.55	11.1	11.7	0.53	2.15	2.68	—	47,693	47,693	1.10	5.04	4.17	49,227
Area	—	4.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	8.01	11.6	38.4	79.9	0.46	0.62	11.1	11.7	0.60	2.15	2.75	172	49,978	50,150	18.7	5.25	188	52,371
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	7.88	6.66	37.9	82.1	0.46	0.55	11.1	11.7	0.53	2.15	2.68	—	47,898	47,898	1.10	5.05	69.4	49,501
Area	0.96	5.70	0.05	5.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184

Total	8.94	12.4	38.9	88.2	0.46	0.63	11.1	11.7	0.61	2.15	2.76	172	50,206	50,378	18.7	5.26	254	52,667
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	1.44	1.21	6.92	15.0	0.08	0.10	2.03	2.13	0.10	0.39	0.49	—	7,930	7,930	0.18	0.84	11.5	8,195
Area	0.17	1.04	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68
Energy	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	332	332	0.03	< 0.005	—	333
Water	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104
Waste	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5
Total	1.63	2.26	7.10	16.1	0.08	0.12	2.03	2.14	0.11	0.39	0.50	28.4	8,312	8,341	3.09	0.87	42.0	8,720

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	6.99	6.31	4.36	87.5	0.18	0.08	0.85	0.93	0.08	0.25	0.33	—	18,695	18,695	0.61	0.43	74.3	18,913
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

User Defined Industrial	1.24	0.69	31.2	8.43	0.28	0.47	2.03	2.50	0.45	0.65	1.10	—	30,443	30,443	0.48	4.57	86.5	31,904
Total	8.22	7.00	35.6	95.9	0.47	0.55	2.88	3.43	0.53	0.91	1.43	—	49,138	49,138	1.08	5.01	161	50,817
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	6.70	6.02	4.84	70.6	0.17	0.08	0.85	0.93	0.08	0.25	0.33	—	17,241	17,241	0.63	0.47	1.93	17,397
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	1.21	0.67	32.6	8.51	0.28	0.47	2.03	2.50	0.45	0.65	1.11	—	30,452	30,452	0.47	4.58	2.24	31,830
Total	7.91	6.68	37.5	79.1	0.45	0.55	2.88	3.43	0.53	0.91	1.43	—	47,693	47,693	1.10	5.04	4.17	49,227
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	1.22	1.09	0.91	13.4	0.03	0.01	0.16	0.17	0.01	0.05	0.06	—	2,889	2,889	0.10	0.08	5.31	2,921
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.22	0.12	6.01	1.54	0.05	0.09	0.37	0.46	0.08	0.12	0.20	—	5,041	5,041	0.08	0.76	6.19	5,275
Total	1.44	1.21	6.92	15.0	0.08	0.10	0.53	0.63	0.10	0.17	0.26	—	7,930	7,930	0.18	0.84	11.5	8,195

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	795	795	0.08	0.01	—	799
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	102	102	0.01	< 0.005	—	103
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	897	897	0.08	0.01	—	902
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	795	795	0.08	0.01	—	799
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	102	102	0.01	< 0.005	—	103

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	897	897	0.08	0.01	—	902
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	132	132	0.01	< 0.005	—	132
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	16.9	16.9	< 0.005	< 0.005	—	17.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	148	148	0.01	< 0.005	—	149

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.02	< 0.005	—	184
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.02	< 0.005	—	184

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.40	1.29	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Total	1.40	6.11	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	4.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.17	0.16	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68
Total	0.17	1.04	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	1,472	1,472	1,472	537,280	25,059	25,059	25,059	9,146,394
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	408	408	408	149,023	10,439	10,439	10,439	3,810,060

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	366,880	122,293	127,574

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

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

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	832,105	349	0.0330	0.0040	3,451,866
Parking Lot	106,872	349	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	349	0.0330	0.0040	0.00
User Defined Industrial	0.00	349	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	41,810,000	2,118,719
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	170	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.0	annual days of extreme heat
Extreme Precipitation	2.05	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	7.76	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.6
AQ-PM	59.8
AQ-DPM	40.3
Drinking Water	70.7
Lead Risk Housing	53.6
Pesticides	13.2
Toxic Releases	64.0
Traffic	82.0
Effect Indicators	—
CleanUp Sites	82.5
Groundwater	97.9
Haz Waste Facilities/Generators	87.9

Impaired Water Bodies	0.00
Solid Waste	84.9
Sensitive Population	—
Asthma	71.5
Cardio-vascular	86.8
Low Birth Weights	97.0
Socioeconomic Factor Indicators	—
Education	82.5
Housing	59.7
Linguistic	82.8
Poverty	89.3
Unemployment	81.0

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	8.353650712
Employed	6.480174516
Education	—
Bachelor's or higher	30.14243552
High school enrollment	100
Preschool enrollment	10.97138458
Transportation	—
Auto Access	10.29128705
Active commuting	87.46310792
Social	—

2-parent households	6.223533941
Voting	6.13370974
Neighborhood	—
Alcohol availability	44.43731554
Park access	43.37225715
Retail density	18.60644168
Supermarket access	67.43231105
Tree canopy	3.977928911
Housing	—
Homeownership	8.353650712
Housing habitability	10.4452714
Low-inc homeowner severe housing cost burden	45.06608495
Low-inc renter severe housing cost burden	46.23379956
Uncrowded housing	21.62196843
Health Outcomes	—
Insured adults	12.4085718
Arthritis	51.7
Asthma ER Admissions	24.0
High Blood Pressure	30.0
Cancer (excluding skin)	80.0
Asthma	9.8
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	31.9
Life Expectancy at Birth	7.4
Cognitively Disabled	15.9
Physically Disabled	19.5

Heart Attack ER Admissions	20.1
Mental Health Not Good	14.9
Chronic Kidney Disease	35.4
Obesity	8.3
Pedestrian Injuries	77.2
Physical Health Not Good	20.0
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	63.5
Current Smoker	15.5
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	18.1
Elderly	24.3
English Speaking	44.9
Foreign-born	53.3
Outdoor Workers	18.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	73.9
Traffic Density	76.9
Traffic Access	61.5
Other Indices	—
Hardship	89.9
Other Decision Support	—
2016 Voting	11.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	98.0
Healthy Places Index Score for Project Location (b)	5.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health and Equity Evaluation Scorecard not completed.

8. User Changes to Default Data

Screen	Justification
Land Use	Total Project area is 56.03 acres
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic analysis
Operations: Fleet Mix	Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater.

Meridian D-1 Gateway Aviation Center (Peak Localized Operations) Detailed Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Meridian D-1 Gateway Aviation Center (Peak Localized Operations)
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50
Precipitation (days)	10.0
Location	33.87742536966998, -117.24692914631906
County	Riverside-South Coast
City	Unincorporated
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5480
EDFZ	11
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Unrefrigerated Warehouse-No Rail	181	1000sqft	7.22	180,800	133,625	0.00	—	—
Parking Lot	122	Space	1.12	0.00	0.00	0.00	—	—

Other Asphalt Surfaces	2,077	1000sqft	47.7	0.00	0.00	0.00	—	—
User Defined Industrial	181	User Defined Unit	0.00	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.4. Operations Emissions Compared Against Thresholds

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

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.21	10.6	6.11	21.4	0.02	0.09	0.11	0.21	0.10	0.02	0.12	172	3,448	3,619	17.9	0.43	186	4,380
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.55	9.08	6.31	15.0	0.02	0.08	0.11	0.20	0.08	0.02	0.10	172	3,410	3,582	17.9	0.43	184	4,344
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.46	9.92	6.26	20.5	0.02	0.09	0.11	0.20	0.09	0.02	0.11	172	3,430	3,602	17.9	0.43	185	4,364
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.00	1.81	1.14	3.74	< 0.005	0.02	0.02	0.04	0.02	< 0.005	0.02	28.4	568	596	2.97	0.07	30.6	723

2.5. Operations Emissions by Sector, Unmitigated

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

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.71	4.49	5.12	12.7	0.01	0.01	0.11	0.13	0.01	0.02	0.03	—	1,129	1,129	0.33	0.22	1.55	1,204
Area	1.40	6.11	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	6.21	10.6	6.11	21.4	0.02	0.09	0.11	0.21	0.10	0.02	0.12	172	3,448	3,619	17.9	0.43	186	4,380
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.44	4.21	5.38	14.3	0.01	0.01	0.11	0.13	0.01	0.02	0.03	—	1,125	1,125	0.36	0.22	0.04	1,200
Area	—	4.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	4.55	9.08	6.31	15.0	0.02	0.08	0.11	0.20	0.08	0.02	0.10	172	3,410	3,582	17.9	0.43	184	4,344
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.40	4.17	5.28	14.3	0.01	0.01	0.11	0.13	0.01	0.02	0.03	—	1,122	1,122	0.36	0.22	0.67	1,198
Area	0.96	5.70	0.05	5.38	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.1	22.1	< 0.005	< 0.005	—	22.2
Energy	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	2,003	2,003	0.18	0.01	—	2,011
Water	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Waste	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184

Total	5.46	9.92	6.26	20.5	0.02	0.09	0.11	0.20	0.09	0.02	0.11	172	3,430	3,602	17.9	0.43	185	4,364
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.80	0.76	0.96	2.62	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	0.01	—	186	186	0.06	0.04	0.11	198
Area	0.17	1.04	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68
Energy	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	332	332	0.03	< 0.005	—	333
Water	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104
Waste	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5
Total	1.00	1.81	1.14	3.74	< 0.005	0.02	0.02	0.04	0.02	< 0.005	0.02	28.4	568	596	2.97	0.07	30.6	723

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	4.37	4.27	0.90	9.88	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	465	465	0.23	0.11	0.87	504
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

User Defined Industrial	0.34	0.22	4.21	2.85	0.01	0.01	0.02	0.02	0.01	0.01	0.01	—	664	664	0.10	0.11	0.68	700
Total	4.71	4.49	5.12	12.7	0.01	0.01	0.03	0.04	0.01	0.01	0.02	—	1,129	1,129	0.33	0.22	1.55	1,204
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	4.13	4.01	0.96	11.3	< 0.005	0.01	0.01	0.02	0.01	< 0.005	0.01	—	451	451	0.26	0.11	0.02	491
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.31	0.20	4.42	2.97	0.01	0.01	0.02	0.02	0.01	0.01	0.01	—	673	673	0.10	0.11	0.02	708
Total	4.44	4.21	5.38	14.3	0.01	0.01	0.03	0.04	0.01	0.01	0.02	—	1,125	1,125	0.36	0.22	0.04	1,200
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.74	0.72	0.18	2.08	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	75.1	75.1	0.04	0.02	0.06	81.9
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	0.06	0.04	0.79	0.53	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	111	111	0.02	0.02	0.05	116
Total	0.80	0.76	0.96	2.62	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	186	186	0.06	0.04	0.11	198

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	795	795	0.08	0.01	—	799
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	102	102	0.01	< 0.005	—	103
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	897	897	0.08	0.01	—	902
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	795	795	0.08	0.01	—	799
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	102	102	0.01	< 0.005	—	103

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	897	897	0.08	0.01	—	902
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	132	132	0.01	< 0.005	—	132
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	16.9	16.9	< 0.005	< 0.005	—	17.0
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	—	148	148	0.01	< 0.005	—	149

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109

Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.10	0.05	0.93	0.78	0.01	0.07	—	0.07	0.07	—	0.07	—	1,106	1,106	0.10	< 0.005	—	1,109
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.02	< 0.005	—	184
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.02	0.01	0.17	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	183	183	0.02	< 0.005	—	184

4.3. Area Emissions by Source

4.3.2. Unmitigated

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

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	1.40	1.29	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Total	1.40	6.11	0.07	7.86	< 0.005	0.01	—	0.01	0.01	—	0.01	—	32.3	32.3	< 0.005	< 0.005	—	32.5
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	4.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	4.82	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Consumer Products	—	0.74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.17	0.16	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68
Total	0.17	1.04	0.01	0.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.67	3.67	< 0.005	< 0.005	—	3.68

4.4. Water Emissions by Land Use

4.4.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	80.1	283	363	8.24	0.20	—	628
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.3	46.8	60.1	1.36	0.03	—	104

4.5. Waste Emissions by Land Use

4.5.2. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	91.6	0.00	91.6	9.15	0.00	—	320
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Other Asphalt Surfaces	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
User Defined Industrial	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	15.2	0.00	15.2	1.52	0.00	—	53.1

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

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

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	184	184
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unrefrigerated Warehouse-No Rail	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	30.5	30.5

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

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

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

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

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

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

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

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

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

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

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

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

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

Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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

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

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

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

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

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

Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Unrefrigerated Warehouse-No Rail	1,472	1,472	1,472	537,280	294	294	294	107,456
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
User Defined Industrial	408	408	408	149,023	81.7	81.7	81.7	29,805

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	366,880	122,293	127,574

5.10.3. Landscape Equipment

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

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO_2 and CH_4 and N_2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Unrefrigerated Warehouse-No Rail	832,105	349	0.0330	0.0040	3,451,866
Parking Lot	106,872	349	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	349	0.0330	0.0040	0.00
User Defined Industrial	0.00	349	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Unrefrigerated Warehouse-No Rail	41,810,000	2,118,719
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Unrefrigerated Warehouse-No Rail	170	0.00
Parking Lot	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
User Defined Industrial	0.00	0.00

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Unrefrigerated Warehouse-No Rail	Cold storage	User Defined	150	7.50	7.50	7.50	25.0

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

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

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

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

5.16.2. Process Boilers

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

5.17. User Defined

Equipment Type	Fuel Type
—	—

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

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

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

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

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	28.0	annual days of extreme heat
Extreme Precipitation	2.05	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	7.76	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

6.2. Initial Climate Risk Scores

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

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

6.3. Adjusted Climate Risk Scores

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

Drought	N/A	N/A	N/A	N/A
Snowpack	N/A	N/A	N/A	N/A
Air Quality	N/A	N/A	N/A	N/A

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

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

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

Indicator	Result for Project Census Tract
Exposure Indicators	—
AQ-Ozone	97.6
AQ-PM	59.8
AQ-DPM	40.3
Drinking Water	70.7
Lead Risk Housing	53.6
Pesticides	13.2
Toxic Releases	64.0
Traffic	82.0
Effect Indicators	—
CleanUp Sites	82.5
Groundwater	97.9
Haz Waste Facilities/Generators	87.9

Impaired Water Bodies	0.00
Solid Waste	84.9
Sensitive Population	—
Asthma	71.5
Cardio-vascular	86.8
Low Birth Weights	97.0
Socioeconomic Factor Indicators	—
Education	82.5
Housing	59.7
Linguistic	82.8
Poverty	89.3
Unemployment	81.0

7.2. Healthy Places Index Scores

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

Indicator	Result for Project Census Tract
Economic	—
Above Poverty	8.353650712
Employed	6.480174516
Median HI	—
Education	—
Bachelor's or higher	30.14243552
High school enrollment	100
Preschool enrollment	10.97138458
Transportation	—
Auto Access	10.29128705
Active commuting	87.46310792

Social	—
2-parent households	6.223533941
Voting	6.13370974
Neighborhood	—
Alcohol availability	44.43731554
Park access	43.37225715
Retail density	18.60644168
Supermarket access	67.43231105
Tree canopy	3.977928911
Housing	—
Homeownership	8.353650712
Housing habitability	10.4452714
Low-inc homeowner severe housing cost burden	45.06608495
Low-inc renter severe housing cost burden	46.23379956
Uncrowded housing	21.62196843
Health Outcomes	—
Insured adults	12.4085718
Arthritis	51.7
Asthma ER Admissions	24.0
High Blood Pressure	30.0
Cancer (excluding skin)	80.0
Asthma	9.8
Coronary Heart Disease	57.7
Chronic Obstructive Pulmonary Disease	27.0
Diagnosed Diabetes	31.9
Life Expectancy at Birth	7.4
Cognitively Disabled	15.9

Physically Disabled	19.5
Heart Attack ER Admissions	20.1
Mental Health Not Good	14.9
Chronic Kidney Disease	35.4
Obesity	8.3
Pedestrian Injuries	77.2
Physical Health Not Good	20.0
Stroke	29.9
Health Risk Behaviors	—
Binge Drinking	63.5
Current Smoker	15.5
No Leisure Time for Physical Activity	16.7
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	18.1
Elderly	24.3
English Speaking	44.9
Foreign-born	53.3
Outdoor Workers	18.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	73.9
Traffic Density	76.9
Traffic Access	61.5
Other Indices	—
Hardship	89.9
Other Decision Support	—

2016 Voting	11.6

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	98.0
Healthy Places Index Score for Project Location (b)	5.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

7.4. Health & Equity Measures

No Health & Equity Measures selected.

7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

8. User Changes to Default Data

Screen	Justification
Land Use	Total Project area is 56.03 acres
Operations: Vehicle Data	Trip characteristics based on information provided in the Traffic analysis
Operations: Fleet Mix	Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis
Operations: Refrigerants	As of 1 January 2022, new commercial refrigeration equipment may not use refrigerants with a GWP of 150 or greater.

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APPENDIX 5.5:

AIRCRAFT-RELATED OPERATIONAL EMISSIONS

Mead &Hunt

April 27, 2022
(*revised 4/23/24)*

Sent via email

Haseeb Qureshi
Associate Principal
Urban Crossroads, Inc.
1133 Camelback St. #8329
Newport Beach, CA 92658
Email: hqureshi@urbanxroads.com

Subject: March Air Reserve Base - Commercial Air Cargo Noise and Air Quality Study – Final Emissions

Dear Mr. Haseeb Qureshi:

This letter contains the results of Amendment #3 (March 15, 2022) of our Agreement for the above-noted Project.

PROJECT BACKGROUND

Lewis Development (Project Applicant) is underway with development plans for an air cargo hangar and transfer terminal (Proposed Project) at the March Air Reserve Base (March ARB) in Riverside County, California. Mead & Hunt, Inc. (Mead & Hunt) was tasked with reviewing the Proposed Project's operations from a noise and air quality perspective and providing results to Urban Crossroads for incorporation into the environmental documents for the Proposed Project.

This work effort includes noise and emissions analysis for the following four scenarios:

1) Proposed Flight Operations Scenario – Reflects 10,608 annual operations by 767-300 aircraft. Operations in this scenario will occur during day, evening, and night[1] as indicated by the Project Applicant.
    a. Once constructed, the Proposed Project is anticipated to average 17 flights per day, six (6) days a week (non-peak). Generally, arrivals would occur in the early morning hours and departures would occur in the late evening hours.
    b. During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 flights per day, six (6) days per week, over a four (4) week period; however, the maximum annual aircraft operations for the Proposed Project would not exceed the currently available civilian air cargo operations capacity under the Joint Use Agreement. Aircraft operations would occur between 7:00 a.m. and 11:00 p.m. (approximately five percent of Proposed Project's proposed aircraft operations would occur between 10:00 p.m. and 11:00 p.m.).
2) No Night Operations Scenario – Reflects 10,608 annual operations by 767-300 aircraft. Similar to option 1, operations in this scenario will occur during day and evening hours; however, no nighttime operations will occur as indicated by the Project Applicant.

[1] Day, evening, and night are distinct time periods for noise modeling purposes. They are defined as: Day between the hours of 7:00 am – 7:00 pm, evening between the hours of 7:00 pm – 10:00 pm, and night between 10:00 pm – 7:00 am. Evening operations incur a 5 dB penalty and night operations incur a 10 dB penalty.

3) Reduced Flight Operations Scenario – Reflects 9,548 annual operations by 767-300 aircraft. Operations in this scenario will occur during day, evening, and night as indicated by the Project Applicant.
4) General Aviation Fleet Scenario – This scenario represents a theoretical change in the project away from air cargo and a focus on general aviation accommodation. The scenario assumes the same number of operations as the Proposed Flight Operations Scenario (10,608) but assumes they would be conducted by a mix of general aviation aircraft. A representative fleet was used from the John Wayne Airport General Aviation Improvement Program EIR (2018) to reflect likely users. **Table 4** at the end of this document details the operations by aircraft type assumed for the General Aviation Scenario.

NOISE CONTOURS

Noise contours were developed to reflect the four scenarios described above in the "Project Background" section. The results of these contours are depicted in **Exhibits 1-7**.

Comparison to Prior Noise Studies

In 2018, March ARB undertook the preparation of an Air Installation Compatible Use Zone (AICUZ) planning document. In the 2018 AICUZ, noise contours were prepared that reflected 21,000 aircraft operations associated with the Joint Powers Authority (JPA). These 21,000 operations represent the maximum allowable civilian operations at the March ARB under a joint-use agreement.

The 2018 March ARB AICUZ does not contain a detailed fleet-mix breakdown of the 21,000 aircraft operations by type of aircraft. However, the March JPA created an internal spreadsheet for the 2018 AICUZ noise contour effort that detailed the fleet mix breakdown of the 21,000 JPA civilian operations. A copy of that spreadsheet was provided to Mead & Hunt, and it was used as the basis of comparison between the Proposed Project and the 2018 AICUZ noise contour assumptions.

The spreadsheet that the JPA created and provided shows 12,600 annual operations conducted by a variety of civilian cargo aircraft. A summary table (**Table 1**) is included to the right.

Note that the civilian cargo aircraft operations were spread across a much broader range of aircraft type, some of which are much louder aircraft than the 767-300.

Table 1: Summary Table

2018 AICUZ Noise Contours Civilian Cargo Aircraft Fleet Mix	
Aircraft Type	**Annual Operations**
747-400	2,496
MD-11F	520
L10-11	520
757	3,250
767	3,510
DC-8	130
A300	520
A320	650
Total	**12,600**

As the Proposed Project would accommodate up to 10,608 annual cargo operations, less than the 12,600 in the 2018 AICUZ noise contour, it is appropriate to compare the Proposed Project's noise impacts to the 2018 AICUZ noise contours, specifically the noise contours associated with the Civilian Cargo Aircraft Fleet Mix (**Table 1**).

Exhibit 7 illustrates, for comparison purposes, the noise contours associated with the Proposed Flight Operations scenario as well as the noise contours associated with the Civilian Cargo Aircraft Fleet Mix.

RESIDENTIAL ANALYSIS

Analysis was conducted to determine the noise impacts on several sensitive receptors as provided by Urban Crossroads. The results of the analysis are provided in **Table 2** below. The receptor points and readings are also shown on **Exhibits 1-7**.

Table 2: Sensitive Receptor Analysis

Location / Receptor	AICUZ Air Cargo Scenario	Preferred Flight Ops	Reduced Flight Ops	No Night Flights	GA* Scenario
1341 W. Oleander Street	60.01	55.01	54.25	53.46	37.81
R1	49.01	47.6	46.85	46.06	27.68
R2	49.05	45.7	44.95	44.17	26.93
R3	51.43	46.81	46.06	45.29	28.84
R4	53.04	47.83	47.07	46.29	30.74
Note: all values are dB CNEL *GA - General Aviation					

EMISSIONS INVENTORY DETAILS

An operational emissions inventory was conducted for the four scenarios described on Page 1 (proposed flight operations, no night operations, reduced flight operations and the general aviation fleet scenario). The four scenarios' specific operations by aircraft type were incorporated into the Federal Aviation Administration's noise and emissions model: Aviation Environmental Design Tool (AEDT). AEDT uses aircraft and engine specific emissions factors to calculate total emissions associated with each operation entered into the model. The AEDT model for each of the four scenarios assumes that the total operations for each scenario are equally divided between arrivals and departures. The AEDT has preset power / thrust settings with resulting emissions factors assigned to each modeled aircraft.

The AEDT model runs used default Ground Service Equipment (GSE) and Auxiliary Power Unit (APU) utilization rates associated with the various aircraft types. No custom modeling / inputs were used.

Summaries of the Criteria Pollutants, Organic Gasses, and Hazardous Air Pollutants for all four scenarios have been documented in the Microsoft Excel files attached (*Attachments A and B*) to this correspondence. The emissions summaries include breakdowns of emissions by phase of flight (e.g., climb, descend, etc.) and by external source (e.g., GSE and APU).

Modeling Assumptions

Proposed Flight Operations Scenario

The Proposed Flight Operations Scenario reflects 10,608 annual operations by 767-300 cargo aircraft. The Proposed Project is anticipated to average 17 flights per day, six (6) days a week (non-peak). Generally, arrivals would occur in the early morning hours and departures would occur in the late evening hours.

During the peak season (i.e., late November through late December), the Proposed Project is anticipated to average 22 flights per day, six (6) days per week, over a four (4) week period; however, the maximum annual aircraft operations for the Proposed Project would not exceed the currently available civilian air cargo operations capacity under the Joint Use Agreement.

Time-of-day

Table 3 below contains the time-of-day assumptions used for all three cargo aircraft scenarios:

Table 3: Time of Day Assumptions

Proposed Flight Operations (Non-Peak) - Arrivals				No Night Operations (Non-Peak) - Arrivals				Reduced Flight Operations (Non-Peak) - Arrivals			
Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
14	3	0	17	14	3	0	17	13	2	0	15
82%	18%	0%	100%	82%	18%	0%	100%	87%	13%	0%	100%
Proposed Flight Operations (Non-Peak) - Departures				No Night Operations (Non-Peak) - Departures				Reduced Flight Operations (Non-Peak) - Departures			
Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
3	12	2	17	5	12	0	17	2	12	1	15
18%	71%	12%	100%	29%	71%	0%	100%	13%	80%	7%	100%
Proposed Flight Operations (Peak) - Arrivals				No Night Operations (Peak) - Arrivals				Reduced Flight Operations (Peak) - Arrivals			
Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
15	7	0	22	15	7	0	22	14	6	0	20
68%	32%	0%	100%	68%	32%	0%	100%	70%	30%	0%	100%
Proposed Flight Operations (Peak) - Departures				No Night Operations (Peak) - Departures				Reduced Flight Operations (Peak) - Departures			
Day	Evening	Night	Total	Day	Evening	Night	Total	Day	Evening	Night	Total
7	13	2	22	9	13	0	22	6	12	2	20
32%	59%	9%	100%	41%	59%	0%	100%	30%	60%	10%	100%

Runway End

Emissions results are independent of runway usage, nonetheless the model assumed Runway 14 is used ten percent of the time and Runway 32 is used ninety percent of the time.

Flight tracks

Emissions generated from flight tracks are independent of flight track usage. All aircraft were modeled on “straight-in” and “straight-out” flight tracks.

GSE and APU

The AEDT has pre-populated default equipment utilization information for GSE and APU for all aircraft models that use GSE and APUs. This modeling effort incorporated the default equipment utilization which includes:

- Thirteen-minutes of APU runtime per operation
- Diesel aircraft tug
- Diesel catering truck
- Diesel cargo loader
- Diesel hydrant fueling truck
- Diesel Lavatory truck
- Diesel service truck

No Night Operations Scenario

The No Night Operations Scenario reflects 10,608 annual operations by 767-300 cargo aircraft. All assumptions are the same as the Preferred Flight Operations scenario with the exception of time-of-day. **Table 3** above includes time-of day information for the No Night Operations Scenario

Reduced Flight Operations Scenario

The Reduced Flight Operations Scenario reflects 9,548 annual operations by 767-300 aircraft. Operations in this scenario will occur during day, evening, and night as indicated by the Project Applicant. All assumptions are the same as the Preferred Flight Operations scenario with the exception of time-of-day. **Table 3** above includes time-of day information for the Reduced Flight Operations Scenario.

General Aviation Flight Operations Scenario

In order to model the potential impacts of a General Aviation (GA) Project scenario rather than an air cargo Project scenario, a representative GA fleet was prepared. The GA fleet scenario depicted below in **Table 4** was derived from an existing GA fleet at John Wayne Airport (SNA). This SNA fleet is a typical and representative fleet of what could potentially occur under the MARB GA fleet scenario. The SNA operations by aircraft type were scaled proportionally to the MARB GA fleet scenario of an annual operations count of 10,608.

Table 4: General Aviation Fleet Scenario Assumptions

SNA GA FLEET EXAMPLE			MARB GA FLEET SCENARIO	
AEDT Model Type	**Annual Total**	**Percentage**	**MARB Annual Total**	**MARB Daily Ops**
Twin Engine Regional Jet				
CNA55B	4,346	4.5%	473	1.295
CL600	3,334	3.4%	363	0.994
CNA525C	3,176	3.3%	346	0.947
LEAR35	3,000	3.1%	326	0.894
GIV	2,860	2.9%	311	0.852
CNA560XL	2,316	2.4%	252	0.690
CL601	1,942	2.0%	211	0.579
GV	1,872	1.9%	204	0.558
CNA750	1,520	1.6%	165	0.453
CNA560U	1,452	1.5%	158	0.433
MU3001	1,448	1.5%	158	0.432
CNA680	1,136	1.2%	124	0.339
F10062	958	1.0%	104	0.286
CNA510	838	0.9%	91	0.250
CIT3	788	0.8%	86	0.235
IA1125	490	0.5%	53	0.146
ECLIPSE500	236	0.2%	26	0.070
Commuter Prop				
DHC6	2,890	3.0%	314	0.861
CNA441	2,888	3.0%	314	0.861
DO228	360	0.4%	39	0.107
CNA208	2,504	2.6%	272	0.746
DHC830	1,156	1.2%	126	0.345
GA Prop				
GASEPF	31,054	31.8%	3379	9.256
CNA 172	9,914	10.2%	1079	2.955
GASEPV	6,912	7.1%	752	2.060
BEC58P	3,060	3.1%	333	0.912
CNA182	2,286	2.3%	249	0.681
CNA 206	1,500	1.5%	163	0.447
PA28	966.00	1.0%	105	0.288
PA31	302	0.3%	33	0.090
TOTAL ANNUAL OPS	**97,504**		**10,608**	**Daily**

<u>Time-of-day</u>

As is common for GA aircraft, all GA operations were assumed to be conducted during daytime hours.

<u>Runway End</u>

As in all other scenarios, the GA Fleet Scenario assumed Runway 14 is used ten percent of the time and Runway 32 is used ninety percent of the time.

<u>Flight Tracks</u>

Emissions generated from flight tracks are independent of flight track usage. All aircraft were modeled on "straight-in" and "straight-out" flight tracks.

<u>GSE and APU</u>

The AEDT has pre-populated default equipment utilization information for GSE and APU for all aircraft models that use GSE and APUs. The GA fleet is comprised of a diverse group of aircraft manufacturers and models with different GSE and APU utilization assumptions. The recommended default configurations and usage were assumed in this modeling effort.

If you have any questions or require additional information, please contact me.

Sincerely,

MEAD & HUNT, Inc.

Corbett Smith, C.M.
Project Manager

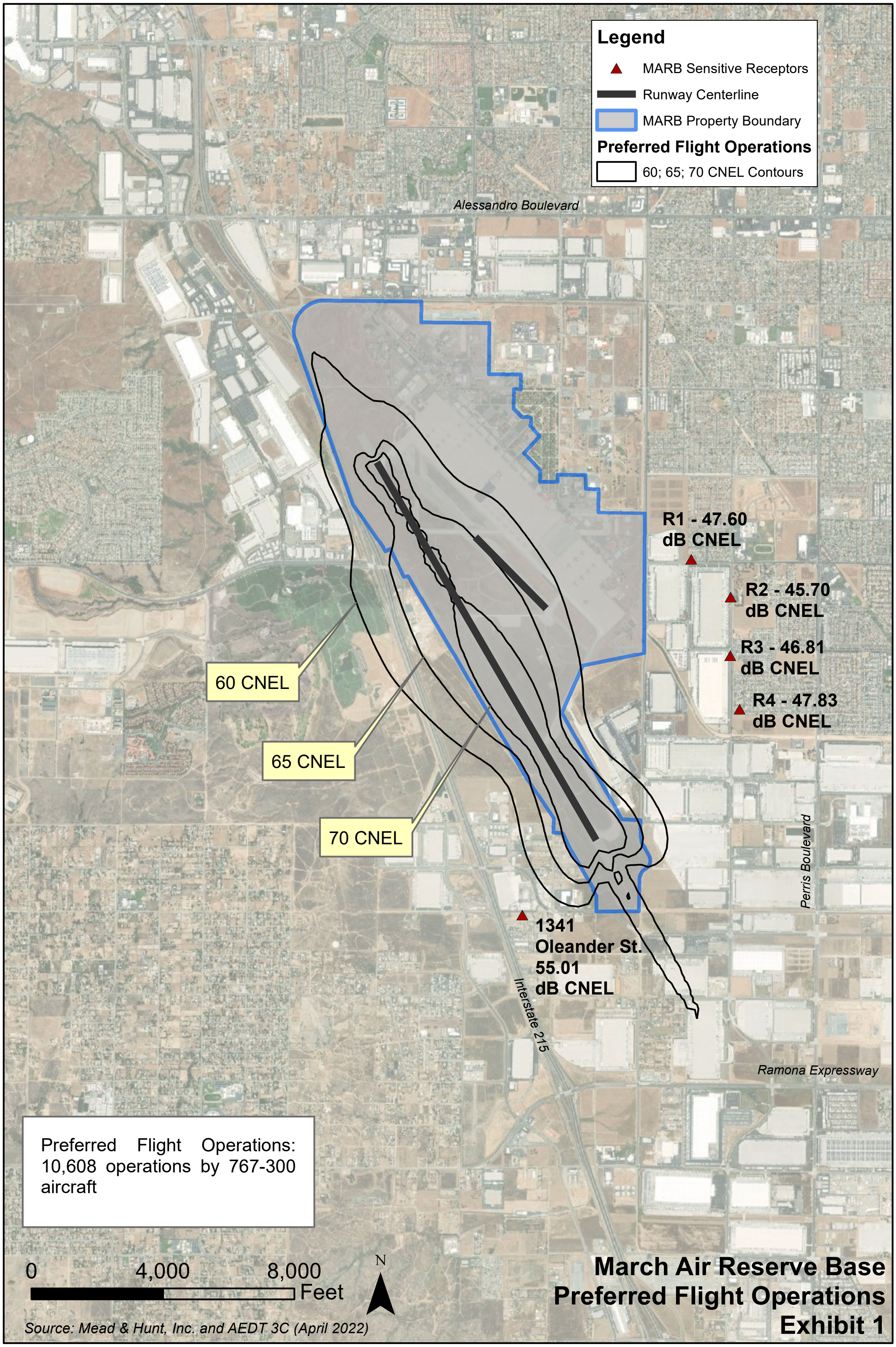
Exhibits:

Exhibit 1. Preferred Flight Operations – Noise Contours
Exhibit 2. GA Fleet – Noise Contours
Exhibit 3. No Night Flights – Noise Contours
Exhibit 4. Reduced Flight Operations – Noise Contours
Exhibit 5. ALL Scenarios – Noise Contours
Exhibit 6. 2018 AICUZ Cargo Operations – Noise Contours
Exhibit 7. Preferred Flight Operations Comparison with 2018 AICUZ Cargo Operations – Noise Contours

Attachments:

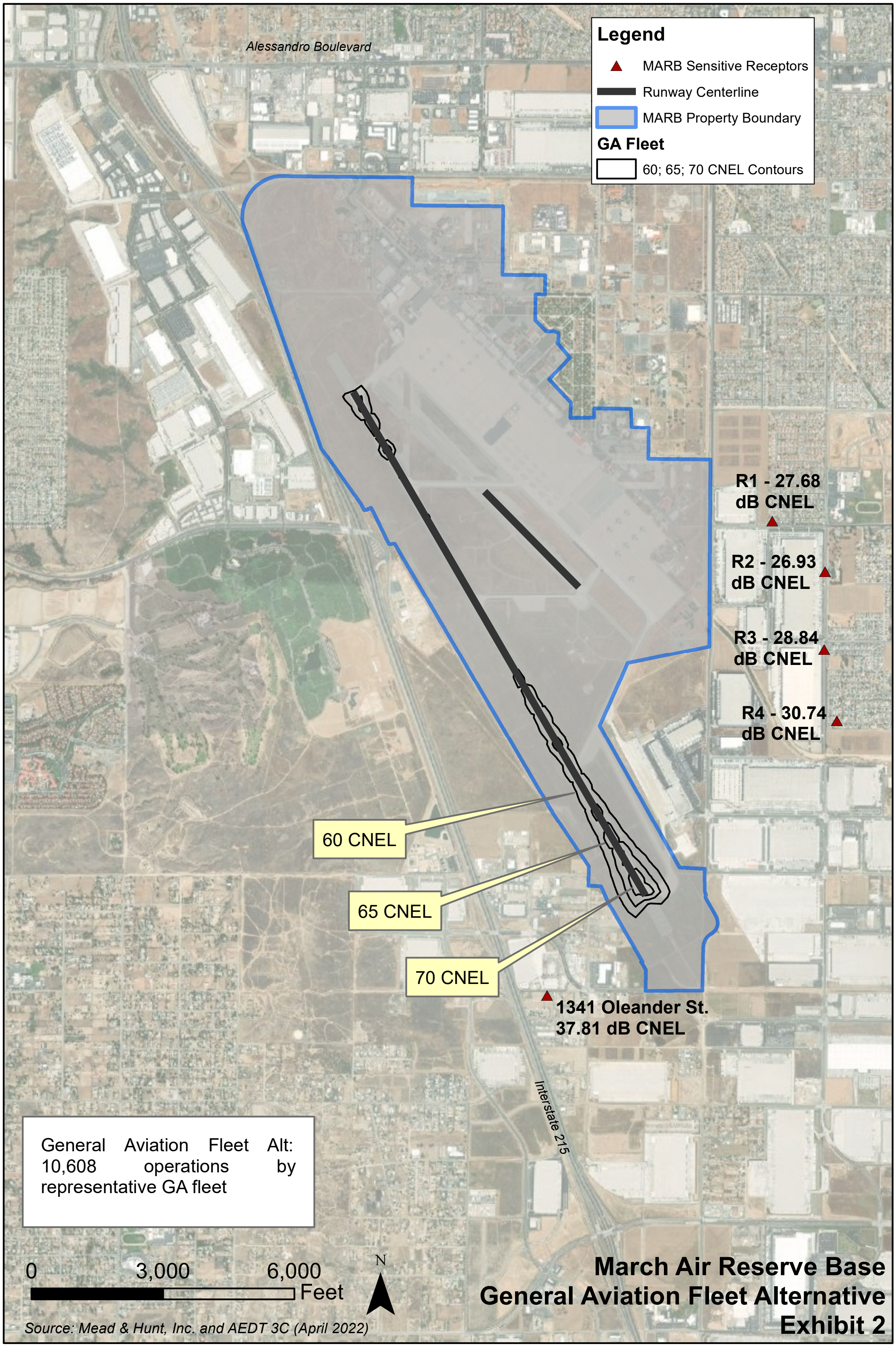
Attachment A - MARB Cargo Emissions Summary April 22.xls – Contains criteria pollutant summaries for all scenarios.

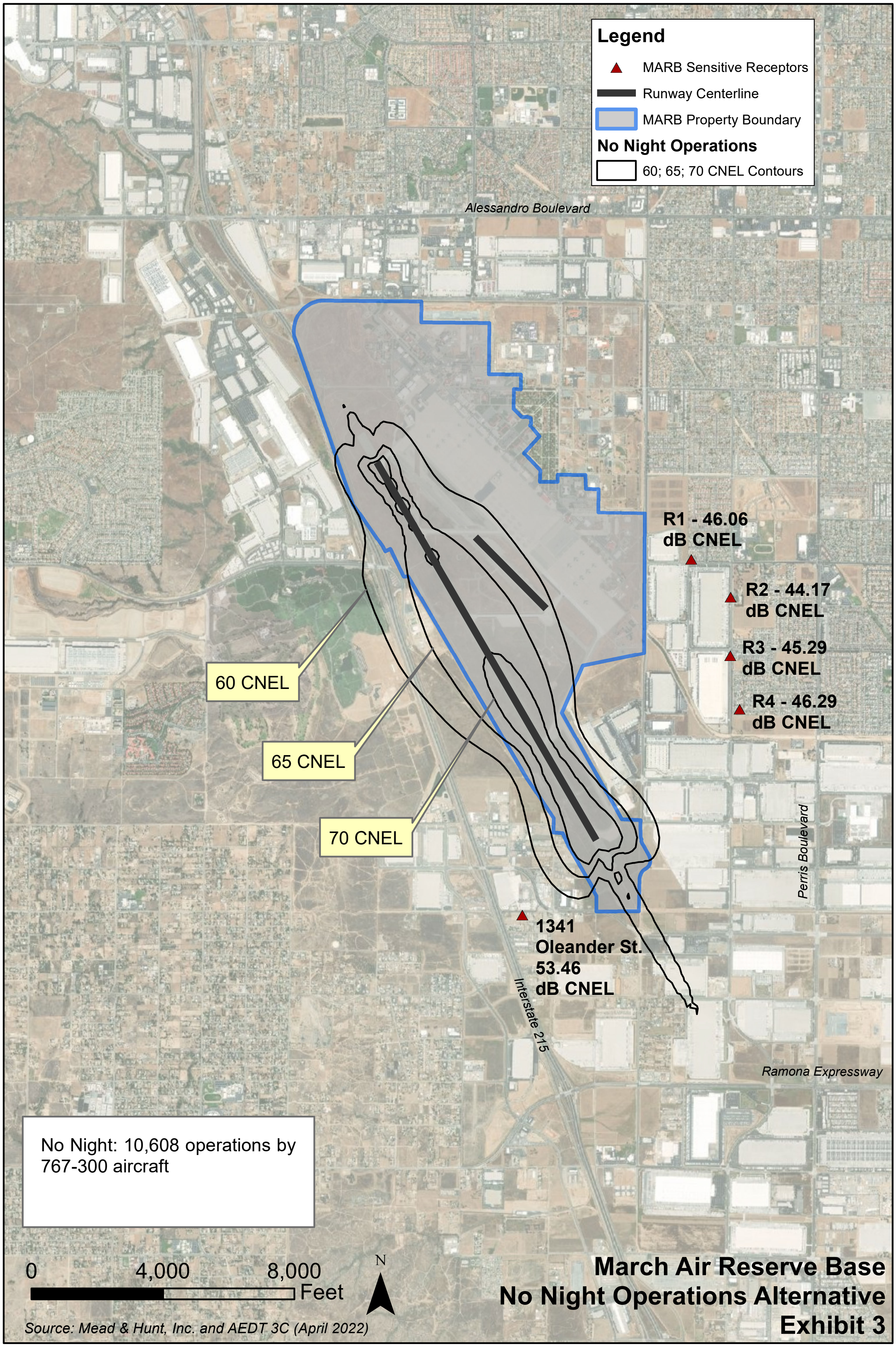
Attachment B - MARB D1 OG and HAPs all scenarios April 22.xls – Contains Organic Gasses and Hazardous Air Pollutant summaries for all scenarios.

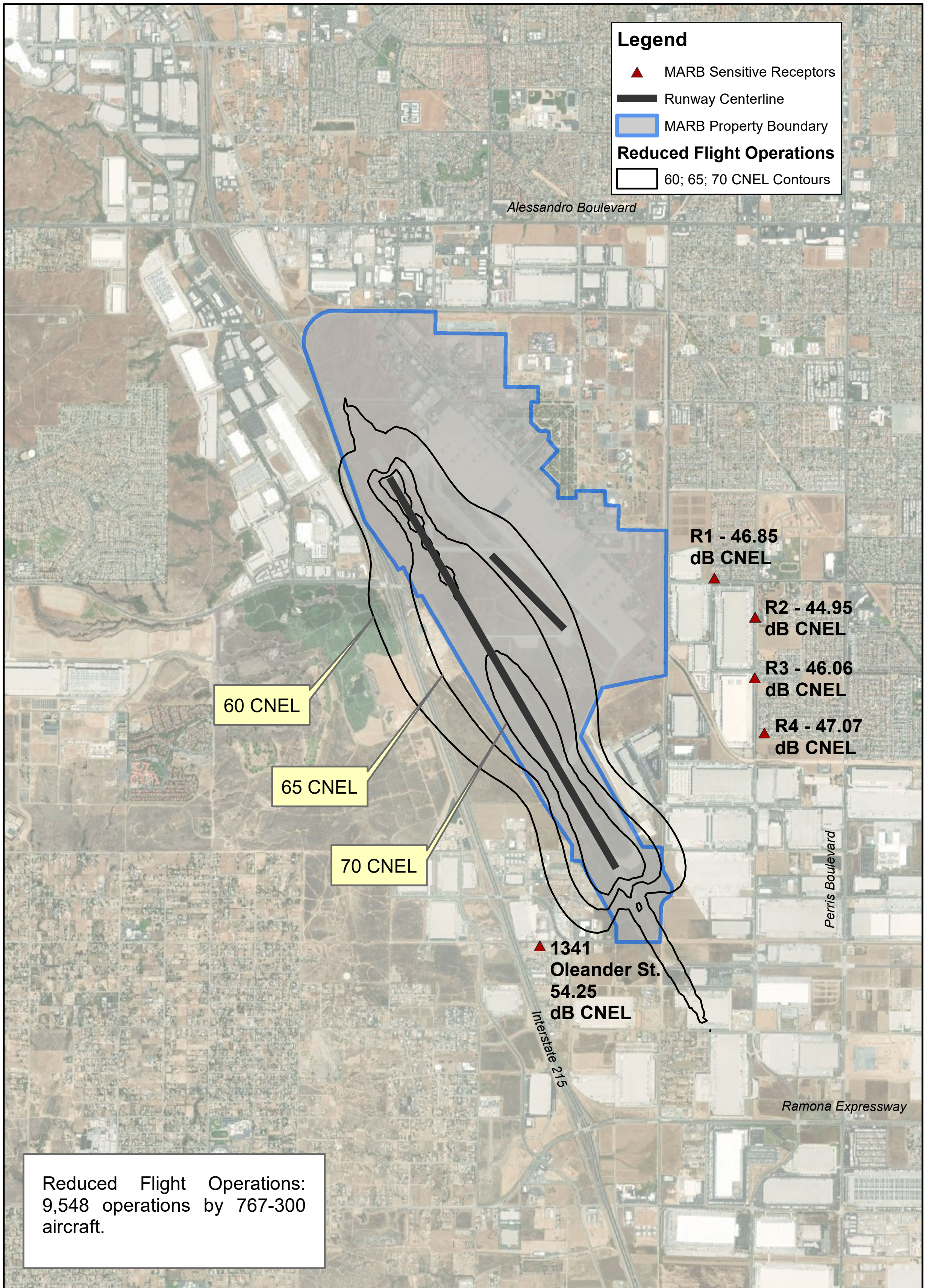


March Air Reserve Base
Preferred Flight Operations
Exhibit 1

Source: Mead & Hunt, Inc. and AEDT 3C (April 2022)

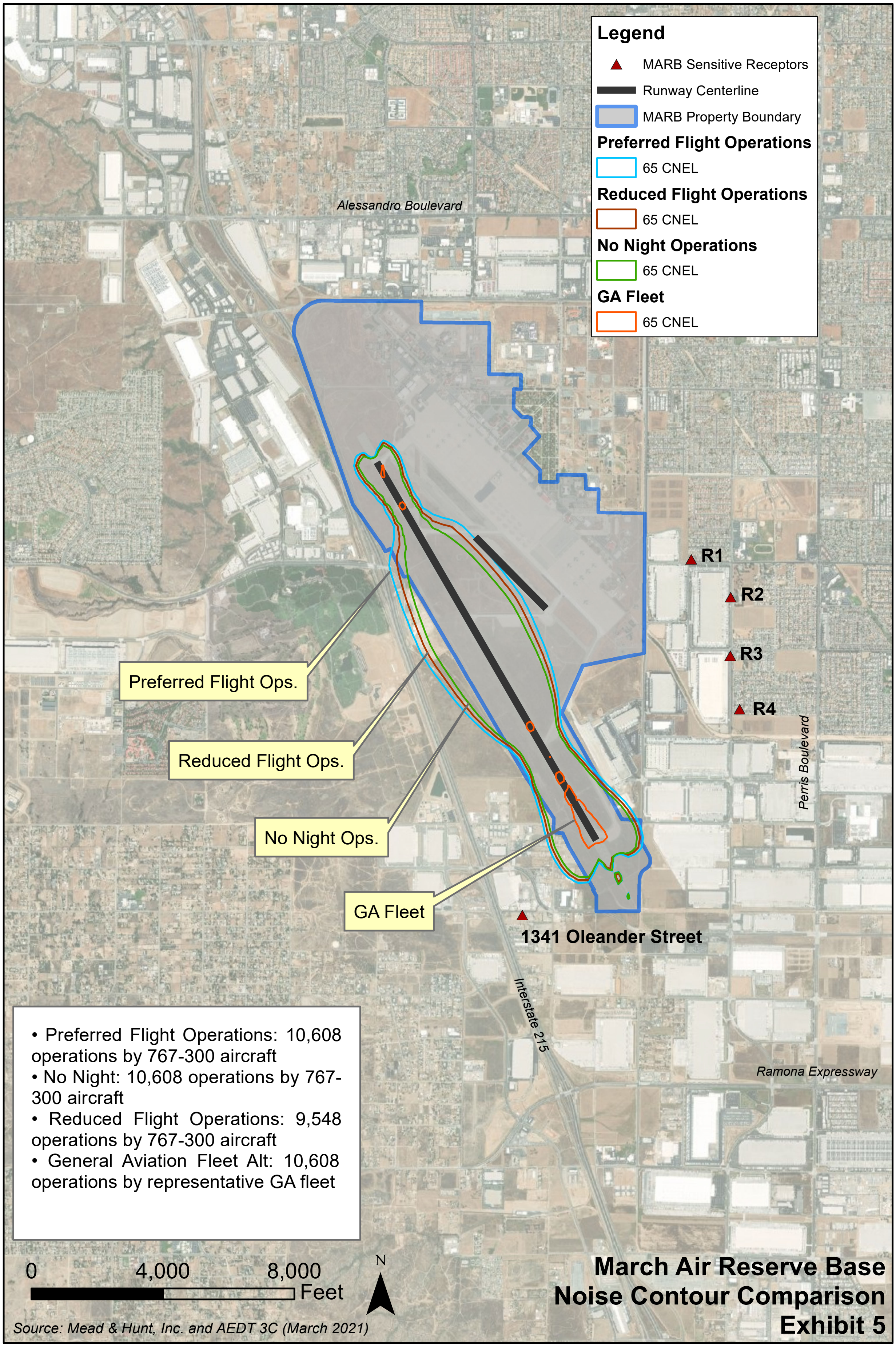

Legend
MARB Sensitive Receptors
Runway Centerline
MARB Property Boundary
GA Fleet
60; 65; 70 CNEL Contours
Alessandro Boulevard
R1 - 27.68 dB CNEL
R2 - 26.93 dB CNEL
R3 - 28.84 dB CNEL
R4 - 30.74 dB CNEL
60 CNEL
65 CNEL
70 CNEL
1341 Oleander St. 37.81 dB CNEL
Interstate 215
General Aviation Fleet Alt: 10,608 operations by representative GA fleet
0
3,000
6,000
Feet
N
Source: Mead & Hunt, Inc. and AEDT 3C (April 2022)
March Air Reserve Base
General Aviation Fleet Alternative
Exhibit 2

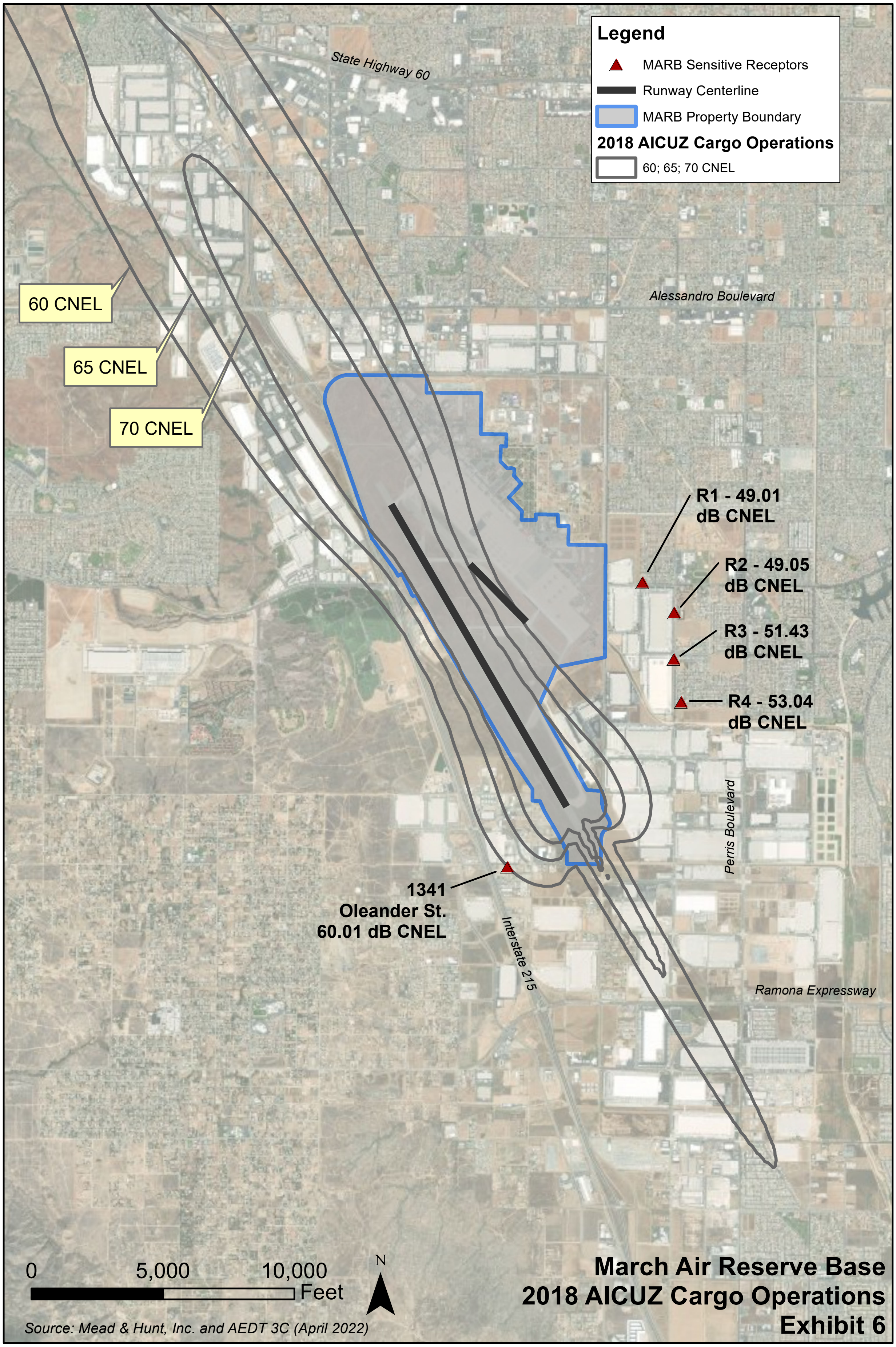

Legend
MARB Sensitive Receptors
Runway Centerline
MARB Property Boundary
No Night Operations
60; 65; 70 CNEL Contours
Alessandro Boulevard
R1 - 46.06 dB CNEL
R2 - 44.17 dB CNEL
R3 - 45.29 dB CNEL
R4 - 46.29 dB CNEL
60 CNEL
65 CNEL
70 CNEL
Perris Boulevard
1341 Oleander St. 53.46 dB CNEL
Interstate 215
Ramona Expressway
No Night: 10,608 operations by 767-300 aircraft
0
4,000
8,000
Feet
N
Source: Mead & Hunt, Inc. and AEDT 3C (April 2022)
March Air Reserve Base
No Night Operations Alternative
Exhibit 3



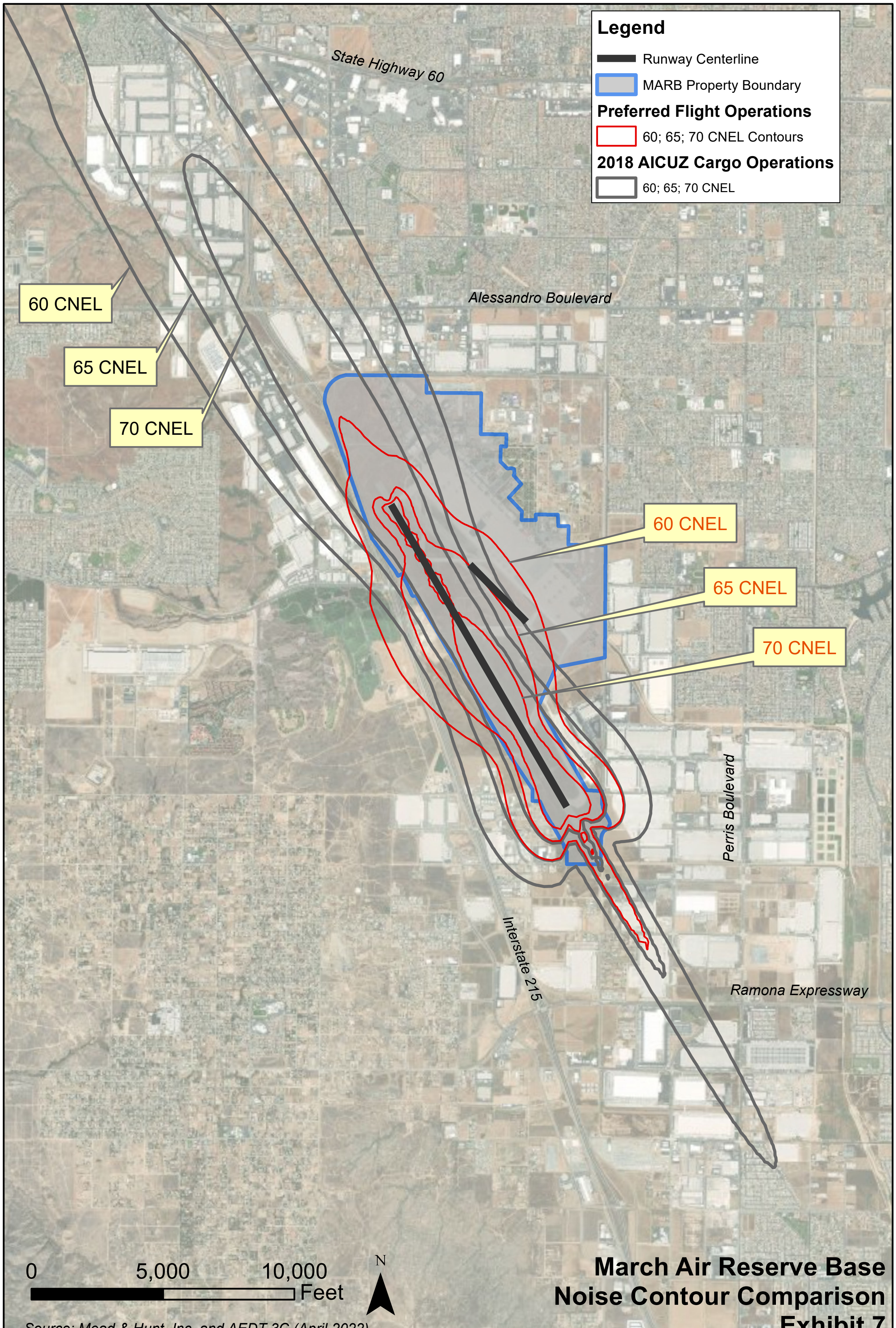
March Air Reserve Base
Reduced Flight Operations Alternative
Exhibit 4

Source: Mead & Hunt, Inc. and AEDT 3C (April 2022)


Legend
MARB Sensitive Receptors
Runway Centerline
MARB Property Boundary
Preferred Flight Operations
65 CNEL
Reduced Flight Operations
65 CNEL
No Night Operations
65 CNEL
GA Fleet
65 CNEL
Alessandro Boulevard
R1
R2
R3
R4
Perris Boulevard
Preferred Flight Ops.
Reduced Flight Ops.
No Night Ops.
GA Fleet
1341 Oleander Street
Interstate 215
Ramona Expressway
• Preferred Flight Operations: 10,608 operations by 767-300 aircraft
• No Night: 10,608 operations by 767-300 aircraft
• Reduced Flight Operations: 9,548 operations by 767-300 aircraft
• General Aviation Fleet Alt: 10,608 operations by representative GA fleet
0
4,000
8,000
Feet
N
Source: Mead & Hunt, Inc. and AEDT 3C (March 2021)
March Air Reserve Base
Noise Contour Comparison
Exhibit 5



March Air Reserve Base
2018 AICUZ Cargo Operations
Exhibit 6



March Air Reserve Base
Noise Contour Comparison
Exhibit 7

No Night Operations (Combined Peak and Non-Peak)

Daily

Mode	**Fuel**	**CO**	**VOC**	**NOx**	**CO2**	**SOx**	**PM 2.5**	**PM 10**
Climb Below Mixing Height	12.2252	0.2252	0.0634	0.2496	38.5705	0.0143	0.0014	0.0014
Descend Below Mixing Height	6.6510	0.1311	0.0312	0.0439	20.9840	0.0078	0.0006	0.0006
GSE LTO	0.0000	0.0458	0.0021	0.0070	0.0000	0.0000	0.0004	0.0004
APU	0.0000	0.0035	0.0004	0.0080	0.0000	0.0008	0.0008	0.0008
TOTALS (ST/DAY)	**18.8762**	**0.4055**	**0.0972**	**0.3085**	**59.5544**	**0.0230**	**0.0032**	**0.0032**
TOTALS (LBS/DAY)	**37752.4200**	**811.0200**	**194.3400**	**617.0000**	**119108.8800**	**45.9800**	**6.3800**	**6.4400**

Annual

Mode	**Fuel**	**CO**	**VOC**	**NOx**	**CO2**	**SOx**	**PM 2.5**	**PM 10**
Climb Below Mixing Height	4,462.1944	82.1871	23.1520	91.1004	14,078.2252	5.2268	0.5074	0.5074
Descend Below Mixing Height	2,427.6223	47.8442	11.3844	16.0272	7,659.1454	2.8434	0.2336	0.2336
GSE LTO	-	16.7097	0.7775	2.5477	-	0.0146	0.1424	0.1533
APU	-	1.2702	0.1533	2.9273	-	0.3066	0.2811	0.2811
TOTALS (ST/Year)	**6,889.8167**	**148.0112**	**35.4671**	**112.6025**	**21,737.3706**	**8.3914**	**1.1644**	**1.1753**
TOTALS (LBS/Year)	**13,779,633.3000**	**296,022.3000**	**70,934.1000**	**225,205.0000**	**43,474,741.2000**	**16,782.7000**	**2,328.7000**	**2,350.6000**

Reduced Operations Alternative (Combined Peak and Non-Peak)

Daily

Mode	**Fuel**	**CO**	**VOC**	**NOx**	**CO2**	**SOx**	**PM 2.5**	**PM 10**
Climb Below Mixing Height	11.0137	0.2029	0.0571	0.2249	34.7481	0.0129	0.0013	0.0013
Descend Below Mixing Height	5.9786	0.1178	0.0280	0.0395	18.8625	0.0070	0.0006	0.0006
GSE LTO	-	0.0412	0.0019	0.0063	-	0.0000	0.0004	0.0004
APU	-	0.0031	0.0004	0.0072	-	0.0008	0.0007	0.0007
TOTALS (ST/DAY)	**16.9923**	**0.3650**	**0.0875**	**0.2778**	**53.6106**	**0.0207**	**0.0029**	**0.0029**
TOTALS (LBS/DAY)	**33,984.5200**	**730.0600**	**174.9400**	**555.6400**	**107,221.1600**	**41.4000**	**5.7600**	**5.7800**

Annual

Mode	**Fuel**	**CO**	**VOC**	**NOx**	**CO2**	**SOx**	**PM 2.5**	**PM 10**
Climb Below Mixing Height	4,019.9859	74.0439	20.8561	82.0703	12,683.0602	4.7085	0.4563	0.4563
Descend Below Mixing Height	2,182.1890	43.0080	10.2346	14.4066	6,884.8016	2.5550	0.2117	0.2117
GSE LTO	-	15.0380	0.6972	2.2922	-	0.0146	0.1314	0.1351
APU	-	1.1461	0.1387	2.6353	-	0.2774	0.2519	0.2519
TOTALS (ST/Year)	**6,202.1749**	**133.2360**	**31.9266**	**101.4043**	**19,567.8617**	**7.5555**	**1.0512**	**1.0549**
TOTALS (LBS/Year)	**12,404,349.8000**	**266,471.9000**	**63,853.1000**	**202,808.6000**	**39,135,723.4000**	**15,111.0000**	**2,102.4000**	**2,109.7000**

General Aviation Fleet Alternative

Daily

Mode	**Fuel**	**CO**	**VOC**	**NOx**	**CO2**	**SOx**	**PM 2.5**	**PM 10**
Climb Below Mixing Height	0.9970	0.0559	0.0084	0.0063	3.1454	0.0012	0.0002	0.0002
Descend Below Mixing Height	0.6331	0.0542	0.0048	0.0029	1.9975	0.0007	0.0002	0.0002
GSE LTO	-	0.0097	0.0003	0.0008	-	0.0000	0.0000	0.0000
APU	-	0.0024	0.0000	0.0005	-	0.0001	0.0001	0.0001
TOTALS (ST/DAY)	**1.6301**	**0.1222**	**0.0135**	**0.0105**	**5.1429**	**0.0020**	**0.0005**	**0.0005**
TOTALS (LBS/DAY)	**3,260.1800**	**244.3800**	**27.0600**	**21.0600**	**10,285.8600**	**4.0200**	**0.9200**	**0.9200**

Annual

Mode	**Fuel**	**CO**	**VOC**	**NOx**	**CO2**	**SOx**	**PM 2.5**	**PM 10**
Climb Below Mixing Height	363.8904	20.4072	3.0697	2.2995	1,148.0783	0.4271	0.0730	0.0730
Descend Below Mixing Height	231.0925	19.7684	1.7374	1.0695	729.0912	0.2701	0.0548	0.0548
GSE LTO	-	3.5442	0.1168	0.2957	-	0.0037	0.0146	0.0146
APU	-	0.8797	0.0146	0.1789	-	0.0329	0.0256	0.0256
TOTALS (ST/Year)	**594.9829**	**44.5994**	**4.9385**	**3.8435**	**1,877.1695**	**0.7337**	**0.1679**	**0.1679**
TOTALS (LBS/Year)	**1,189,965.7000**	**89,198.7000**	**9,876.9000**	**7,686.9000**	**3,754,338.9000**	**1,467.3000**	**335.8000**	**335.8000**

ATTACHMENT A - Prefered Flight Ops Scenario - Peak vs Non Peak Emissions

Prefered Flight Operations (Peak Only)

Daily Mode	Fuel (ST)	CO (ST)	VOC (ST)	NOx (ST)	CO2 (ST)	SOx (ST)	PM 2.5 (ST)	PM 10 (ST)
Climb Below Mixing Height	1.1948	0.0220	0.0054	0.0244	3.7695	0.0014	0.0001	0.0001
Descend Below Mixing Height	0.6541	0.0129	0.0031	0.0043	2.0638	0.0008	0.0001	0.0001
GSE LTO	-	0.0045	0.0002	0.0007	-	-	0.0000	0.0000
APU	-	0.0003	0.0000	0.0008	-	0.0001	0.0001	0.0001
TOTALS (ST/DAY)	**1.8489**	**0.0397**	**0.0088**	**0.0302**	**5.8333**	**0.0023**	**0.0003**	**0.0003**
TOTALS (LBS/DAY)	**3,697.8000**	**79.4600**	**17.5000**	**60.3600**	**11,666.5800**	**4.5000**	**0.6400**	**0.6400**

Prefered Flight Operations (Non-Peak Only)

Daily Mode	Fuel (ST)	CO (ST)	VOC (ST)	NOx (ST)	CO2 (ST)	SOx (ST)	PM 2.5 (ST)	PM 10 (ST)
Climb Below Mixing Height	11.0305	0.2032	0.0501	0.2252	34.8013	0.0129	0.0013	0.0013
Descend Below Mixing Height	5.9969	0.1182	0.0281	0.0396	18.9202	0.0070	0.0006	0.0006
GSE LTO	-	0.0413	0.0019	0.0063	-	0.0000	0.0004	0.0004
APU	-	0.0031	0.0004	0.0072	-	0.0008	0.0007	0.0007
TOTALS (ST)	**17.0274**	**0.3658**	**0.0806**	**0.2783**	**53.7215**	**0.0207**	**0.0029**	**0.0029**
TOTALS (LBS/DAY)	**34,054.8000**	**731.6000**	**161.1200**	**556.6400**	**107,442.9200**	**41.4800**	**5.7600**	**5.7800**

Combined on and off-site

Mode	Formaldehyde (IRIS, CAA)	Methyl alcohol (IRIS, CAA)	Benzene (IRIS, CAA)	C-5 Benzene + C-4 Aroald	C-4 Benzene + C-3 Aroald	Acetaldehyde (IRIS, CAA)	Naphthalene (IRIS, CAA)	O-xylene (IRIS, CAA)	Isopropylbenzene (cumene) (IRIS, CAA)	Ethylbenzene (IRIS, CAA)	Styrene (IRIS, CAA)	M & P-xylene (IRIS, CAA)	1,3-butadiene (IRIS, CAA)	Acrolein (IRIS, CAA)	M-xylene (IRIS, CAA)	Toluene (IRIS, CAA)	Phenol (carbolic acid) (IRIS, CAA)	N-hexane (IRIS, CAA)	2,2,4-trimethylpentane (IRIS, CAA)
Departure Below Mixing Height	0.006875	0.0010081	0.0009388	0.000181	0.000366	0.0023859	0.000302	9.27E-05	1.68E-06	9.72E-05	0.000173	0.000157	0.0009422	0.0013677		0.000358549	0.000405		
Arrival Below Mixing Height	0.00386	0.000566	0.0005271	0.000102	0.000206	0.0013395	0.00017	5.21E-05	9.37E-07	5.46E-05	9.69E-05	8.84E-05	0.000529	0.0007679		0.000201304	0.000228		
DepartureTaxi	0.006789	0.0009955	0.0009271	0.000179	0.000362	0.002356	0.000298	9.15E-05	1.65E-06	9.60E-05	0.00017	0.000156	0.0009304	0.0013506		0.000354062	0.0004		
ArrivalTaxi	0.003369	0.000494	0.0004601	8.87E-05	0.00018	0.0011692	0.000148	4.54E-05	8.16E-07	4.76E-05	8.46E-05	7.72E-05	0.0004617	0.0006703		0.000175708	0.000199		
Ground Service Equipment	6.39E-05		1.55E-05			2.16E-05		8.07E-06		5.94E-06					1.65E-05	2.64E-05		1.36E-05	1.33E-05
Aircraft Auxiliary Power Units	3.55E-05	5.21E-06	4.85E-06	9.37E-07	1.90E-06	1.23E-05	1.57E-06	4.74E-07	1.10E-08	5.07E-07	8.93E-07	8.16E-07	4.87E-06	7.07E-06		1.85E-06	2.09E-06		
DAILY TOTAL (ST)	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
DAILY TOTAL (LBS)	**21.67**	**3.16**	**2.97**	**0.57**	**1.15**	**7.52**	**0.95**	**0.31**	**0.01**	**0.32**	**0.54**	**0.49**	**2.95**	**4.29**	**0.03**	**1.18**	**1.27**	**0.03**	**0.03**
ANNUAL TOTAL (ST)	**3.95**	**0.58**	**0.54**	**0.10**	**0.21**	**1.37**	**0.17**	**0.06**	**0.00**	**0.06**	**0.10**	**0.09**	**0.54**	**0.78**	**0.01**	**0.21**	**0.23**	**0.00**	**0.00**
ANNUAL TOTAL (LBS)	**7,909.14**	**1,152.87**	**1,084.99**	**206.95**	**418.99**	**2,744.31**	**345.54**	**111.91**	**1.92**	**115.48**	**197.37**	**180.12**	**1,077.49**	**1,564.18**	**12.04**	**429.34**	**463.70**	**9.91**	**9.71**
On-Site																			
Aircraft Auxiliary Power Units	3.55E-05	5.21E-06	4.85E-06	9.37E-07	1.90E-06	1.23E-05	1.57E-06	4.74E-07	1.10E-08	5.07E-07	8.93E-07	8.16E-07	4.87E-06	7.07E-06	0.00E+00	1.85E-06	2.09E-06	0.00E+00	0.00E+00
Ground Service Equipment	6.39E-05	0.00E+00	1.55E-05	0.00E+00	0.00E+00	2.16E-05	0.00E+00	8.07E-06	0.00E+00	5.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-05	2.64E-05	0.00E+00	1.36E-05	1.33E-05
Taxi out - 5% Assigned **	3.39E-04	4.98E-05	4.64E-05	8.93E-06	1.81E-05	1.18E-04	1.49E-05	4.58E-06	8.27E-08	4.80E-06	8.52E-06	7.78E-06	4.65E-05	6.75E-05	0.00E+00	1.77E-05	2.00E-05	0.00E+00	0.00E+00
Taxi in - 5% Assigned **	0.000168	2.47E-05	2.3E-05	4.43E-06	8.98E-06	5.846E-05	7.4E-06	2.27E-06	4.08E-08	2.38099E-06	4.23E-06	3.86E-06	2.309E-05	3.351E-05	0	8.78542E-06	9.94E-06	0	0
DAILY ON-SITE TOTAL (ST)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
DAILY ON-SITE TOTAL (LBS)	**1.21**	**0.16**	**0.18**	**0.03**	**0.06**	**0.42**	**0.05**	**0.03**	**0.00**	**0.03**	**0.03**	**0.02**	**0.15**	**0.22**	**0.03**	**0.11**	**0.06**	**0.03**	**0.03**
ANNUAL ON-SITE TOTAL (ST)	**0.22**	**0.03**	**0.03**	**0.01**	**0.01**	**0.08**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.03**	**0.04**	**0.01**	**0.02**	**0.01**	**0.00**	**0.00**
ANNUAL ON-SITE TOTAL (LBS)	**443.39**	**58.17**	**65.50**	**10.44**	**21.14**	**153.44**	**17.44**	**11.24**	**0.10**	**9.95**	**9.96**	**9.09**	**54.37**	**78.92**	**12.04**	**39.98**	**23.40**	**9.91**	**9.71**
Off-Site																			
Departure Below Mixing Height	0.006875	0.0010081	0.0009388	0.000181	0.000366	0.0023859	0.000302	9.27E-05	1.68E-06	9.71798E-05	0.000173	0.000157	0.0009422	0.0013677	0	0.000358549	0.000405	0	0
Arrival Below Mixing Height	0.00386	0.000566	0.0005271	0.000102	0.000206	0.0013395	0.00017	5.21E-05	9.37E-07	5.45644E-05	9.69E-05	8.84E-05	0.000529	0.0007679	0	0.000201304	0.000228	0	0
Taxi out - 5% subtracted out **	0.000339	4.977E-05	4.635E-05	8.93E-06	1.81E-05	0.0001178	1.49E-05	4.58E-06	8.27E-08	4.79781E-06	8.52E-06	7.78E-06	4.652E-05	6.753E-05	0	1.77031E-05	2E-05	0	0
Taxi in - 5% subtracted out **	0.000168	2.47E-05	2.3E-05	4.43E-06	8.98E-06	5.846E-05	7.4E-06	2.27E-06	4.08E-08	2.38099E-06	4.23E-06	3.86E-06	2.309E-05	3.351E-05	0	8.78542E-06	9.94E-06	0	0
DAILY ON-SITE TOTAL (ST)	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**0.00**	**0.00**	**-**	**-**
DAILY ON-SITE TOTAL (LBS)	**20.45**	**3.00**	**2.79**	**0.54**	**1.09**	**7.10**	**0.90**	**0.28**	**0.00**	**0.29**	**0.51**	**0.47**	**2.80**	**4.07**	**-**	**1.07**	**1.21**	**-**	**-**
ANNUAL ON-SITE TOTAL (ST)	**3.73**	**0.55**	**0.51**	**0.10**	**0.20**	**1.30**	**0.16**	**0.05**	**0.00**	**0.05**	**0.09**	**0.09**	**0.51**	**0.74**	**-**	**0.19**	**0.22**	**-**	**-**
ANNUAL ON-SITE TOTAL (LBS)	**7,465.76**	**1,094.70**	**1,019.49**	**196.51**	**397.85**	**2,590.87**	**328.10**	**100.67**	**1.82**	**105.53**	**187.41**	**171.03**	**1,023.12**	**1,485.26**	**-**	**389.36**	**440.31**	**-**	**-**

* Speciated Organic Gasses and Hazardous Air Pollutant information is not available for aircraft engine startup
** Sub totals above for on-site and off-site assume that 5% of taxiing aircraft emissions occur within the project boundary and 95% occur outside of the project boundary
** For off-site sub totals, taxi emissions are included in the "departure below mixing height" and "arrival below mixing height". Therefore, 5% of taxi emissions are subtracted from the off-site sub total to reflect 95% of all taxi emissions occuring off-site.
* Blank cells reflect data not available

Propionaldehyde (CAA)	Acetone (IRIS)	2-methylnaphthalene (IRIS)	Benzaldehyde (IRIS)	N-heptane (IRIS)	Hexaldehyde	Methane	Ethane	Ethylene	Acetylene	Propane	1-propyne	Isobutane	2,2-dimethylbutane	Isopentane	Isoprene	2-methyl-2-propenal (methacrolein)	Methylglyoxal	2,3-dimethylbutane	1-Methylnaphthalene	1,2,4-trimethylbenzene (1,3,4-trimethylbenzene)
0.000406025	0.000206	0.000115	0.000262	3.57E-05			0.000290977	0.0086348	0.0021999	4.36E-05						0.00023959	0.000839		0.000137943	0.000195
0.000227958	0.000116	6.46E-05	0.000147	2.01E-05			0.000163363	0.004848	0.0012351	2.45E-05						0.00013452	0.000471		7.74E-05	0.00011
0.000400933	0.000203	0.000114	0.000259	3.53E-05			0.000287328	0.0085267	0.0021723	4.30E-05						0.00023659	0.000829		0.000136224	0.000193
0.000198978	0.000101	5.64E-05	0.000129	1.75E-05			0.000142595	0.0042316	0.0010781	2.14E-05						0.00011742	0.000411		6.76E-05	9.58E-05
1.31E-05			4.09E-06	6.47E-06	5.95E-07	2.17E-05	6.12E-06	3.86E-05	2.36E-05		2.13E-06	3.04E-05	1.95E-06	9.79E-05	8.82E-07			8.69E-06		1.28E-05
2.09E-06	1.07E-06	5.95E-07	1.36E-06	1.87E-07			1.50E-06	4.46E-05	1.14E-05	2.20E-07						1.23E-06	4.33E-06		7.17E-07	1.01E-06
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
1.30	**0.65**	**0.36**	**0.83**	**0.12**	**0.00**	**0.04**	**0.92**	**27.13**	**6.94**	**0.14**	**0.00**	**0.06**	**0.00**	**0.20**	**0.00**	**0.75**	**2.63**	**0.02**	**0.43**	**0.64**
0.24	**0.12**	**0.07**	**0.15**	**0.02**	**0.00**	**0.01**	**0.17**	**4.95**	**1.27**	**0.02**	**0.00**	**0.01**	**0.00**	**0.04**	**0.00**	**0.14**	**0.48**	**0.00**	**0.08**	**0.12**
473.93	**235.69**	**131.57**	**303.18**	**45.61**	**0.43**	**15.86**	**337.23**	**9,903.20**	**2,533.08**	**49.82**	**1.55**	**22.21**	**1.42**	**71.47**	**0.64**	**274.00**	**959.97**	**6.34**	**157.76**	**232.88**

2.09E-06	1.07E-06	5.95E-07	1.36E-06	1.87E-07	0.00E+00	0.00E+00	1.50E-06	4.46E-05	1.14E-05	2.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-06	4.33E-06	0.00E+00	7.17E-07	1.01E-06
1.31E-05	0.00E+00	0.00E+00	4.09E-06	6.47E-06	5.95E-07	2.17E-05	6.12E-06	3.86E-05	2.36E-05	0.00E+00	2.13E-06	3.04E-05	1.95E-06	9.79E-05	8.82E-07	0.00E+00	0.00E+00	8.69E-06	0.00E+00	1.28E-05
2.00E-05	1.02E-05	5.68E-06	1.30E-05	1.76E-06	0.00E+00	0.00E+00	1.44E-05	4.26E-04	1.09E-04	2.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-05	4.14E-05	0.00E+00	6.81E-06	9.65E-06
9.94891E-06	5.05E-06	2.82E-06	6.43E-06	8.76E-07	0	0	7.12975E-06	0.0002116	5.39E-05	1.07E-06	0	0	0	0	0	5.8709E-06	2.06E-05	0	3.38024E-06	4.79E-06
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.09	**0.03**	**0.02**	**0.05**	**0.02**	**0.00**	**0.04**	**0.06**	**1.44**	**0.39**	**0.01**	**0.00**	**0.06**	**0.00**	**0.20**	**0.00**	**0.04**	**0.13**	**0.02**	**0.02**	**0.06**
0.02	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.01**	**0.01**	**0.26**	**0.07**	**0.00**	**0.00**	**0.01**	**0.00**	**0.04**	**0.00**	**0.01**	**0.02**	**0.00**	**0.00**	**0.01**
33.02	**11.89**	**6.64**	**18.13**	**6.79**	**0.43**	**15.86**	**21.25**	**526.42**	**144.16**	**2.51**	**1.55**	**22.21**	**1.42**	**71.47**	**0.64**	**13.82**	**48.43**	**6.34**	**7.96**	**20.61**

0.000406025	0.000206	0.000115	0.000262	3.57E-05	0	0	0.000290977	0.0086348	0.0021999	4.36E-05	0	0	0	0	0	0.00023959	0.000839	0	0.000137943	0.000195
0.000227958	0.000116	6.46E-05	0.000147	2.01E-05	0	0	0.000163363	0.004848	0.0012351	2.45E-05	0	0	0	0	0	0.00013452	0.000471	0	7.74484E-05	0.00011
2.00466E-05	1.02E-05	5.68E-06	1.3E-05	1.76E-06	0	0	1.43664E-05	0.0004263	0.0001086	2.15E-06	0	0	0	0	0	1.1829E-05	4.14E-05	0	6.81118E-06	9.65E-06
9.94891E-06	5.05E-06	2.82E-06	6.43E-06	8.76E-07	0	0	7.12975E-06	0.0002116	5.39E-05	1.07E-06	0	0	0	0	0	5.8709E-06	2.06E-05	0	3.38024E-06	4.79E-06
0.00	**0.00**	**0.00**	**0.00**	**0.00**	-	-	**0.00**	**0.01**	**0.00**	**0.00**	-	-	-	-	-	**0.00**	**0.00**	-	**0.00**	**0.00**
1.21	**0.61**	**0.34**	**0.78**	**0.11**	-	-	**0.87**	**25.69**	**6.55**	**0.13**	-	-	-	-	-	**0.71**	**2.50**	-	**0.41**	**0.58**
0.22	**0.11**	**0.06**	**0.14**	**0.02**	-	-	**0.16**	**4.69**	**1.19**	**0.02**	-	-	-	-	-	**0.13**	**0.46**	-	**0.07**	**0.11**
440.91	**223.80**	**124.94**	**285.05**	**38.82**	-	-	**315.98**	**9,376.78**	**2,388.93**	**47.31**	-	-	-	-	-	**260.17**	**911.54**	-	**149.80**	**212.27**

3-methylpentane	Methylcyclopentane	N-propylbenzene	N-butylbenzene	p-Tolualdehyde	N-butane	4-Phenyl-1-butene	3-methyl-1-butene	2-methyl-1-butene	1-butene	Glyoxal	2,4,4-trimethyl-1-pentene	2-methylpentane	2,4-dimethylpentane	1,3,5-trimethylbenzene	Methylcyclohexane	N-pentane	1-pentene	2-methyl-1-pentene	4-methyl-1-pentene	Valeraldehyde
		2.96E-05		2.68E-05			6.26E-05	7.82E-05	0.0009796	0.0010142		0.000227859		3.02E-05		0.000110584	0.000433	1.90E-05	3.85E-05	0.000137
		1.66E-05		1.50E-05			3.51E-05	4.39E-05	0.00055	0.0005694		0.000127934		1.69E-05		6.21E-05	0.000243	1.07E-05	2.16E-05	7.68E-05
		2.92E-05		2.65E-05			6.18E-05	7.72E-05	0.0009673	0.0010015		0.000225015		2.98E-05		0.000109195	0.000428	1.88E-05	3.81E-05	0.000135
		1.45E-05		1.31E-05			3.07E-05	3.83E-05	0.0004801	0.000497		0.000111664		1.48E-05		5.42E-05	0.000212	9.30E-06	1.89E-05	6.71E-05
1.37E-05	9.84E-06	2.74E-06	1.86E-06		0.000198835	2.30E-06	1.25E-06		9.84E-06		1.53E-05	2.49E-05	5.68E-06	1.07E-05	2.30E-06	4.31E-05	3.64E-06			
		1.54E-07		1.43E-07			3.20E-07	4.08E-07	5.06E-06	5.24E-06		1.18E-06		1.54E-07		5.73E-07	2.24E-06	9.92E-08	1.98E-07	7.05E-07
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.03	**0.02**	**0.10**	**0.00**	**0.08**	**0.40**	**0.00**	**0.20**	**0.24**	**3.09**	**3.18**	**0.03**	**0.76**	**0.01**	**0.12**	**0.00**	**0.43**	**1.37**	**0.06**	**0.12**	**0.43**
0.00	**0.00**	**0.02**	**0.00**	**0.02**	**0.07**	**0.00**	**0.04**	**0.04**	**0.56**	**0.58**	**0.01**	**0.14**	**0.00**	**0.02**	**0.00**	**0.08**	**0.25**	**0.01**	**0.02**	**0.08**
9.97	**7.19**	**35.86**	**1.36**	**30.66**	**145.15**	**1.68**	**72.45**	**89.42**	**1,127.47**	**1,159.88**	**11.20**	**278.78**	**4.14**	**42.32**	**1.68**	**157.93**	**498.29**	**21.72**	**44.07**	**156.48**
0.00E+00	0.00E+00	1.54E-07	0.00E+00	1.43E-07	0.00E+00	0.00E+00	3.20E-07	4.08E-07	5.06E-06	5.24E-06	0.00E+00	1.18E-06	0.00E+00	1.54E-07	0.00E+00	5.73E-07	2.24E-06	9.92E-08	1.98E-07	7.05E-07
1.37E-05	9.84E-06	2.74E-06	1.86E-06	0.00E+00	1.99E-04	2.30E-06	1.25E-06	0.00E+00	9.84E-06	0.00E+00	1.53E-05	2.49E-05	5.68E-06	1.07E-05	2.30E-06	4.31E-05	3.64E-06	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	1.46E-06	0.00E+00	1.32E-06	0.00E+00	0.00E+00	3.09E-06	3.86E-06	4.84E-05	5.01E-05	0.00E+00	1.13E-05	0.00E+00	1.49E-06	0.00E+00	5.46E-06	2.14E-05	9.38E-07	1.90E-06	6.76E-06
0	0	7.2532E-07	0	6.56978E-07	0	0	1.53276E-06	1.92E-06	2.4E-05	2.485E-05	0	5.58321E-06	0	7.391E-07	0	2.70948E-06	1.06E-05	4.6518E-07	9.4413E-07	3.35E-06
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.03	**0.02**	**0.01**	**0.00**	**0.00**	**0.40**	**0.00**	**0.01**	**0.01**	**0.17**	**0.16**	**0.03**	**0.09**	**0.01**	**0.03**	**0.00**	**0.10**	**0.08**	**0.00**	**0.01**	**0.02**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.07**	**0.00**	**0.00**	**0.00**	**0.03**	**0.03**	**0.01**	**0.02**	**0.00**	**0.00**	**0.00**	**0.02**	**0.01**	**0.00**	**0.00**	**0.00**
9.97	**7.19**	**3.71**	**1.36**	**1.55**	**145.15**	**1.68**	**4.52**	**4.51**	**63.71**	**58.52**	**11.20**	**31.34**	**4.14**	**9.57**	**1.68**	**37.85**	**27.66**	**1.10**	**2.22**	**7.89**
0	0	2.9597E-05	0	2.68082E-05	0	0	6.25562E-05	7.82E-05	0.0009796	0.0010142	0	0.000227859	0	3.01592E-05	0	0.000110584	0.000433	1.8993E-05	3.8537E-05	0.000137
0	0	1.6623E-05	0	1.50465E-05	0	0	3.51196E-05	4.39E-05	0.00055	0.0005694	0	0.000127934	0	1.69315E-05	0	6.20822E-05	0.000243	1.0659E-05	2.1638E-05	7.68E-05
0	0	1.4617E-06	0	1.32332E-06	0	0	3.08813E-06	3.86E-06	4.837E-05	5.008E-05	0	1.12507E-05	0	1.48922E-06	0	5.45975E-06	2.14E-05	9.3752E-07	1.9026E-06	6.76E-06
0	0	7.2532E-07	0	6.56978E-07	0	0	1.53276E-06	1.92E-06	2.4E-05	2.485E-05	0	5.58321E-06	0	7.391E-07	0	2.70948E-06	1.06E-05	4.6518E-07	9.4413E-07	3.35E-06
-	**-**	**0.00**	**-**	**0.00**	**-**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**0.00**	**-**	**0.00**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
-	**-**	**0.09**	**-**	**0.08**	**-**	**-**	**0.19**	**0.23**	**2.91**	**3.02**	**-**	**0.68**	**-**	**0.09**	**-**	**0.33**	**1.29**	**0.06**	**0.11**	**0.41**
-	**-**	**0.02**	**-**	**0.01**	**-**	**-**	**0.03**	**0.04**	**0.53**	**0.55**	**-**	**0.12**	**-**	**0.02**	**-**	**0.06**	**0.24**	**0.01**	**0.02**	**0.07**
-	**-**	**32.14**	**-**	**29.11**	**-**	**-**	**67.93**	**84.90**	**1,063.76**	**1,101.36**	**-**	**247.44**	**-**	**32.75**	**-**	**120.08**	**470.62**	**20.62**	**41.85**	**148.59**

Cyclohexene	N-octane	1-octene	N-nonane	N-dodecane	Propylene	Butyraldehyde	1-nonene	N-decane	1,2-diethylbenzene (ortho)	(1-Methylpropyl)benzene	1,3-diethylbenzene (meta)	Cyclopentene	Cyclopentane	1,2-propadiene	Indan	2-methyl-2-butene	1,2,3-trimethylbenzene	o-Tolualdehyde	N-Hexadecane	2,3,3-trimethylpentane
	3.46E-05	0.000154147	3.46E-05	0.000258018	0.0025322	6.65E-05	0.000137	0.000179								0.00010332	5.92E-05	0.000128	2.74E-05	
	1.94E-05	8.65E-05	1.94E-05	0.000144866	0.0014217	3.73E-05	7.71E-05	0.0001								5.80E-05	3.32E-05	7.21E-05	1.54E-05	
	3.42E-05	0.000152218	3.42E-05	0.000254788	0.0025005	6.56E-05	0.000136	0.000176								0.00010203	5.85E-05	0.000127	2.70E-05	
	1.70E-05	7.55E-05	1.70E-05	0.000126446	0.0012409	3.26E-05	6.73E-05	8.76E-05								5.06E-05	2.90E-05	6.30E-05	1.34E-05	
1.40E-05	2.13E-06		9.70E-07		1.39E-05			9.70E-07	2.66E-06	4.41E-07	2.04E-06	2.57E-06	4.25E-06	9.70E-07	2.83E-06	9.70E-07	2.30E-06			3.73E-06
	1.76E-07	7.94E-07	1.76E-07	1.33E-06	1.31E-05	3.42E-07	7.05E-07	9.26E-07								5.29E-07	3.09E-07	6.61E-07	1.43E-07	
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.03	**0.11**	**0.48**	**0.11**	**0.81**	**7.96**	**0.21**	**0.43**	**0.56**	**0.01**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**	**0.01**	**0.33**	**0.19**	**0.40**	**0.09**	**0.01**
0.01	**0.02**	**0.09**	**0.02**	**0.15**	**1.45**	**0.04**	**0.08**	**0.10**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.06**	**0.03**	**0.07**	**0.02**	**0.00**
10.23	**41.15**	**176.28**	**40.31**	**295.08**	**2,906.06**	**76.00**	**157.12**	**205.10**	**1.94**	**0.32**	**1.49**	**1.87**	**3.11**	**0.71**	**2.07**	**118.87**	**69.39**	**146.90**	**31.30**	**2.72**

0.00E+00	1.76E-07	7.94E-07	1.76E-07	1.33E-06	1.31E-05	3.42E-07	7.05E-07	9.26E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.29E-07	3.09E-07	6.61E-07	1.43E-07	0.00E+00
1.40E-05	2.13E-06	0.00E+00	9.70E-07	0.00E+00	1.39E-05	0.00E+00	0.00E+00	9.70E-07	2.66E-06	4.41E-07	2.04E-06	2.57E-06	4.25E-06	9.70E-07	2.83E-06	9.70E-07	2.30E-06	0.00E+00	0.00E+00	3.73E-06
0.00E+00	1.71E-06	7.61E-06	1.71E-06	1.27E-05	1.25E-04	3.28E-06	6.78E-06	8.82E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-06	2.92E-06	6.34E-06	1.35E-06	0.00E+00
0	8.48229E-07	3.77707E-06	8.48E-07	6.32231E-06	6.205E-05	1.63E-06	3.37E-06	4.38E-06	0	0	0	0	0	0	0	2.53146E-06	1.45E-06	3.15E-06	6.71E-07	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.03	**0.01**	**0.02**	**0.01**	**0.04**	**0.43**	**0.01**	**0.02**	**0.03**	**0.01**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**	**0.01**	**0.02**	**0.01**	**0.02**	**0.00**	**0.01**
0.01	**0.00**	**0.00**	**0.00**	**0.01**	**0.08**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
10.23	**3.55**	**8.89**	**2.70**	**14.89**	**156.28**	**3.83**	**7.92**	**11.02**	**1.94**	**0.32**	**1.49**	**1.87**	**3.11**	**0.71**	**2.07**	**6.67**	**5.10**	**7.41**	**1.58**	**2.72**

0	3.46236E-05	0.000154147	3.46E-05	0.000258018	0.0025322	6.65E-05	0.000137	0.000179	0	0	0	0	0	0	0	0.00010332	5.92E-05	0.000128	2.74E-05	0
0	1.94448E-05	8.65425E-05	1.94E-05	0.000144866	0.0014217	3.73E-05	7.71E-05	0.0001	0	0	0	0	0	0	0	5.80146E-05	3.32E-05	7.21E-05	1.54E-05	0
0	1.70968E-06	7.61091E-06	1.71E-06	1.27394E-05	0.000125	3.28E-06	6.78E-06	8.82E-06	0	0	0	0	0	0	0	5.1015E-06	2.92E-06	6.34E-06	1.35E-06	0
0	8.48229E-07	3.77707E-06	8.48E-07	6.32231E-06	6.205E-05	1.63E-06	3.37E-06	4.38E-06	0	0	0	0	0	0	0	2.53146E-06	1.45E-06	3.15E-06	6.71E-07	0
-	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**-**
-	**0.10**	**0.46**	**0.10**	**0.77**	**7.53**	**0.20**	**0.41**	**0.53**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.31**	**0.18**	**0.38**	**0.08**	**-**
-	**0.02**	**0.08**	**0.02**	**0.14**	**1.37**	**0.04**	**0.07**	**0.10**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.06**	**0.03**	**0.07**	**0.01**	**-**
-	**37.60**	**167.39**	**37.60**	**280.19**	**2,749.78**	**72.17**	**149.20**	**194.08**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**112.20**	**64.29**	**139.49**	**29.72**	**-**

2,3,4-trimethylpentane	2,4-dimethylhexane	4-methylheptane	3-methylheptane	Cis-2-butene	Isovaleraldehyde	2-methylheptane	1-hexene	1-Methyl-2-ethylbenzene (o-ethyltoluene)	1-Methyl-3-ethylbenzene (m-ethyltoluene)	Tolualdehyde	1-Methyl-4-ethylbenzene (p-ethyltoluene)	Cis-1,4-dimethylcyclohexane	Trans-2-butene	2-methyl-2-pentene	Cis-2-pentene	N-tridecane	N-Tetradecane	N-Pentadecane	N-heptadecane
				0.000117286	1.79E-05		0.000411052	3.63E-05	8.60E-05	0.000155	3.57E-05				0.000154147	0.000299	0.000232	9.66E-05	5.03E-06
				6.59E-05	1.00E-05		0.00023078	2.04E-05	4.83E-05	8.72E-05	2.01E-05				8.65E-05	0.000168	0.00013	5.42E-05	2.82E-06
				0.000115809	1.76E-05		0.000405904	3.58E-05	8.49E-05	0.000153	3.53E-05				0.000152218	0.000295	0.000229	9.54E-05	4.96E-06
				5.75E-05	8.76E-06		0.000201436	1.78E-05	4.22E-05	7.61E-05	1.75E-05				7.55E-05	0.000146	0.000114	4.73E-05	2.46E-06
2.30E-06	3.73E-06	2.22E-06	3.11E-06	5.94E-06		2.30E-06	2.48E-06		1.42E-06			7.05E-07	7.89E-06	3.02E-06	8.60E-06				
				6.06E-07	8.82E-08		2.13E-06	1.87E-07	4.41E-07	8.05E-07	1.87E-07				7.94E-07	1.54E-06	1.20E-06	4.96E-07	2.20E-08
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.01**	**0.00**	**0.01**	**0.38**	**0.06**	**0.00**	**1.29**	**0.11**	**0.27**	**0.49**	**0.11**	**0.00**	**0.02**	**0.01**	**0.50**	**0.94**	**0.73**	**0.30**	**0.02**
0.00	**0.00**	**0.00**	**0.00**	**0.07**	**0.01**	**0.00**	**0.24**	**0.02**	**0.05**	**0.09**	**0.02**	**0.00**	**0.00**	**0.00**	**0.09**	**0.17**	**0.13**	**0.06**	**0.00**
1.68	**2.72**	**1.62**	**2.27**	**138.47**	**20.43**	**1.68**	**471.90**	**41.51**	**99.39**	**177.56**	**40.89**	**0.51**	**5.76**	**2.20**	**182.56**	**341.71**	**265.71**	**110.49**	**5.75**

0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-07	8.82E-08	0.00E+00	2.13E-06	1.87E-07	4.41E-07	8.05E-07	1.87E-07	0.00E+00	0.00E+00	0.00E+00	7.94E-07	1.54E-06	1.20E-06	4.96E-07	2.20E-08
2.30E-06	3.73E-06	2.22E-06	3.11E-06	5.94E-06	0.00E+00	2.30E-06	2.48E-06	0.00E+00	1.42E-06	0.00E+00	0.00E+00	7.05E-07	7.89E-06	3.02E-06	8.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-06	8.82E-07	0.00E+00	2.03E-05	1.79E-06	4.25E-06	7.67E-06	1.76E-06	0.00E+00	0.00E+00	0.00E+00	7.61E-06	1.48E-05	1.15E-05	4.77E-06	2.48E-07
0	0	0	0	2.87373E-06	4.38E-07	0	1.00718E-05	8.9E-07	2.10762E-06	3.8E-06	8.76E-07	0	0	0	3.77707E-06	7.32E-06	5.69E-06	2.37E-06	1.23E-07
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.01**	**0.00**	**0.01**	**0.03**	**0.00**	**0.00**	**0.07**	**0.01**	**0.02**	**0.02**	**0.01**	**0.00**	**0.02**	**0.01**	**0.04**	**0.05**	**0.04**	**0.02**	**0.00**
0.00	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**
1.68	**2.72**	**1.62**	**2.27**	**11.10**	**1.03**	**1.68**	**25.53**	**2.09**	**6.00**	**8.96**	**2.06**	**0.51**	**5.76**	**2.20**	**15.17**	**17.24**	**13.41**	**5.57**	**0.29**

0	0	0	0	0.000117286	1.79E-05	0	0.000411052	3.63E-05	8.60023E-05	0.000155	3.57E-05	0	0	0	0.000154147	0.000299	0.000232	9.66E-05	5.03E-06
0	0	0	0	6.58521E-05	1E-05	0	0.00023078	2.04E-05	4.82923E-05	8.72E-05	2.01E-05	0	0	0	8.65425E-05	0.000168	0.00013	5.42E-05	2.82E-06
0	0	0	0	5.79044E-06	8.82E-07	0	2.02952E-05	1.79E-06	4.24665E-06	7.67E-06	1.76E-06	0	0	0	7.61091E-06	1.48E-05	1.15E-05	4.77E-06	2.48E-07
0	0	0	0	2.87373E-06	4.38E-07	0	1.00718E-05	8.9E-07	2.10762E-06	3.8E-06	8.76E-07	0	0	0	3.77707E-06	7.32E-06	5.69E-06	2.37E-06	1.23E-07
-	**-**	**-**	**-**	**0.00**	**0.00**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**-**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
-	**-**	**-**	**-**	**0.35**	**0.05**	**-**	**1.22**	**0.11**	**0.26**	**0.46**	**0.11**	**-**	**-**	**-**	**0.46**	**0.89**	**0.69**	**0.29**	**0.01**
-	**-**	**-**	**-**	**0.06**	**0.01**	**-**	**0.22**	**0.02**	**0.05**	**0.08**	**0.02**	**-**	**-**	**-**	**0.08**	**0.16**	**0.13**	**0.05**	**0.00**
-	**-**	**-**	**-**	**127.37**	**19.40**	**-**	**446.37**	**39.42**	**93.40**	**168.60**	**38.82**	**-**	**-**	**-**	**167.39**	**324.47**	**252.30**	**104.92**	**5.46**

Trans-2-pentene	1-Methylcyclopentene	1-undecene	1-decene	2,3,5-trimethylhexane	1-Methyl-3-propylbenzene	N-undecane	2,6-dimethyloctane	2,4-dimethylheptane	2,5-dimethylheptane	3-methyloctane	4-methyloctane	2-methyloctane	2,2,5-trimethylhexane	Trans-2-hexene	Crotonaldehyde	T-2-Nonene	2-methyldecane	2,3-dimethyloctane
0.000200499			0.00010332			0.000247965								1.68E-05	0.000576917			
0.000112568			5.80E-05			0.000139222								9.40E-06	0.000323914			
0.000197986			0.00010203			0.000244867								1.65E-05	0.000569697			
9.83E-05			5.06E-05			0.000121519								8.21E-06	0.000282732			
7.28E-06	2.65E-07	1.25E-06		7.05E-07	1.42E-06	1.25E-06	6.17E-07	7.05E-07	1.16E-06	2.74E-06	3.46E-06	3.53E-07	2.13E-06		7.50E-06	1.51E-06	5.59E-06	4.61E-06
1.04E-06			5.29E-07			1.28E-06								8.82E-08	2.98E-06			
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.64	**0.00**	**0.00**	**0.32**	**0.00**	**0.00**	**0.78**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**	**0.00**	**0.05**	**1.82**	**0.00**	**0.01**	**0.01**
0.12	**0.00**	**0.00**	**0.06**	**0.00**	**0.00**	**0.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.33**	**0.00**	**0.00**	**0.00**
234.61	**0.19**	**0.91**	**118.16**	**0.51**	**1.04**	**284.49**	**0.45**	**0.51**	**0.84**	**2.00**	**2.53**	**0.26**	**1.55**	**19.16**	**665.25**	**1.10**	**4.08**	**3.36**

1.04E-06	0.00E+00	0.00E+00	5.29E-07	0.00E+00	0.00E+00	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.82E-08	2.98E-06	0.00E+00	0.00E+00	0.00E+00
7.28E-06	2.65E-07	1.25E-06	0.00E+00	7.05E-07	1.42E-06	1.25E-06	6.17E-07	7.05E-07	1.16E-06	2.74E-06	3.46E-06	3.53E-07	2.13E-06	0.00E+00	7.50E-06	1.51E-06	5.59E-06	4.61E-06
9.90E-06	0.00E+00	0.00E+00	5.10E-06	0.00E+00	0.00E+00	1.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.27E-07	2.85E-05	0.00E+00	0.00E+00	0.00E+00
4.913E-06	0	0	2.53146E-06	0	0	6.07594E-06	0	0	0	0	0	0	0	4.10611E-07	1.41366E-05	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.05	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.11**	**0.00**	**0.01**	**0.01**
0.01	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**
16.88	**0.19**	**0.91**	**5.96**	**0.51**	**1.04**	**15.22**	**0.45**	**0.51**	**0.84**	**2.00**	**2.53**	**0.26**	**1.55**	**0.97**	**38.76**	**1.10**	**4.08**	**3.36**

0.000200499	0	0	0.00010332	0	0	0.000247965	0	0	0	0	0	0	0	1.67551E-05	0.000576917	0	0	0
0.000112568	0	0	5.80146E-05	0	0	0.000139222	0	0	0	0	0	0	0	9.40272E-06	0.000323914	0	0	0
9.89931E-06	0	0	5.1015E-06	0	0	1.22434E-05	0	0	0	0	0	0	0	8.27285E-07	2.84848E-05	0	0	0
4.913E-06	0	0	2.53146E-06	0	0	6.07594E-06	0	0	0	0	0	0	0	4.10611E-07	1.41366E-05	0	0	0
0.00	-	-	**0.00**	-	-	**0.00**	-	-	-	-	-	-	-	**0.00**	**0.00**	-	-	-
0.60	-	-	**0.31**	-	-	**0.74**	-	-	-	-	-	-	-	**0.05**	**1.72**	-	-	-
0.11	-	-	**0.06**	-	-	**0.13**	-	-	-	-	-	-	-	**0.01**	**0.31**	-	-	-
217.73	-	-	**112.20**	-	-	**269.27**	-	-	-	-	-	-	-	**18.19**	**626.49**	-	-	-

Cis-2-hexene	Heptene	Dimethyl napthalene	C-1 Compounds	C-10 Compounds	C-10 Olefins	C-10 Paraffins	C-11 Compounds	C-12 Compounds	C-13 Compounds	C-14 Alkane	C-14 Compounds	C-15 Alkane	C-15 Compounds	C-16 Alkane	C-16 Compounds	C-17 Compounds	C-18 Alkane	C-18 Compounds	C-19 Compounds
	0.000244614	5.03E-05			0.00326326	0.0081573				0.000103882		9.89E-05		8.15E-05			1.11E-06		
	0.000137337	2.82E-05			0.00183215	0.0045799				5.83E-05		5.55E-05		4.58E-05			6.28E-07		
	0.000241561	4.96E-05			0.0032224	0.0080552				0.000102581		9.76E-05		8.05E-05			1.10E-06		
	0.000119876	2.46E-05			0.0015992	0.0039976				5.09E-05		4.84E-05		4.00E-05			5.51E-07		
9.70E-07			4.31E-05	2.61E-05			2.66E-05	1.63E-05	2.55E-05		3.30E-05		3.23E-05		2.59E-05	2.27E-05		1.51E-05	1.16E-05
	1.27E-06	2.65E-07			1.69E-05	4.22E-05				5.40E-07		5.07E-07		4.19E-07			1.10E-08		
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.77**	**0.16**	**0.09**	**0.05**	**10.22**	**25.56**	**0.05**	**0.03**	**0.05**	**0.33**	**0.07**	**0.31**	**0.06**	**0.26**	**0.05**	**0.05**	**0.00**	**0.03**	**0.02**
0.00	**0.14**	**0.03**	**0.02**	**0.01**	**1.87**	**4.66**	**0.01**	**0.01**	**0.01**	**0.06**	**0.01**	**0.06**	**0.01**	**0.05**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**
0.71	**279.75**	**57.49**	**31.44**	**19.08**	**3,731.96**	**9,328.93**	**19.41**	**11.93**	**18.60**	**118.80**	**24.12**	**113.05**	**23.59**	**93.25**	**18.92**	**16.59**	**1.28**	**11.06**	**8.46**
0.00E+00	1.27E-06	2.65E-07	0.00E+00	0.00E+00	1.69E-05	4.22E-05	0.00E+00	0.00E+00	0.00E+00	5.40E-07	0.00E+00	5.07E-07	0.00E+00	4.19E-07	0.00E+00	0.00E+00	1.10E-08	0.00E+00	0.00E+00
9.70E-07	0.00E+00	0.00E+00	4.31E-05	2.61E-05	0.00E+00	0.00E+00	2.66E-05	1.63E-05	2.55E-05	0.00E+00	3.30E-05	0.00E+00	3.23E-05	0.00E+00	2.59E-05	2.27E-05	0.00E+00	1.51E-05	1.16E-05
0.00E+00	1.21E-05	2.48E-06	0.00E+00	0.00E+00	1.61E-04	4.03E-04	0.00E+00	0.00E+00	0.00E+00	5.13E-06	0.00E+00	4.88E-06	0.00E+00	4.03E-06	0.00E+00	0.00E+00	5.51E-08	0.00E+00	0.00E+00
0	5.99382E-06	1.23E-06	0	0	7.996E-05	0.0001999	0	0	0	2.54524E-06	0	2.42233E-06	0	1.99794E-06	0	0	2.75578E-08	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.04**	**0.01**	**0.09**	**0.05**	**0.52**	**1.29**	**0.05**	**0.03**	**0.05**	**0.02**	**0.07**	**0.02**	**0.06**	**0.01**	**0.05**	**0.05**	**0.00**	**0.03**	**0.02**
0.00	**0.01**	**0.00**	**0.02**	**0.01**	**0.09**	**0.24**	**0.01**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**
0.71	**14.12**	**2.90**	**31.44**	**19.08**	**188.30**	**470.70**	**19.41**	**11.93**	**18.60**	**6.00**	**24.12**	**5.70**	**23.59**	**4.70**	**18.92**	**16.59**	**0.07**	**11.06**	**8.46**
0	0.000244614	5.03E-05	0	0	0.00326326	0.0081573	0	0	0	0.000103882	0	9.88553E-05	0	8.1538E-05	0	0	1.11333E-06	0	0
0	0.000137337	2.82E-05	0	0	0.00183215	0.0045799	0	0	0	5.83233E-05	0	5.55014E-05	0	4.5779E-05	0	0	6.28317E-07	0	0
0	1.2078E-05	2.48E-06	0	0	0.00016112	0.0004028	0	0	0	5.12905E-06	0	4.88048E-06	0	4.02619E-06	0	0	5.51156E-08	0	0
0	5.99382E-06	1.23E-06	0	0	7.996E-05	0.0001999	0	0	0	2.54524E-06	0	2.42233E-06	0	1.99794E-06	0	0	2.75578E-08	0	0
-	**0.00**	**0.00**	**-**	**-**	**0.00**	**0.01**	**-**	**-**	**-**	**0.00**	**-**	**0.00**	**-**	**0.00**	**-**	**-**	**0.00**	**-**	**-**
-	**0.73**	**0.15**	**-**	**-**	**9.71**	**24.27**	**-**	**-**	**-**	**0.31**	**-**	**0.29**	**-**	**0.24**	**-**	**-**	**0.00**	**-**	**-**
-	**0.13**	**0.03**	**-**	**-**	**1.77**	**4.43**	**-**	**-**	**-**	**0.06**	**-**	**0.05**	**-**	**0.04**	**-**	**-**	**0.00**	**-**	**-**
-	**265.63**	**54.58**	**-**	**-**	**3,543.66**	**8,858.24**	**-**	**-**	**-**	**112.81**	**-**	**107.35**	**-**	**88.54**	**-**	**-**	**1.21**	**-**	**-**

C-2 Compounds	C-20 Compounds	C-21 Compounds	C-22 Compounds	C-23 Compounds	C-24 Compounds	C-25 Compounds	C-26 Compounds	C-27 Compounds	C-28 Compounds	C-29 Compounds	C-3 Compounds	C-30 Compounds	C-31 Compounds	C-32 Compounds	C-33 Compounds	C-34 Compounds	C-35 Compounds	C-36 Compounds
0.000148228	6.76E-06	5.57E-06	4.38E-06	3.56E-06	3.56E-06	4.01E-06	3.26E-06	1.63E-06	2.38E-06	1.04E-06	3.87E-05	2.38E-06	2.15E-06	2.01E-06	1.63E-06	1.79E-06	1.19E-06	1.49E-06
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.30	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.05	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
108.21	**4.93**	**4.06**	**3.19**	**2.60**	**2.60**	**2.93**	**2.38**	**1.19**	**1.74**	**0.76**	**28.24**	**1.74**	**1.57**	**1.46**	**1.19**	**1.30**	**0.87**	**1.09**
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.48E-04	6.76E-06	5.57E-06	4.38E-06	3.56E-06	3.56E-06	4.01E-06	3.26E-06	1.63E-06	2.38E-06	1.04E-06	3.87E-05	2.38E-06	2.15E-06	2.01E-06	1.63E-06	1.79E-06	1.19E-06	1.49E-06
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.30	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.05	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
108.21	**4.93**	**4.06**	**3.19**	**2.60**	**2.60**	**2.93**	**2.38**	**1.19**	**1.74**	**0.76**	**28.24**	**1.74**	**1.57**	**1.46**	**1.19**	**1.30**	**0.87**	**1.09**
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

C-37 Compounds	C-38 Compounds	C-39 Compounds	C-4 Compounds	C-40 Compounds	C-41 Compounds	C-42 Compounds	C-43 compounds	C-5 Compounds	C-6 Compounds	C-7 Compounds	C-8 Compounds	C-9 Compounds	Cyclopentylcyclopentane	Hexyne	Methylcyclooctane	Pentyne	T-1-Phenylbutene	Decanol
																		0.00326326
																		0.001832152
																		0.003222398
																		0.0015992
5.95E-07	3.75E-07	8.16E-07	3.03E-05	1.43E-07	3.75E-07	1.43E-07	7.72E-08	1.75E-05	3.19E-05	2.15E-05	8.39E-06	5.57E-06	4.08E-06	1.76E-07	2.92E-06	1.69E-06	2.04E-06	
																		1.69E-05
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**
0.00	**0.00**	**0.00**	**0.06**	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	**0.06**	**0.04**	**0.02**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**10.22**
0.00	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.87**
0.43	**0.27**	**0.60**	**22.12**	**0.10**	**0.27**	**0.10**	**0.06**	**12.79**	**23.31**	**15.67**	**6.12**	**4.06**	**2.98**	**0.13**	**2.13**	**1.23**	**1.49**	**3,731.96**

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-05
5.95E-07	3.75E-07	8.16E-07	3.03E-05	1.43E-07	3.75E-07	1.43E-07	7.72E-08	1.75E-05	3.19E-05	2.15E-05	8.39E-06	5.57E-06	4.08E-06	1.76E-07	2.92E-06	1.69E-06	2.04E-06	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-04
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.996E-05
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.00**	**0.00**	**0.06**	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	**0.06**	**0.04**	**0.02**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.52**
0.00	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.09**
0.43	**0.27**	**0.60**	**22.12**	**0.10**	**0.27**	**0.10**	**0.06**	**12.79**	**23.31**	**15.67**	**6.12**	**4.06**	**2.98**	**0.13**	**2.13**	**1.23**	**1.49**	**188.30**

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00326326
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.001832152
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00016112
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7.996E-05
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.00**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**9.71**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**1.77**
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**3,543.66**

Dodecanol
0.0016313
0.0009159
0.0016109
0.0007995
8.43E-06
0.00
5.11
0.93
1,865.66

8.43E-06
0.00E+00
8.05E-05
3.997E-05
0.00
0.26
0.05
94.13

0.0016313
0.0009159
8.055E-05
3.997E-05
0.00
4.85
0.89
1,771.52

ATTACHMENT B - March Air Reserve Base - D1 Project - No Night Operations Scenario - Speciated Organic Gases and Hazardous Air Pollutants - April 2022

Combined on and off-site

Mode	Formaldehyde (IRIS, CAA)	Methyl alcohol (IRIS, CAA)	Benzene (IRIS, CAA)	C-5 Benzene + C-4 Aroald	C-4 Benzene + C-3 Aroald	Acetaldehyde (IRIS, CAA)	Naphthalene (IRIS, CAA)	O-xylene (IRIS, CAA)	Isopropyl benzene (cumene) (IRIS, CAA)	Ethylbenzene (IRIS, CAA)	Styrene (IRIS, CAA)	M & P-xylene (IRIS, CAA)	1,3-butadiene (IRIS, CAA)	Acrolein (IRIS, CAA)	M-xylene (IRIS, CAA)	Toluene (IRIS, CAA)	Phenol (carbolic acid) (IRIS, CAA)	N-hexane (IRIS, CAA)	2,2,4-trimethylpentane (IRIS, CAA)	Propionaldehyde (CAA)	Acetone (IRIS)
Departure Below Mixing Height	0.006875	0.0010081	0.0009388	0.000181	0.000366	0.00238586	0.000302	9.27E-05	1.68E-06	9.72E-05	0.000173	0.000157	0.0009422	0.00136774		0.000359	0.000405			0.000406	0.000206
Arrival Below Mixing Height	0.00386	0.000566	0.0005271	0.000102	0.000206	0.00133954	0.00017	5.21E-05	9.37E-07	5.46E-05	9.69E-05	8.84E-05	0.000529	0.00076791		0.000201	0.000228			0.000228	0.000116
DepartureTaxi	0.0067889	0.0009955	0.0009271	0.000179	0.000362	0.00235599	0.000298	9.15E-05	1.65E-06	9.60E-05	0.00017	0.000156	0.0009304	0.00135062		0.000354	0.0004			0.000401	0.000203
ArrivalTaxi	0.0033692	0.000494	0.0004601	8.87E-05	0.00018	0.00116922	0.000148	4.54E-05	8.16E-07	4.76E-05	8.46E-05	7.72E-05	0.0004617	0.00067028		0.000176	0.000199			0.000199	0.000101
Ground Service Equipment	4.69E-05		1.24E-05			1.59E-05		6.45E-06		4.75E-06					1.32E-05	2.11E-05		1.08E-05	1.06E-05	9.65E-06	
Aircraft Auxiliary Power Units	2.84E-05	4.17E-06	3.88E-06	7.50E-07	1.51E-06	9.87E-06	1.25E-06	3.86E-07	1.10E-08	3.97E-07	7.17E-07	6.50E-07	3.89E-06	5.65E-06		1.48E-06	1.68E-06			1.68E-06	8.49E-07
DAILY TOTAL (ST)	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
DAILY TOTAL (LBS)	**21.62**	**3.16**	**2.96**	**0.57**	**1.15**	**7.50**	**0.95**	**0.30**	**0.01**	**0.31**	**0.54**	**0.49**	**2.95**	**4.28**	**0.03**	**1.16**	**1.27**	**0.02**	**0.02**	**1.29**	**0.65**
ANNUAL TOTAL (ST)	**3.95**	**0.58**	**0.54**	**0.10**	**0.21**	**1.37**	**0.17**	**0.06**	**0.00**	**0.06**	**0.10**	**0.09**	**0.54**	**0.78**	**0.00**	**0.21**	**0.23**	**0.00**	**0.00**	**0.24**	**0.12**
ANNUAL TOTAL (LBS)	**7,891.50**	**1,152.10**	**1,082.01**	**206.81**	**418.71**	**2,738.32**	**345.31**	**110.66**	**1.92**	**114.53**	**197.24**	**180.00**	**1,076.78**	**1,563.15**	**9.62**	**425.19**	**463.40**	**7.92**	**7.77**	**471.07**	**235.53**
On-Site																					
Aircraft Auxiliary Power Units	2.84E-05	4.17E-06	3.88E-06	7.50E-07	1.51E-06	9.87E-06	1.25E-06	3.86E-07	1.10E-08	3.97E-07	7.17E-07	6.50E-07	3.89E-06	5.65E-06	0.00E+00	1.48E-06	1.68E-06	0.00E+00	0.00E+00	1.68E-06	8.49E-07
Ground Service Equipment	4.69E-05	0.00E+00	1.24E-05	0.00E+00	0.00E+00	1.59E-05	0.00E+00	6.45E-06	0.00E+00	4.75E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.32E-05	2.11E-05	0.00E+00	1.08E-05	1.06E-05	9.65E-06	0.00E+00
Taxi out - 5% Assigned **	3.39E-04	4.98E-05	4.64E-05	8.93E-06	1.81E-05	1.18E-04	1.49E-05	4.58E-06	8.27E-08	4.80E-06	8.52E-06	7.78E-06	4.65E-05	6.75E-05	0.00E+00	1.77E-05	2.00E-05	0.00E+00	0.00E+00	2.00E-05	1.02E-05
Taxi in - 5% Assigned **	0.0001685	2.47E-05	2.3E-05	4.43E-06	8.98E-06	5.8461E-05	7.4E-06	2.27E-06	4.08E-08	2.38E-06	4.23E-06	3.86E-06	2.309E-05	3.3514E-05	0	8.79E-06	9.94E-06	0	0	9.95E-06	5.05E-06
DAILY ON-SITE TOTAL (ST)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
DAILY ON-SITE TOTAL (LBS)	**1.17**	**0.16**	**0.17**	**0.03**	**0.06**	**0.40**	**0.05**	**0.03**	**0.00**	**0.02**	**0.03**	**0.02**	**0.15**	**0.21**	**0.03**	**0.10**	**0.06**	**0.02**	**0.02**	**0.08**	**0.03**
ANNUAL ON-SITE TOTAL (ST)	**0.21**	**0.03**	**0.03**	**0.01**	**0.01**	**0.07**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.03**	**0.04**	**0.00**	**0.02**	**0.01**	**0.00**	**0.00**	**0.02**	**0.01**
ANNUAL ON-SITE TOTAL (LBS)	**425.75**	**57.41**	**62.52**	**10.31**	**20.86**	**147.44**	**17.20**	**9.99**	**0.10**	**9.00**	**9.83**	**8.97**	**53.65**	**77.89**	**9.62**	**35.83**	**23.09**	**7.92**	**7.77**	**30.16**	**11.73**
Off-Site																					
Departure Below Mixing Height	0.006875	0.0010081	0.0009388	0.000181	0.000366	0.00238586	0.000302	9.27E-05	1.68E-06	9.72E-05	0.000173	0.000157	0.0009422	0.00136774	0	0.000359	0.000405	0	0	0.000406	0.000206
Arrival Below Mixing Height	0.00386	0.000566	0.0005271	0.000102	0.000206	0.00133954	0.00017	5.21E-05	9.37E-07	5.46E-05	9.69E-05	8.84E-05	0.000529	0.00076791	0	0.000201	0.000228	0	0	0.000228	0.000116
Taxi out - 5% subtracted out **	0.0003394	4.977E-05	4.635E-05	8.93E-06	1.81E-05	0.0001178	1.49E-05	4.58E-06	8.27E-08	4.8E-06	8.52E-06	7.78E-06	4.652E-05	6.7531E-05	0	1.77E-05	2E-05	0	0	2E-05	1.02E-05
Taxi in - 5% subtracted out **	0.0001685	2.47E-05	2.3E-05	4.43E-06	8.98E-06	5.8461E-05	7.4E-06	2.27E-06	4.08E-08	2.38E-06	4.23E-06	3.86E-06	2.309E-05	3.3514E-05	0	8.79E-06	9.94E-06	0	0	9.95E-06	5.05E-06
DAILY ON-SITE TOTAL (ST)	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**0.00**	**0.00**	**-**	**-**	**0.00**	**0.00**
DAILY ON-SITE TOTAL (LBS)	**20.45**	**3.00**	**2.79**	**0.54**	**1.09**	**7.10**	**0.90**	**0.28**	**0.00**	**0.29**	**0.51**	**0.47**	**2.80**	**4.07**	**-**	**1.07**	**1.21**	**-**	**-**	**1.21**	**0.61**
ANNUAL ON-SITE TOTAL (ST)	**3.73**	**0.55**	**0.51**	**0.10**	**0.20**	**1.30**	**0.16**	**0.05**	**0.00**	**0.05**	**0.09**	**0.09**	**0.51**	**0.74**	**-**	**0.19**	**0.22**	**-**	**-**	**0.22**	**0.11**
ANNUAL ON-SITE TOTAL (LBS)	**7,465.76**	**1,094.70**	**1,019.49**	**196.51**	**397.85**	**2,590.87**	**328.10**	**100.67**	**1.82**	**105.53**	**187.41**	**171.03**	**1,023.12**	**1,485.26**	**-**	**389.36**	**440.31**	**-**	**-**	**440.91**	**223.80**

* Speciated Organic Gasses and Hazardous Air Pollutant information is not available for aircraft engine startup
** Sub totals above for on-site and off-site assume that 5% of taxiing aircraft emissions occur within the project boundary and 95% occur outside of the project boundary
** For off-site sub totals, taxi emissions are included in the "departure below mixing height" and "arrival below mixing height". Therefore, 5% of taxi emissions are subtracted from the off-site sub total to reflect 95% of all taxi emissions occuring off-site.
* Blank cells reflect data not available

2-methylnaphthalene (IRIS)	Benzaldehyde (IRIS)	N-heptane (IRIS)	Hexaldehyde	Methane	Ethane	Ethylene	Acetylene	Propane	1-propyne	Isobutane	2,2-dimethylbutane	Isopentane	Isoprene	2-methyl-2-propenal (methacrolein)	Methylglyoxal	2,3-dimethylbutane	1-Methylnaphthalene	1,2,4-trimethylbenzene (1,3,4-trimethylbenzene)	3-methylpentane	Methylcyclopentane	N-propylbenzene	N-butylbenzene	p-Tolualdehyde	N-butane
0.000115	0.000262	3.57E-05			0.000291	0.008635	0.0022	4.36E-05						0.00024	0.000839		0.000138	0.000195			2.96E-05		2.68E-05	
6.46E-05	0.000147	2.01E-05			0.000163	0.004848	0.001235	2.45E-05						0.000135	0.000471		7.74E-05	0.00011			1.66E-05		1.50E-05	
0.000114	0.000259	3.53E-05			0.000287	0.008527	0.002172	4.30E-05						0.000237	0.000829		0.000136	0.000193			2.92E-05		2.65E-05	
5.64E-05	0.000129	1.75E-05			0.000143	0.004232	0.001078	2.14E-05						0.000117	0.000411		6.76E-05	9.58E-05			1.45E-05		1.31E-05	
	3.00E-06	5.17E-06	4.41E-07	1.74E-05	4.89E-06	3.08E-05	1.89E-05		1.70E-06	2.43E-05	1.55E-06	7.83E-05	7.05E-07			6.94E-06		1.02E-05	1.09E-05	7.87E-06	2.19E-06	1.49E-06		0.000159
4.74E-07	1.08E-06	1.43E-07			1.20E-06	3.57E-05	9.09E-06	1.76E-07						9.92E-07	3.47E-06		5.73E-07	8.05E-07			1.21E-07		1.10E-07	
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.36	**0.83**	**0.12**	**0.00**	**0.03**	**0.92**	**27.10**	**6.93**	**0.14**	**0.00**	**0.05**	**0.00**	**0.16**	**0.00**	**0.75**	**2.63**	**0.01**	**0.43**	**0.63**	**0.02**	**0.02**	**0.10**	**0.00**	**0.08**	**0.32**
0.07	**0.15**	**0.02**	**0.00**	**0.01**	**0.17**	**4.95**	**1.26**	**0.02**	**0.00**	**0.01**	**0.00**	**0.03**	**0.00**	**0.14**	**0.48**	**0.00**	**0.08**	**0.12**	**0.00**	**0.00**	**0.02**	**0.00**	**0.02**	**0.06**
131.49	**302.18**	**44.63**	**0.32**	**12.67**	**336.12**	**9,891.02**	**2,527.97**	**49.79**	**1.24**	**17.75**	**1.13**	**57.12**	**0.51**	**273.82**	**959.34**	**5.07**	**157.65**	**230.85**	**7.97**	**5.75**	**35.43**	**1.09**	**30.63**	**116.01**
4.74E-07	1.08E-06	1.43E-07	0.00E+00	0.00E+00	1.20E-06	3.57E-05	9.09E-06	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.92E-07	3.47E-06	0.00E+00	5.73E-07	8.05E-07	0.00E+00	0.00E+00	1.21E-07	0.00E+00	1.10E-07	0.00E+00
0.00E+00	3.00E-06	5.17E-06	4.41E-07	1.74E-05	4.89E-06	3.08E-05	1.89E-05	0.00E+00	1.70E-06	2.43E-05	1.55E-06	7.83E-05	7.05E-07	0.00E+00	0.00E+00	6.94E-06	0.00E+00	1.02E-05	1.09E-05	7.87E-06	2.19E-06	1.49E-06	0.00E+00	1.59E-04
5.68E-06	1.30E-05	1.76E-06	0.00E+00	0.00E+00	1.44E-05	4.26E-04	1.09E-04	2.15E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.18E-05	4.14E-05	0.00E+00	6.81E-06	9.65E-06	0.00E+00	0.00E+00	1.46E-06	0.00E+00	1.32E-06	0.00E+00
2.82E-06	6.43E-06	8.76E-07	0	0	7.13E-06	0.000212	5.39E-05	1.07E-06	0	0	0	0	0	5.87E-06	2.06E-05	0	3.38E-06	4.79E-06	0	0	7.25E-07	0	6.57E-07	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.02	**0.05**	**0.02**	**0.00**	**0.03**	**0.06**	**1.41**	**0.38**	**0.01**	**0.00**	**0.05**	**0.00**	**0.16**	**0.00**	**0.04**	**0.13**	**0.01**	**0.02**	**0.05**	**0.02**	**0.02**	**0.01**	**0.00**	**0.00**	**0.32**
0.00	**0.01**	**0.00**	**0.00**	**0.01**	**0.01**	**0.26**	**0.07**	**0.00**	**0.00**	**0.01**	**0.00**	**0.03**	**0.00**	**0.01**	**0.02**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.06**
6.55	**17.13**	**5.81**	**0.32**	**12.67**	**20.14**	**514.24**	**139.05**	**2.48**	**1.24**	**17.75**	**1.13**	**57.12**	**0.51**	**13.65**	**47.80**	**5.07**	**7.86**	**18.58**	**7.97**	**5.75**	**3.29**	**1.09**	**1.53**	**116.01**
0.000115	0.000262	3.57E-05	0	0	0.000291	0.008635	0.0022	4.36E-05	0	0	0	0	0	0.00024	0.000839	0	0.000138	0.000195	0	0	2.96E-05	0	2.68E-05	0
6.46E-05	0.000147	2.01E-05	0	0	0.000163	0.004848	0.001235	2.45E-05	0	0	0	0	0	0.000135	0.000471	0	7.74E-05	0.00011	0	0	1.66E-05	0	1.5E-05	0
5.68E-06	1.3E-05	1.76E-06	0	0	1.44E-05	0.000426	0.000109	2.15E-06	0	0	0	0	0	1.18E-05	4.14E-05	0	6.81E-06	9.65E-06	0	0	1.46E-06	0	1.32E-06	0
2.82E-06	6.43E-06	8.76E-07	0	0	7.13E-06	0.000212	5.39E-05	1.07E-06	0	0	0	0	0	5.87E-06	2.06E-05	0	3.38E-06	4.79E-06	0	0	7.25E-07	0	6.57E-07	0
0.00	**0.00**	**0.00**	-	-	**0.00**	**0.01**	**0.00**	**0.00**	-	-	-	-	-	**0.00**	**0.00**	-	**0.00**	**0.00**	-	-	**0.00**	-	**0.00**	-
0.34	**0.78**	**0.11**	-	-	**0.87**	**25.69**	**6.55**	**0.13**	-	-	-	-	-	**0.71**	**2.50**	-	**0.41**	**0.58**	-	-	**0.09**	-	**0.08**	-
0.06	**0.14**	**0.02**	-	-	**0.16**	**4.69**	**1.19**	**0.02**	-	-	-	-	-	**0.13**	**0.46**	-	**0.07**	**0.11**	-	-	**0.02**	-	**0.01**	-
124.94	**285.05**	**38.82**	-	-	**315.98**	**9,376.78**	**2,388.93**	**47.31**	-	-	-	-	-	**260.17**	**911.54**	-	**149.80**	**212.27**	-	-	**32.14**	-	**29.11**	-

4-Phenyl-1-butene	3-methyl-1-butene	2-methyl-1-butene	1-butene	Glyoxal	2,4,4-trimethyl-1-pentene	2-methylpentane	2,4-dimethylpentane	1,3,5-trimethylbenzene	Methylcyclohexane	N-pentane	1-pentene	2-methyl-1-pentene	4-methyl-1-pentene	Valeraldehyde	Cyclohexene	N-octane	1-octene	N-nonane	N-dodecane	Propylene	Butyraldehyde	1-nonene	N-decane	1,2-diethylbenzene (ortho)
	6.26E-05	7.82E-05	0.00098	0.001014		0.000228		3.02E-05		0.000111	0.000433	1.90E-05	3.85E-05	0.000137		3.46E-05	0.000154	3.46E-05	0.000258	0.002532	6.65E-05	0.000137	0.000179	
	3.51E-05	4.39E-05	0.00055	0.000569		0.000128		1.69E-05		6.21E-05	0.000243	1.07E-05	2.16E-05	7.68E-05		1.94E-05	8.65E-05	1.94E-05	0.000145	0.001422	3.73E-05	7.71E-05	0.0001	
	6.18E-05	7.72E-05	0.000967	0.001002		0.000225		2.98E-05		0.000109	0.000428	1.88E-05	3.81E-05	0.000135		3.42E-05	0.000152	3.42E-05	0.000255	0.0025	6.56E-05	0.000136	0.000176	
	3.07E-05	3.83E-05	0.00048	0.000497		0.000112		1.48E-05		5.42E-05	0.000212	9.30E-06	1.89E-05	6.71E-05		1.70E-05	7.55E-05	1.70E-05	0.000126	0.001241	3.26E-05	6.73E-05	8.76E-05	
1.84E-06	9.92E-07		7.87E-06		1.23E-05	1.99E-05	4.54E-06	8.58E-06	1.84E-06	3.44E-05	2.91E-06				1.12E-05	1.70E-06		7.83E-07		1.11E-05			7.83E-07	2.13E-06
	2.54E-07	3.20E-07	4.05E-06	4.19E-06		9.37E-07		1.21E-07		4.52E-07	1.80E-06	7.72E-08	1.54E-07	5.62E-07		1.43E-07	6.39E-07	1.43E-07	1.07E-06	1.05E-05	2.76E-07	5.73E-07	7.39E-07	
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.20**	**0.24**	**3.08**	**3.18**	**0.02**	**0.75**	**0.01**	**0.11**	**0.00**	**0.42**	**1.36**	**0.06**	**0.12**	**0.43**	**0.02**	**0.11**	**0.48**	**0.11**	**0.81**	**7.95**	**0.21**	**0.43**	**0.56**	**0.00**
0.00	**0.04**	**0.04**	**0.56**	**0.58**	**0.00**	**0.14**	**0.00**	**0.02**	**0.00**	**0.08**	**0.25**	**0.01**	**0.02**	**0.08**	**0.00**	**0.02**	**0.09**	**0.02**	**0.15**	**1.45**	**0.04**	**0.08**	**0.10**	**0.00**
1.34	**72.21**	**89.35**	**1,125.29**	**1,159.12**	**8.95**	**274.95**	**3.32**	**40.73**	**1.34**	**151.52**	**497.43**	**21.70**	**44.04**	**156.37**	**8.18**	**40.81**	**176.17**	**40.15**	**294.89**	**2,902.11**	**75.95**	**157.03**	**204.83**	**1.55**

0.00E+00	2.54E-07	3.20E-07	4.05E-06	4.19E-06	0.00E+00	9.37E-07	0.00E+00	1.21E-07	0.00E+00	4.52E-07	1.80E-06	7.72E-08	1.54E-07	5.62E-07	0.00E+00	1.43E-07	6.39E-07	1.43E-07	1.07E-06	1.05E-05	2.76E-07	5.73E-07	7.39E-07	0.00E+00
1.84E-06	9.92E-07	0.00E+00	7.87E-06	0.00E+00	1.23E-05	1.99E-05	4.54E-06	8.58E-06	1.84E-06	3.44E-05	2.91E-06	0.00E+00	0.00E+00	0.00E+00	1.12E-05	1.70E-06	0.00E+00	7.83E-07	0.00E+00	1.11E-05	0.00E+00	0.00E+00	7.83E-07	2.13E-06
0.00E+00	3.09E-06	3.86E-06	4.84E-05	5.01E-05	0.00E+00	1.13E-05	0.00E+00	1.49E-06	0.00E+00	5.46E-06	2.14E-05	9.38E-07	1.90E-06	6.76E-06	0.00E+00	1.71E-06	7.61E-06	1.71E-06	1.27E-05	1.25E-04	3.28E-06	6.78E-06	8.82E-06	0.00E+00
0	1.53E-06	1.92E-06	2.4E-05	2.49E-05	0	5.58E-06	0	7.39E-07	0	2.71E-06	1.06E-05	4.65E-07	9.44E-07	3.35E-06	0	8.48E-07	3.78E-06	8.48E-07	6.32E-06	6.2E-05	1.63E-06	3.37E-06	4.38E-06	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.01**	**0.01**	**0.17**	**0.16**	**0.02**	**0.08**	**0.01**	**0.02**	**0.00**	**0.09**	**0.07**	**0.00**	**0.01**	**0.02**	**0.02**	**0.01**	**0.02**	**0.01**	**0.04**	**0.42**	**0.01**	**0.02**	**0.03**	**0.00**
0.00	**0.00**	**0.00**	**0.03**	**0.03**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.02**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.08**	**0.00**	**0.00**	**0.01**	**0.00**
1.34	**4.28**	**4.45**	**61.53**	**57.75**	**8.95**	**27.51**	**3.32**	**7.98**	**1.34**	**31.44**	**26.81**	**1.08**	**2.19**	**7.79**	**8.18**	**3.21**	**8.78**	**2.54**	**14.70**	**152.33**	**3.79**	**7.83**	**10.75**	**1.55**

0	6.26E-05	7.82E-05	0.00098	0.001014	0	0.000228	0	3.02E-05	0	0.000111	0.000433	1.9E-05	3.85E-05	0.000137	0	3.46E-05	0.000154	3.46E-05	0.000258	0.002532	6.65E-05	0.000137	0.000179	0
0	3.51E-05	4.39E-05	0.00055	0.000569	0	0.000128	0	1.69E-05	0	6.21E-05	0.000243	1.07E-05	2.16E-05	7.68E-05	0	1.94E-05	8.65E-05	1.94E-05	0.000145	0.001422	3.73E-05	7.71E-05	0.0001	0
0	3.09E-06	3.86E-06	4.84E-05	5.01E-05	0	1.13E-05	0	1.49E-06	0	5.46E-06	2.14E-05	9.38E-07	1.9E-06	6.76E-06	0	1.71E-06	7.61E-06	1.71E-06	1.27E-05	0.000125	3.28E-06	6.78E-06	8.82E-06	0
0	1.53E-06	1.92E-06	2.4E-05	2.49E-05	0	5.58E-06	0	7.39E-07	0	2.71E-06	1.06E-05	4.65E-07	9.44E-07	3.35E-06	0	8.48E-07	3.78E-06	8.48E-07	6.32E-06	6.2E-05	1.63E-06	3.37E-06	4.38E-06	0
-	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**0.00**	**-**	**0.00**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**
-	**0.19**	**0.23**	**2.91**	**3.02**	**-**	**0.68**	**-**	**0.09**	**-**	**0.33**	**1.29**	**0.06**	**0.11**	**0.41**	**-**	**0.10**	**0.46**	**0.10**	**0.77**	**7.53**	**0.20**	**0.41**	**0.53**	**-**
-	**0.03**	**0.04**	**0.53**	**0.55**	**-**	**0.12**	**-**	**0.02**	**-**	**0.06**	**0.24**	**0.01**	**0.02**	**0.07**	**-**	**0.02**	**0.08**	**0.02**	**0.14**	**1.37**	**0.04**	**0.07**	**0.10**	**-**
-	**67.93**	**84.90**	**1,063.76**	**1,101.36**	**-**	**247.44**	**-**	**32.75**	**-**	**120.08**	**470.62**	**20.62**	**41.85**	**148.59**	**-**	**37.60**	**167.39**	**37.60**	**280.19**	**2,749.78**	**72.17**	**149.20**	**194.08**	**-**

(1-Methylpropyl)benzene	1,3-diethylbenzene (meta)	Cyclopentene	Cyclopentane	1,2-propadiene	Indan	2-methyl-2-butene	1,2,3-trimethylbenzene	o-Tolualdehyde	N-Hexadecane	2,3,3-trimethylpentane	2,3,4-trimethylpentane	2,4-dimethylhexane	4-methylheptane	3-methylheptane	Cis-2-butene	Isovaleraldehyde	2-methylheptane	1-hexene	1-Methyl-2-ethylbenzene (o-ethyltoluene)	1-Methyl-3-ethylbenzene (m-ethyltoluene)	Tolualdehyde	1-Methyl-4-ethylbenzene (p-ethyltoluene)	Cis-1,4-dimethylcyclohexane	Trans-2-butene
						0.000103	5.92E-05	0.000128	2.74E-05						0.000117	1.79E-05		0.000411	3.63E-05	8.60E-05	0.000155	3.57E-05		
						5.80E-05	3.32E-05	7.21E-05	1.54E-05						6.59E-05	1.00E-05		0.000231	2.04E-05	4.83E-05	8.72E-05	2.01E-05		
						0.000102	5.85E-05	0.000127	2.70E-05						0.000116	1.76E-05		0.000406	3.58E-05	8.49E-05	0.000153	3.53E-05		
						5.06E-05	2.90E-05	6.30E-05	1.34E-05						5.75E-05	8.76E-06		0.000201	1.78E-05	4.22E-05	7.61E-05	1.75E-05		
3.53E-07	1.63E-06	2.05E-06	3.41E-06	7.83E-07	2.27E-06	7.83E-07	1.84E-06			2.98E-06	1.84E-06	2.98E-06	1.77E-06	2.48E-06	4.75E-06		1.84E-06	1.98E-06		1.14E-06			5.62E-07	6.31E-06
						4.30E-07	2.43E-07	5.29E-07	1.10E-07						4.85E-07	7.72E-08		1.70E-06	1.54E-07	3.53E-07	6.39E-07	1.43E-07		
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.33**	**0.19**	**0.40**	**0.09**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.38**	**0.06**	**0.00**	**1.29**	**0.11**	**0.27**	**0.49**	**0.11**	**0.00**	**0.01**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.06**	**0.03**	**0.07**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.07**	**0.01**	**0.00**	**0.24**	**0.02**	**0.05**	**0.09**	**0.02**	**0.00**	**0.00**
0.26	**1.19**	**1.50**	**2.49**	**0.57**	**1.66**	**118.66**	**69.00**	**146.81**	**31.28**	**2.17**	**1.34**	**2.17**	**1.30**	**1.81**	**137.51**	**20.42**	**1.34**	**471.22**	**41.49**	**99.12**	**177.44**	**40.85**	**0.41**	**4.60**
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.30E-07	2.43E-07	5.29E-07	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.85E-07	7.72E-08	0.00E+00	1.70E-06	1.54E-07	3.53E-07	6.39E-07	1.43E-07	0.00E+00	0.00E+00
3.53E-07	1.63E-06	2.05E-06	3.41E-06	7.83E-07	2.27E-06	7.83E-07	1.84E-06	0.00E+00	0.00E+00	2.98E-06	1.84E-06	2.98E-06	1.77E-06	2.48E-06	4.75E-06	0.00E+00	1.84E-06	1.98E-06	0.00E+00	1.14E-06	0.00E+00	0.00E+00	5.62E-07	6.31E-06
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.10E-06	2.92E-06	6.34E-06	1.35E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.79E-06	8.82E-07	0.00E+00	2.03E-05	1.79E-06	4.25E-06	7.67E-06	1.76E-06	0.00E+00	0.00E+00
0	0	0	0	0	0	2.53E-06	1.45E-06	3.15E-06	6.71E-07	0	0	0	0	0	2.87E-06	4.38E-07	0	1.01E-05	8.9E-07	2.11E-06	3.8E-06	8.76E-07	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.02**	**0.01**	**0.02**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.03**	**0.00**	**0.00**	**0.07**	**0.01**	**0.02**	**0.02**	**0.01**	**0.00**	**0.01**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.26	**1.19**	**1.50**	**2.49**	**0.57**	**1.66**	**6.46**	**4.71**	**7.31**	**1.56**	**2.17**	**1.34**	**2.17**	**1.30**	**1.81**	**10.15**	**1.02**	**1.34**	**24.86**	**2.07**	**5.72**	**8.84**	**2.03**	**0.41**	**4.60**
0	0	0	0	0	0	0.000103	5.92E-05	0.000128	2.74E-05	0	0	0	0	0	0.000117	1.79E-05	0	0.000411	3.63E-05	8.6E-05	0.000155	3.57E-05	0	0
0	0	0	0	0	0	5.8E-05	3.32E-05	7.21E-05	1.54E-05	0	0	0	0	0	6.59E-05	1E-05	0	0.000231	2.04E-05	4.83E-05	8.72E-05	2.01E-05	0	0
0	0	0	0	0	0	5.1E-06	2.92E-06	6.34E-06	1.35E-06	0	0	0	0	0	5.79E-06	8.82E-07	0	2.03E-05	1.79E-06	4.25E-06	7.67E-06	1.76E-06	0	0
0	0	0	0	0	0	2.53E-06	1.45E-06	3.15E-06	6.71E-07	0	0	0	0	0	2.87E-06	4.38E-07	0	1.01E-05	8.9E-07	2.11E-06	3.8E-06	8.76E-07	0	0
-	**-**	**-**	**-**	**-**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**-**	**-**	**-**	**-**	**0.00**	**0.00**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**-**
-	**-**	**-**	**-**	**-**	**-**	**0.31**	**0.18**	**0.38**	**0.08**	**-**	**-**	**-**	**-**	**-**	**0.35**	**0.05**	**-**	**1.22**	**0.11**	**0.26**	**0.46**	**0.11**	**-**	**-**
-	**-**	**-**	**-**	**-**	**-**	**0.06**	**0.03**	**0.07**	**0.01**	**-**	**-**	**-**	**-**	**-**	**0.06**	**0.01**	**-**	**0.22**	**0.02**	**0.05**	**0.08**	**0.02**	**-**	**-**
-	**-**	**-**	**-**	**-**	**-**	**112.20**	**64.29**	**139.49**	**29.72**	**-**	**-**	**-**	**-**	**-**	**127.37**	**19.40**	**-**	**446.37**	**39.42**	**93.40**	**168.60**	**38.82**	**-**	**-**

2-methyl-2-pentene	Cis-2-pentene	N-tridecane	N-Tetradecane	N-Pentadecane	N-heptadecane	Trans-2-pentene	1-Methylcyclopentene	1-undecene	1-decene	2,3,5-trimethylhexane	1-Methyl-3-propylbenzene	N-undecane	2,6-dimethyloctane	2,4-dimethylheptane	2,5-dimethylheptane	3-methyloctane	4-methyloctane	2-methyloctane	2,2,5-trimethylhexane	Trans-2-hexene	Crotonaldehyde	T-2-Nonene	2-methyldecane	2,3-dimethyloctane
	0.000154	0.000299	0.000232	9.66E-05	5.03E-06	0.0002			0.000103			0.000248								1.68E-05	0.000577			
	8.65E-05	0.000168	0.00013	5.42E-05	2.82E-06	0.000113			5.80E-05			0.000139								9.40E-06	0.000324			
	0.000152	0.000295	0.000229	9.54E-05	4.96E-06	0.000198			0.000102			0.000245								1.65E-05	0.00057			
	7.55E-05	0.000146	0.000114	4.73E-05	2.46E-06	9.83E-05			5.06E-05			0.000122								8.21E-06	0.000283			
2.41E-06	6.88E-06					5.81E-06	2.09E-07	9.92E-07		5.62E-07	1.14E-06	9.92E-07	4.96E-07	5.62E-07	9.26E-07	2.19E-06	2.77E-06	2.87E-07	1.70E-06		5.50E-06	1.20E-06	4.46E-06	3.68E-06
	6.39E-07	1.23E-06	9.59E-07	3.97E-07	2.20E-08	8.27E-07			4.30E-07			1.03E-06								6.61E-08	2.38E-06			
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.50**	**0.94**	**0.73**	**0.30**	**0.02**	**0.64**	**0.00**	**0.00**	**0.32**	**0.00**	**0.00**	**0.78**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.05**	**1.82**	**0.00**	**0.01**	**0.01**
0.00	**0.09**	**0.17**	**0.13**	**0.06**	**0.00**	**0.12**	**0.00**	**0.00**	**0.06**	**0.00**	**0.00**	**0.14**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.33**	**0.00**	**0.00**	**0.00**
1.76	**181.19**	**341.49**	**265.53**	**110.42**	**5.75**	**233.38**	**0.15**	**0.72**	**118.09**	**0.41**	**0.83**	**284.12**	**0.36**	**0.41**	**0.68**	**1.60**	**2.02**	**0.21**	**1.24**	**19.14**	**663.36**	**0.88**	**3.26**	**2.69**

0.00E+00	6.39E-07	1.23E-06	9.59E-07	3.97E-07	2.20E-08	8.27E-07	0.00E+00	0.00E+00	4.30E-07	0.00E+00	0.00E+00	1.03E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-08	2.38E-06	0.00E+00	0.00E+00	0.00E+00
2.41E-06	6.88E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.81E-06	2.09E-07	9.92E-07	0.00E+00	5.62E-07	1.14E-06	9.92E-07	4.96E-07	5.62E-07	9.26E-07	2.19E-06	2.77E-06	2.87E-07	1.70E-06	0.00E+00	5.50E-06	1.20E-06	4.46E-06	3.68E-06
0.00E+00	7.61E-06	1.48E-05	1.15E-05	4.77E-06	2.48E-07	9.90E-06	0.00E+00	0.00E+00	5.10E-06	0.00E+00	0.00E+00	1.22E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.27E-07	2.85E-05	0.00E+00	0.00E+00	0.00E+00
0	3.78E-06	7.32E-06	5.69E-06	2.37E-06	1.23E-07	4.91E-06	0	0	2.53E-06	0	0	6.08E-06	0	0	0	0	0	0	0	4.11E-07	1.41E-05	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.04**	**0.05**	**0.04**	**0.02**	**0.00**	**0.04**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.10**	**0.00**	**0.01**	**0.01**
0.00	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**
1.76	**13.80**	**17.02**	**13.23**	**5.50**	**0.29**	**15.66**	**0.15**	**0.72**	**5.89**	**0.41**	**0.83**	**14.85**	**0.36**	**0.41**	**0.68**	**1.60**	**2.02**	**0.21**	**1.24**	**0.95**	**36.87**	**0.88**	**3.26**	**2.69**

0	0.000154	0.000299	0.000232	9.66E-05	5.03E-06	0.0002	0	0	0.000103	0	0	0.000248	0	0	0	0	0	0	0	1.68E-05	0.000577	0	0	0
0	8.65E-05	0.000168	0.00013	5.42E-05	2.82E-06	0.000113	0	0	5.8E-05	0	0	0.000139	0	0	0	0	0	0	0	9.4E-06	0.000324	0	0	0
0	7.61E-06	1.48E-05	1.15E-05	4.77E-06	2.48E-07	9.9E-06	0	0	5.1E-06	0	0	1.22E-05	0	0	0	0	0	0	0	8.27E-07	2.85E-05	0	0	0
0	3.78E-06	7.32E-06	5.69E-06	2.37E-06	1.23E-07	4.91E-06	0	0	2.53E-06	0	0	6.08E-06	0	0	0	0	0	0	0	4.11E-07	1.41E-05	0	0	0
-	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	-	-	**0.00**	-	-	**0.00**	-	-	-	-	-	-	-	**0.00**	**0.00**	-	-	-
-	**0.46**	**0.89**	**0.69**	**0.29**	**0.01**	**0.60**	-	-	**0.31**	-	-	**0.74**	-	-	-	-	-	-	-	**0.05**	**1.72**	-	-	-
-	**0.08**	**0.16**	**0.13**	**0.05**	**0.00**	**0.11**	-	-	**0.06**	-	-	**0.13**	-	-	-	-	-	-	-	**0.01**	**0.31**	-	-	-
-	**167.39**	**324.47**	**252.30**	**104.92**	**5.46**	**217.73**	-	-	**112.20**	-	-	**269.27**	-	-	-	-	-	-	-	**18.19**	**626.49**	-	-	-

Cis-2-hexene	Heptene	Dimethyl napthalene	C-1 Compounds	C-10 Compounds	C-10 Olefins	C-10 Paraffins	C-11 Compounds	C-12 Compounds	C-13 Compounds	C-14 Alkane	C-14 Compounds	C-15 Alkane	C-15 Compounds	C-16 Alkane	C-16 Compounds	C-17 Compounds	C-18 Alkane	C-18 Compounds	C-19 Compounds	C-2 Compounds	C-20 Compounds	C-21 Compounds	C-22 Compounds	C-23 Compounds
	0.000245	5.03E-05			0.003263	0.008157				0.000104		9.89E-05		8.15E-05			1.11E-06							
	0.000137	2.82E-05			0.001832	0.00458				5.83E-05		5.55E-05		4.58E-05			6.28E-07							
	0.000242	4.96E-05			0.003222	0.008055				0.000103		9.76E-05		8.05E-05			1.10E-06							
	0.00012	2.46E-05			0.001599	0.003998				5.09E-05		4.84E-05		4.00E-05			5.51E-07							
7.83E-07			3.16E-05	1.92E-05			1.95E-05	1.20E-05	1.87E-05		2.42E-05		2.37E-05		1.90E-05	1.67E-05		1.11E-05	8.50E-06	0.000109	4.96E-06	4.09E-06	3.22E-06	2.61E-06
	1.01E-06	2.09E-07			1.35E-05	3.37E-05				4.30E-07		4.08E-07		3.42E-07			0							
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.77**	**0.16**	**0.06**	**0.04**	**10.22**	**25.54**	**0.04**	**0.02**	**0.04**	**0.33**	**0.05**	**0.31**	**0.05**	**0.26**	**0.04**	**0.03**	**0.00**	**0.02**	**0.02**	**0.22**	**0.01**	**0.01**	**0.01**	**0.01**
0.00	**0.14**	**0.03**	**0.01**	**0.01**	**1.86**	**4.66**	**0.01**	**0.00**	**0.01**	**0.06**	**0.01**	**0.06**	**0.01**	**0.05**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**
0.57	**279.56**	**57.45**	**23.06**	**13.99**	**3,729.50**	**9,322.78**	**14.23**	**8.75**	**13.64**	**118.72**	**17.70**	**112.98**	**17.29**	**93.19**	**13.87**	**12.17**	**1.27**	**8.11**	**6.20**	**79.36**	**3.62**	**2.99**	**2.35**	**1.91**

0.00E+00	1.01E-06	2.09E-07	0.00E+00	0.00E+00	1.35E-05	3.37E-05	0.00E+00	0.00E+00	0.00E+00	4.30E-07	0.00E+00	4.08E-07	0.00E+00	3.42E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7.83E-07	0.00E+00	0.00E+00	3.16E-05	1.92E-05	0.00E+00	0.00E+00	1.95E-05	1.20E-05	1.87E-05	0.00E+00	2.42E-05	0.00E+00	2.37E-05	0.00E+00	1.90E-05	1.67E-05	0.00E+00	1.11E-05	8.50E-06	1.09E-04	4.96E-06	4.09E-06	3.22E-06	2.61E-06
0.00E+00	1.21E-05	2.48E-06	0.00E+00	0.00E+00	1.61E-04	4.03E-04	0.00E+00	0.00E+00	0.00E+00	5.13E-06	0.00E+00	4.88E-06	0.00E+00	4.03E-06	0.00E+00	0.00E+00	5.51E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	5.99E-06	1.23E-06	0	0	8E-05	0.0002	0	0	0	2.55E-06	0	2.42E-06	0	2E-06	0	0	2.76E-08	0	0	0	0	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.04**	**0.01**	**0.06**	**0.04**	**0.51**	**1.27**	**0.04**	**0.02**	**0.04**	**0.02**	**0.05**	**0.02**	**0.05**	**0.01**	**0.04**	**0.03**	**0.00**	**0.02**	**0.02**	**0.22**	**0.01**	**0.01**	**0.01**	**0.01**
0.00	**0.01**	**0.00**	**0.01**	**0.01**	**0.09**	**0.23**	**0.01**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**
0.57	**13.93**	**2.86**	**23.06**	**13.99**	**185.84**	**464.54**	**14.23**	**8.75**	**13.64**	**5.92**	**17.70**	**5.63**	**17.29**	**4.65**	**13.87**	**12.17**	**0.06**	**8.11**	**6.20**	**79.36**	**3.62**	**2.99**	**2.35**	**1.91**

0	0.000245	5.03E-05	0	0	0.003263	0.008157	0	0	0	0.000104	0	9.89E-05	0	8.15E-05	0	0	1.11E-06	0	0	0	0	0	0	0
0	0.000137	2.82E-05	0	0	0.001832	0.00458	0	0	0	5.83E-05	0	5.55E-05	0	4.58E-05	0	0	6.28E-07	0	0	0	0	0	0	0
0	1.21E-05	2.48E-06	0	0	0.000161	0.000403	0	0	0	5.13E-06	0	4.88E-06	0	4.03E-06	0	0	5.51E-08	0	0	0	0	0	0	0
0	5.99E-06	1.23E-06	0	0	8E-05	0.0002	0	0	0	2.55E-06	0	2.42E-06	0	2E-06	0	0	2.76E-08	0	0	0	0	0	0	0
-	**0.00**	**0.00**	**-**	**-**	**0.00**	**0.01**	**-**	**-**	**-**	**0.00**	**-**	**0.00**	**-**	**0.00**	**-**	**-**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
-	**0.73**	**0.15**	**-**	**-**	**9.71**	**24.27**	**-**	**-**	**-**	**0.31**	**-**	**0.29**	**-**	**0.24**	**-**	**-**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
-	**0.13**	**0.03**	**-**	**-**	**1.77**	**4.43**	**-**	**-**	**-**	**0.06**	**-**	**0.05**	**-**	**0.04**	**-**	**-**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
-	**265.63**	**54.58**	**-**	**-**	**3,543.66**	**8,858.24**	**-**	**-**	**-**	**112.81**	**-**	**107.35**	**-**	**88.54**	**-**	**-**	**1.21**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

C-24 Compounds	C-25 Compounds	C-26 Compounds	C-27 Compounds	C-28 Compounds	C-29 Compounds	C-3 Compounds	C-30 Compounds	C-31 Compounds	C-32 Compounds	C-33 Compounds	C-34 Compounds	C-35 Compounds	C-36 Compounds	C-37 Compounds	C-38 Compounds	C-39 Compounds	C-4 Compounds	C-40 Compounds	C-41 Compounds	C-42 Compounds	C-43 compounds	C-5 Compounds	C-6 Compounds	C-7 Compounds
2.61E-06	2.94E-06	2.39E-06	1.20E-06	1.74E-06	7.61E-07	2.84E-05	1.74E-06	1.58E-06	1.47E-06	1.20E-06	1.31E-06	8.71E-07	1.09E-06	4.41E-07	2.76E-07	5.95E-07	2.22E-05	1.10E-07	2.76E-07	1.10E-07	5.51E-08	1.29E-05	2.34E-05	1.57E-05
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.06**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.03**	**0.05**	**0.03**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**
1.91	**2.15**	**1.75**	**0.88**	**1.27**	**0.56**	**20.71**	**1.27**	**1.15**	**1.07**	**0.88**	**0.96**	**0.64**	**0.80**	**0.32**	**0.20**	**0.43**	**16.22**	**0.08**	**0.20**	**0.08**	**0.04**	**9.38**	**17.10**	**11.49**

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
2.61E-06	2.94E-06	2.39E-06	1.20E-06	1.74E-06	7.61E-07	2.84E-05	1.74E-06	1.58E-06	1.47E-06	1.20E-06	1.31E-06	8.71E-07	1.09E-06	4.41E-07	2.76E-07	5.95E-07	2.22E-05	1.10E-07	2.76E-07	1.10E-07	5.51E-08	1.29E-05	2.34E-05	1.57E-05
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.06**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.03**	**0.05**	**0.03**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**
1.91	**2.15**	**1.75**	**0.88**	**1.27**	**0.56**	**20.71**	**1.27**	**1.15**	**1.07**	**0.88**	**0.96**	**0.64**	**0.80**	**0.32**	**0.20**	**0.43**	**16.22**	**0.08**	**0.20**	**0.08**	**0.04**	**9.38**	**17.10**	**11.49**

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

C-8 Compounds	C-9 Compounds	Cyclopentylcyclopentane	Hexyne	Methylcyclooctane	Pentyne	T-1-Phenylbutene	Decanol	Dodecanol
							0.003263	0.001631
							0.001832	0.000916
							0.003222	0.001611
							0.001599	0.000799
6.15E-06	4.09E-06	3.26E-06	1.43E-07	2.34E-06	1.34E-06	1.63E-06		
							1.35E-05	6.75E-06
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**
0.01	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**10.22**	**5.11**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.86**	**0.93**
4.49	**2.99**	**2.38**	**0.10**	**1.71**	**0.98**	**1.19**	**3,729.50**	**1,864.43**

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E-05	6.75E-06
6.15E-06	4.09E-06	3.26E-06	1.43E-07	2.34E-06	1.34E-06	1.63E-06	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.61E-04	8.05E-05
0	0	0	0	0	0	0	8E-05	4E-05
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.51**	**0.25**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.09**	**0.05**
4.49	**2.99**	**2.38**	**0.10**	**1.71**	**0.98**	**1.19**	**185.84**	**92.90**

0	0	0	0	0	0	0	0.003263	0.001631
0	0	0	0	0	0	0	0.001832	0.000916
0	0	0	0	0	0	0	0.000161	8.05E-05
0	0	0	0	0	0	0	8E-05	4E-05
-	**-**	**-**	**-**	**-**	**-**	**-**	**0.00**	**0.00**
-	**-**	**-**	**-**	**-**	**-**	**-**	**9.71**	**4.85**
-	**-**	**-**	**-**	**-**	**-**	**-**	**1.77**	**0.89**
-	**-**	**-**	**-**	**-**	**-**	**-**	**3,543.66**	**1,771.52**

Combined on and off-site

Mode	Formaldehyde (IRIS, CAA)	Methyl alcohol (IRIS, CAA)	Benzene (IRIS, CAA)	C-5 Benzene + C-4 Aroald	C-4 Benzene + C-3 Aroald	Acetaldehyde (IRIS, CAA)	Naphthalene (IRIS, CAA)	O-xylene (IRIS, CAA)	Isopropyl benzene (cumene) (IRIS, CAA)	Ethylbenzene (IRIS, CAA)	Styrene (IRIS, CAA)	M & P-xylene (IRIS, CAA)	1,3-butadiene (IRIS, CAA)	Acrolein (IRIS, CAA)	M-xylene (IRIS, CAA)	Toluene (IRIS, CAA)	Phenol (carbolic acid) (IRIS, CAA)	N-hexane (IRIS, CAA)	2,2,4-trimethyl pentane (IRIS, CAA)	Propionaldehyde (CAA)	Acetone (IRIS)	2-methylnaphthalene (IRIS)
Departure Below Mixing Height	0.006194	0.000908	0.000163	0.00033	0.000846	0.002149	0.000272	8.35E-05	1.51E-06	8.75E-05	0.000155	0.000142	0.000849	0.001232		0.000323	0.000365			0.000366	0.000186	0.000104
Arrival Below Mixing Height	0.00347	0.000509	9.13E-05	0.000185	0.000474	0.001204	0.000152	4.68E-05	8.49E-07	4.90E-05	8.71E-05	7.95E-05	0.000476	0.00069		0.000181	0.000205			0.000205	0.000104	5.81E-05
DepartureTaxi	0.006116	0.000897	0.000161	0.000326	0.000835	0.002123	0.000269	8.25E-05	1.49E-06	8.65E-05	0.000154	0.00014	0.000838	0.001217		0.000319	0.000361			0.000361	0.000183	0.000102
ArrivalTaxi	0.003029	0.000444	7.97E-05	0.000161	0.000414	0.001051	0.000133	4.08E-05	7.39E-07	4.28E-05	7.60E-05	6.94E-05	0.000415	0.000603		0.000158	0.000179			0.000179	9.08E-05	5.07E-05
Ground Service Equipment	6.39E-05				1.55E-05	2.16E-05		8.07E-06		5.94E-06					1.65E-05	2.64E-05		1.36E-05	1.33E-05	1.31E-05		
Aircraft Auxiliary Power Units	3.55E-05	5.21E-06	9.37E-07	1.90E-06	4.85E-06	1.23E-05	1.57E-06	4.74E-07	1.10E-08	5.07E-07	8.93E-07	8.16E-07	4.87E-06	7.07E-06		1.85E-06	2.09E-06			2.09E-06	1.07E-06	5.95E-07
DAILY TOTAL (ST)	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
DAILY TOTAL (LBS)	**19.53**	**2.84**	**0.51**	**1.03**	**2.68**	**6.77**	**0.85**	**0.28**	**0.00**	**0.29**	**0.49**	**0.44**	**2.66**	**3.86**	**0.03**	**1.06**	**1.14**	**0.03**	**0.03**	**1.17**	**0.58**	**0.32**
ANNUAL TOTAL (ST)	**3.56**	**0.52**	**0.09**	**0.19**	**0.49**	**1.24**	**0.16**	**0.05**	**0.00**	**0.05**	**0.09**	**0.08**	**0.49**	**0.70**	**0.01**	**0.19**	**0.21**	**0.00**	**0.00**	**0.21**	**0.11**	**0.06**
ANNUAL TOTAL (LBS)	**7,126.88**	**1,038.17**	**186.36**	**377.31**	**978.17**	**2,472.84**	**311.16**	**101.37**	**1.73**	**104.42**	**177.72**	**162.20**	**970.30**	**1,408.56**	**12.04**	**388.55**	**417.57**	**9.91**	**9.71**	**427.72**	**212.24**	**118.48**

On-Site

Mode	Formaldehyde (IRIS, CAA)	Methyl alcohol (IRIS, CAA)	Benzene (IRIS, CAA)	C-5 Benzene + C-4 Aroald	C-4 Benzene + C-3 Aroald	Acetaldehyde (IRIS, CAA)	Naphthalene (IRIS, CAA)	O-xylene (IRIS, CAA)	Isopropyl benzene (cumene) (IRIS, CAA)	Ethylbenzene (IRIS, CAA)	Styrene (IRIS, CAA)	M & P-xylene (IRIS, CAA)	1,3-butadiene (IRIS, CAA)	Acrolein (IRIS, CAA)	M-xylene (IRIS, CAA)	Toluene (IRIS, CAA)	Phenol (carbolic acid) (IRIS, CAA)	N-hexane (IRIS, CAA)	2,2,4-trimethyl pentane (IRIS, CAA)	Propionaldehyde (CAA)	Acetone (IRIS)	2-methylnaphthalene (IRIS)
Aircraft Auxiliary Power Units	3.55E-05	5.21E-06	9.37E-07	1.90E-06	4.85E-06	1.23E-05	1.57E-06	4.74E-07	1.10E-08	5.07E-07	8.93E-07	8.16E-07	4.87E-06	7.07E-06	0.00E+00	1.85E-06	2.09E-06	0.00E+00	0.00E+00	2.09E-06	1.07E-06	5.95E-07
Ground Service Equipment	6.39E-05	0.00E+00	0.00E+00	0.00E+00	1.55E-05	2.16E-05	0.00E+00	8.07E-06	0.00E+00	5.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.65E-05	2.64E-05	0.00E+00	1.36E-05	1.33E-05	1.31E-05	0.00E+00	0.00E+00
Taxi out - 5% Assigned **	3.06E-04	4.48E-05	8.05E-06	1.63E-05	4.18E-05	1.06E-04	1.34E-05	4.12E-06	7.44E-08	4.32E-06	7.68E-06	7.01E-06	4.19E-05	6.08E-05	0.00E+00	1.59E-05	1.80E-05	0.00E+00	0.00E+00	1.81E-05	9.17E-06	5.12E-06
Taxi in - 5% Assigned **	0.000151	2.22E-05	3.99E-06	8.07E-06	2.07E-05	5.26E-05	6.66E-06	2.04E-06	3.69E-08	2.14E-06	3.8E-06	3.47E-06	2.08E-05	3.01E-05	0	7.9E-06	8.93E-06	0	0	8.94E-06	4.54E-06	2.53E-06
DAILY ON-SITE TOTAL (ST)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
DAILY ON-SITE TOTAL (LBS)	**1.11**	**0.14**	**0.03**	**0.05**	**0.17**	**0.39**	**0.04**	**0.03**	**0.00**	**0.03**	**0.02**	**0.02**	**0.14**	**0.20**	**0.03**	**0.10**	**0.06**	**0.03**	**0.03**	**0.08**	**0.03**	**0.02**
ANNUAL ON-SITE TOTAL (ST)	**0.20**	**0.03**	**0.00**	**0.01**	**0.03**	**0.07**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.04**	**0.01**	**0.02**	**0.01**	**0.00**	**0.00**	**0.02**	**0.01**	**0.00**
ANNUAL ON-SITE TOTAL (LBS)	**406.40**	**52.75**	**9.47**	**19.17**	**60.45**	**140.60**	**15.81**	**10.74**	**0.09**	**9.43**	**9.03**	**8.24**	**49.30**	**71.56**	**12.04**	**38.06**	**21.21**	**9.91**	**9.71**	**30.83**	**10.79**	**6.02**

Off-Site

Mode	Formaldehyde (IRIS, CAA)	Methyl alcohol (IRIS, CAA)	Benzene (IRIS, CAA)	C-5 Benzene + C-4 Aroald	C-4 Benzene + C-3 Aroald	Acetaldehyde (IRIS, CAA)	Naphthalene (IRIS, CAA)	O-xylene (IRIS, CAA)	Isopropyl benzene (cumene) (IRIS, CAA)	Ethylbenzene (IRIS, CAA)	Styrene (IRIS, CAA)	M & P-xylene (IRIS, CAA)	1,3-butadiene (IRIS, CAA)	Acrolein (IRIS, CAA)	M-xylene (IRIS, CAA)	Toluene (IRIS, CAA)	Phenol (carbolic acid) (IRIS, CAA)	N-hexane (IRIS, CAA)	2,2,4-trimethyl pentane (IRIS, CAA)	Propionaldehyde (CAA)	Acetone (IRIS)	2-methylnaphthalene (IRIS)
Departure Below Mixing Height	0.006194	0.000908	0.000163	0.00033	0.000846	0.002149	0.000272	8.35E-05	1.51E-06	8.75E-05	0.000155	0.000142	0.000849	0.001232	0	0.000323	0.000365	0	0	0.000366	0.000186	0.000104
Arrival Below Mixing Height	0.00347	0.000509	9.13E-05	0.000185	0.000474	0.001204	0.000152	4.68E-05	8.49E-07	4.9E-05	8.71E-05	7.95E-05	0.000476	0.00069	0	0.000181	0.000205	0	0	0.000205	0.000104	5.81E-05
Taxi out - 5% subtracted out **	0.000306	4.48E-05	8.05E-06	1.63E-05	4.18E-05	0.000106	1.34E-05	4.12E-06	7.44E-08	4.32E-06	7.68E-06	7.01E-06	4.19E-05	6.08E-05	0	1.59E-05	1.8E-05	0	0	1.81E-05	9.17E-06	5.12E-06
Taxi in - 5% subtracted out **	0.000151	2.22E-05	3.99E-06	8.07E-06	2.07E-05	5.26E-05	6.66E-06	2.04E-06	3.69E-08	2.14E-06	3.8E-06	3.47E-06	2.08E-05	3.01E-05	0	7.9E-06	8.93E-06	0	0	8.94E-06	4.54E-06	2.53E-06
DAILY ON-SITE TOTAL (ST)	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	-	**0.00**	**0.00**	-	-	**0.00**	**0.00**	**0.00**
DAILY ON-SITE TOTAL (LBS)	**18.41**	**2.70**	**0.48**	**0.98**	**2.51**	**6.39**	**0.81**	**0.25**	**0.00**	**0.26**	**0.46**	**0.42**	**2.52**	**3.66**	-	**0.96**	**1.09**	-	-	**1.09**	**0.55**	**0.31**
ANNUAL ON-SITE TOTAL (ST)	**3.36**	**0.49**	**0.09**	**0.18**	**0.46**	**1.17**	**0.15**	**0.05**	**0.00**	**0.05**	**0.08**	**0.08**	**0.46**	**0.67**	-	**0.18**	**0.20**	-	-	**0.20**	**0.10**	**0.06**
ANNUAL ON-SITE TOTAL (LBS)	**6,720.49**	**985.42**	**176.89**	**358.14**	**917.72**	**2,332.24**	**295.34**	**90.63**	**1.64**	**94.99**	**168.69**	**153.96**	**921.00**	**1,337.00**	-	**350.50**	**396.35**	-	-	**396.89**	**201.45**	**112.46**

* Speciated Organic Gasses and Hazardous Air Pollutant information is not available for aircraft engine startup
** Sub totals above for on-site and off-site assume that 5% of taxiing aircraft emissions occur within the project boundary and 95% occur outside of the project boundary
** For off-site sub totals, taxi emissions are included in the "departure below mixing height" and "arrival below mixing height". Therefore, 5% of taxi emissions are subtracted from the off-site sub total to reflect 95% of all taxi emissions occuring off-site.
* Blank cells reflect data not available

Benzaldehyde (IRIS)	N-heptane (IRIS)	Hexaldehyde	Methane	Ethane	Ethylene	Acetylene	Propane	1-propyne	Isobutane	2,2-dimethyl butane	Isopentane	Isoprene	2-methyl-2-propenal (methacrolein)	Methylglyoxal	2,3-dimethyl butane	1-Methylnaphthalene	1,2,4-trimethyl benzene (1,3,4-trimethyl benzene)	3-methylpentane	Methylcyclopentane	N-propylbenzene	N-butylbenzene	p-Tolualdehyde	N-butane	4-Phenyl-1-butene
0.000236	3.22E-05			0.000262	0.007779	0.001982	3.92E-05						0.000216	0.000756		0.000124	0.000176			2.67E-05		2.42E-05		
0.000132	1.80E-05			0.000147	0.004358	0.00111	2.20E-05						0.000121	0.000424		6.96E-05	9.87E-05			1.49E-05		1.35E-05		
0.000234	3.18E-05			0.000259	0.007682	0.001957	3.88E-05						0.000213	0.000747		0.000123	0.000174			2.63E-05		2.38E-05		
0.000116	1.57E-05			0.000128	0.003804	0.000969	1.92E-05						0.000106	0.00037		6.08E-05	8.61E-05			1.30E-05		1.18E-05		
4.09E-06	6.47E-06	5.95E-07	2.17E-05	6.12E-06	3.86E-05	2.36E-05		2.13E-06	3.04E-05	1.95E-06	9.79E-05	8.82E-07			8.69E-06		1.28E-05	1.37E-05	9.84E-06	2.74E-06	1.86E-06		0.000199	2.30E-06
1.36E-06	1.87E-07			1.50E-06	4.46E-05	1.14E-05	2.20E-07						1.23E-06	4.33E-06		7.17E-07	1.01E-06			1.54E-07		1.43E-07		
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.75	**0.11**	**0.00**	**0.04**	**0.83**	**24.44**	**6.25**	**0.12**	**0.00**	**0.06**	**0.00**	**0.20**	**0.00**	**0.68**	**2.37**	**0.02**	**0.39**	**0.58**	**0.03**	**0.02**	**0.09**	**0.00**	**0.08**	**0.40**	**0.00**
0.14	**0.02**	**0.00**	**0.01**	**0.15**	**4.46**	**1.14**	**0.02**	**0.00**	**0.01**	**0.00**	**0.04**	**0.00**	**0.12**	**0.43**	**0.00**	**0.07**	**0.11**	**0.00**	**0.00**	**0.02**	**0.00**	**0.01**	**0.07**	**0.00**
273.31	**41.53**	**0.43**	**15.86**	**304.12**	**8,920.69**	**2,282.77**	**44.85**	**1.55**	**22.21**	**1.42**	**71.47**	**0.64**	**246.74**	**864.46**	**6.34**	**142.07**	**210.63**	**9.97**	**7.19**	**32.49**	**1.36**	**27.61**	**145.15**	**1.68**

1.36E-06	1.87E-07	0.00E+00	0.00E+00	1.50E-06	4.46E-05	1.14E-05	2.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E-06	4.33E-06	0.00E+00	7.17E-07	1.01E-06	0.00E+00	0.00E+00	1.54E-07	0.00E+00	1.43E-07	0.00E+00	0.00E+00
4.09E-06	6.47E-06	5.95E-07	2.17E-05	6.12E-06	3.86E-05	2.36E-05	0.00E+00	2.13E-06	3.04E-05	1.95E-06	9.79E-05	8.82E-07	0.00E+00	0.00E+00	8.69E-06	0.00E+00	1.28E-05	1.37E-05	9.84E-06	2.74E-06	1.86E-06	0.00E+00	1.99E-04	2.30E-06
1.17E-05	1.59E-06	0.00E+00	0.00E+00	1.29E-05	3.84E-04	9.79E-05	1.94E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.07E-05	3.73E-05	0.00E+00	6.14E-06	8.69E-06	0.00E+00	0.00E+00	1.32E-06	0.00E+00	1.19E-06	0.00E+00	0.00E+00
5.78E-06	7.87E-07	0	0	6.41E-06	0.00019	4.85E-05	9.6E-07	0	0	0	0	0	5.28E-06	1.85E-05	0	3.04E-06	4.31E-06	0	0	6.52E-07	0	5.9E-07	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.05	**0.02**	**0.00**	**0.04**	**0.05**	**1.31**	**0.36**	**0.01**	**0.00**	**0.06**	**0.00**	**0.20**	**0.00**	**0.03**	**0.12**	**0.02**	**0.02**	**0.05**	**0.03**	**0.02**	**0.01**	**0.00**	**0.00**	**0.40**	**0.00**
0.01	**0.00**	**0.00**	**0.01**	**0.01**	**0.24**	**0.07**	**0.00**	**0.00**	**0.01**	**0.00**	**0.04**	**0.00**	**0.01**	**0.02**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.07**	**0.00**
16.72	**6.60**	**0.43**	**15.86**	**19.69**	**479.96**	**132.32**	**2.28**	**1.55**	**22.21**	**1.42**	**71.47**	**0.64**	**12.53**	**43.92**	**6.34**	**7.22**	**19.56**	**9.97**	**7.19**	**3.55**	**1.36**	**1.41**	**145.15**	**1.68**

0.000236	3.22E-05	0	0	0.000262	0.007779	0.001982	3.92E-05	0	0	0	0	0	0.000216	0.000756	0	0.000124	0.000176	0	0	2.67E-05	0	2.42E-05	0	0
0.000132	1.8E-05	0	0	0.000147	0.004358	0.00111	2.2E-05	0	0	0	0	0	0.000121	0.000424	0	6.96E-05	9.87E-05	0	0	1.49E-05	0	1.35E-05	0	0
1.17E-05	1.59E-06	0	0	1.29E-05	0.000384	9.79E-05	1.94E-06	0	0	0	0	0	1.07E-05	3.73E-05	0	6.14E-06	8.69E-06	0	0	1.32E-06	0	1.19E-06	0	0
5.78E-06	7.87E-07	0	0	6.41E-06	0.00019	4.85E-05	9.6E-07	0	0	0	0	0	5.28E-06	1.85E-05	0	3.04E-06	4.31E-06	0	0	6.52E-07	0	5.9E-07	0	0
0.00	**0.00**	-	-	**0.00**	**0.01**	**0.00**	**0.00**	-	-	-	-	-	**0.00**	**0.00**	-	**0.00**	**0.00**	-	-	**0.00**	-	**0.00**	-	-
0.70	**0.10**	-	-	**0.78**	**23.13**	**5.89**	**0.12**	-	-	-	-	-	**0.64**	**2.25**	-	**0.37**	**0.52**	-	-	**0.08**	-	**0.07**	-	-
0.13	**0.02**	-	-	**0.14**	**4.22**	**1.08**	**0.02**	-	-	-	-	-	**0.12**	**0.41**	-	**0.07**	**0.10**	-	-	**0.01**	-	**0.01**	-	-
256.59	**34.93**	-	-	**284.44**	**8,440.73**	**2,150.45**	**42.58**	-	-	-	-	-	**234.21**	**820.54**	-	**134.85**	**191.08**	-	-	**28.93**	-	**26.20**	-	-

3-methyl-1-butene	2-methyl-1-butene	1-butene	Glyoxal	2,4,4-trimethyl-1-pentene	2-methylpentane	2,4-dimethylpentane	1,3,5-trimethylbenzene	Methylcyclohexane	N-pentane	1-pentene	2-methyl-1-pentene	4-methyl-1-pentene	Valeraldehyde	Cyclohexene	N-octane	1-octene	N-nonane	N-dodecane	Propylene	Butyraldehyde	1-nonene	N-decane	1,2-diethylbenzene (ortho)	(1-Methylpropyl)benzene
0.000883	5.64E-05	7.04E-05	0.000914		0.000205		2.72E-05		9.96E-05	1.71E-05	3.47E-05	0.00039	0.000123		3.12E-05	0.000139	3.12E-05	0.000232	0.002281	5.99E-05	0.000124	0.000161		
0.000494	3.16E-05	3.95E-05	0.000512		0.000115		1.52E-05		5.58E-05	9.58E-06	1.94E-05	0.000219	6.91E-05		1.75E-05	7.78E-05	1.75E-05	0.00013	0.001278	3.35E-05	6.93E-05	9.02E-05		
0.000871	5.56E-05	6.96E-05	0.000902		0.000203		2.68E-05		9.84E-05	1.69E-05	3.43E-05	0.000386	0.000122		3.08E-05	0.000137	3.08E-05	0.00023	0.002253	5.91E-05	0.000122	0.000159		
0.000432	2.76E-05	3.44E-05	0.000447		0.0001		1.33E-05		4.87E-05	8.37E-06	1.70E-05	0.000191	6.03E-05		1.53E-05	6.79E-05	1.53E-05	0.000114	0.001115	2.93E-05	6.05E-05	7.87E-05		
9.84E-06	1.25E-06			1.53E-05	2.49E-05	5.68E-06	1.07E-05	2.30E-06	4.31E-05			3.64E-06		1.40E-05	2.13E-06		9.70E-07		1.39E-05			9.70E-07	2.66E-06	4.41E-07
5.06E-06	3.20E-07	4.08E-07	5.24E-06		1.18E-06		1.54E-07		5.73E-07	9.92E-08	1.98E-07	2.24E-06	7.05E-07		1.76E-07	7.94E-07	1.76E-07	1.33E-06	1.31E-05	3.42E-07	7.05E-07	9.26E-07		
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
2.78	**0.18**	**0.22**	**2.86**	**0.03**	**0.69**	**0.01**	**0.11**	**0.00**	**0.40**	**0.05**	**0.11**	**1.23**	**0.39**	**0.03**	**0.10**	**0.43**	**0.10**	**0.73**	**7.17**	**0.19**	**0.39**	**0.51**	**0.01**	**0.00**
0.51	**0.03**	**0.04**	**0.52**	**0.01**	**0.13**	**0.00**	**0.02**	**0.00**	**0.07**	**0.01**	**0.02**	**0.22**	**0.07**	**0.01**	**0.02**	**0.08**	**0.02**	**0.13**	**1.31**	**0.03**	**0.07**	**0.09**	**0.00**	**0.00**
#######	**65.32**	**80.53**	**1,044.48**	**11.20**	**252.86**	**4.14**	**38.89**	**1.68**	**145.35**	**19.55**	**39.68**	**448.98**	**140.92**	**10.23**	**37.21**	**158.74**	**36.36**	**265.72**	**2,617.94**	**68.45**	**141.48**	**184.76**	**1.94**	**0.32**

5.06E-06	3.20E-07	4.08E-07	5.24E-06	0.00E+00	1.18E-06	0.00E+00	1.54E-07	0.00E+00	5.73E-07	9.92E-08	1.98E-07	2.24E-06	7.05E-07	0.00E+00	1.76E-07	7.94E-07	1.76E-07	1.33E-06	1.31E-05	3.42E-07	7.05E-07	9.26E-07	0.00E+00	0.00E+00
9.84E-06	1.25E-06	0.00E+00	0.00E+00	1.53E-05	2.49E-05	5.68E-06	1.07E-05	2.30E-06	4.31E-05	0.00E+00	0.00E+00	3.64E-06	0.00E+00	1.40E-05	2.13E-06	0.00E+00	9.70E-07	0.00E+00	1.39E-05	0.00E+00	0.00E+00	9.70E-07	2.66E-06	4.41E-07
4.36E-05	2.78E-06	3.48E-06	4.51E-05	0.00E+00	1.01E-05	0.00E+00	1.34E-06	0.00E+00	4.92E-06	8.44E-07	1.71E-06	1.93E-05	6.09E-06	0.00E+00	1.54E-06	6.86E-06	1.54E-06	1.15E-05	1.13E-04	2.96E-06	6.11E-06	7.95E-06	0.00E+00	0.00E+00
2.16E-05	1.38E-06	1.72E-06	2.23E-05	0	5.02E-06	0	6.64E-07	0	2.44E-06	4.18E-07	8.49E-07	9.55E-06	3.01E-06	0	7.63E-07	3.4E-06	7.63E-07	5.68E-06	5.58E-05	1.46E-06	3.03E-06	3.94E-06	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.16	**0.01**	**0.01**	**0.15**	**0.03**	**0.08**	**0.01**	**0.03**	**0.00**	**0.10**	**0.00**	**0.01**	**0.07**	**0.02**	**0.03**	**0.01**	**0.02**	**0.01**	**0.04**	**0.39**	**0.01**	**0.02**	**0.03**	**0.01**	**0.00**
0.03	**0.00**	**0.00**	**0.03**	**0.01**	**0.02**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.01**	**0.07**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**
58.44	**4.18**	**4.09**	**53.06**	**11.20**	**30.12**	**4.14**	**9.41**	**1.68**	**37.25**	**0.99**	**2.02**	**25.33**	**7.16**	**10.23**	**3.36**	**8.06**	**2.52**	**13.50**	**142.65**	**3.48**	**7.19**	**10.06**	**1.94**	**0.32**

0.000883	5.64E-05	7.04E-05	0.000914	0	0.000205	0	2.72E-05	0	9.96E-05	1.71E-05	3.47E-05	0.00039	0.000123	0	3.12E-05	0.000139	3.12E-05	0.000232	0.002281	5.99E-05	0.000124	0.000161	0	0
0.000494	3.16E-05	3.95E-05	0.000512	0	0.000115	0	1.52E-05	0	5.58E-05	9.58E-06	1.94E-05	0.000219	6.91E-05	0	1.75E-05	7.78E-05	1.75E-05	0.00013	0.001278	3.35E-05	6.93E-05	9.02E-05	0	0
4.36E-05	2.78E-06	3.48E-06	4.51E-05	0	1.01E-05	0	1.34E-06	0	4.92E-06	8.44E-07	1.71E-06	1.93E-05	6.09E-06	0	1.54E-06	6.86E-06	1.54E-06	1.15E-05	0.000113	2.96E-06	6.11E-06	7.95E-06	0	0
2.16E-05	1.38E-06	1.72E-06	2.23E-05	0	5.02E-06	0	6.64E-07	0	2.44E-06	4.18E-07	8.49E-07	9.55E-06	3.01E-06	0	7.63E-07	3.4E-06	7.63E-07	5.68E-06	5.58E-05	1.46E-06	3.03E-06	3.94E-06	0	0
0.00	**0.00**	**0.00**	**0.00**	**-**	**0.00**	**-**	**0.00**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**-**
2.62	**0.17**	**0.21**	**2.72**	**-**	**0.61**	**-**	**0.08**	**-**	**0.30**	**0.05**	**0.10**	**1.16**	**0.37**	**-**	**0.09**	**0.41**	**0.09**	**0.69**	**6.78**	**0.18**	**0.37**	**0.48**	**-**	**-**
0.48	**0.03**	**0.04**	**0.50**	**-**	**0.11**	**-**	**0.01**	**-**	**0.05**	**0.01**	**0.02**	**0.21**	**0.07**	**-**	**0.02**	**0.08**	**0.02**	**0.13**	**1.24**	**0.03**	**0.07**	**0.09**	**-**	**-**
957.58	**61.14**	**76.43**	**991.42**	**-**	**222.75**	**-**	**29.48**	**-**	**108.10**	**18.56**	**37.66**	**423.65**	**133.76**	**-**	**33.85**	**150.68**	**33.85**	**252.22**	**2,475.29**	**64.97**	**134.30**	**174.70**	**-**	**-**

1,3-diethylbenzene (meta)	Cyclopentene	Cyclopentane	1,2-propadiene	Indan	2-methyl-2-butene	1,2,3-trimethylbenzene	o-Tolualdehyde	N-Hexadecane	2,3,3-trimethylpentane	2,3,4-trimethylpentane	2,4-dimethylhexane	4-methylheptane	3-methylheptane	Cis-2-butene	Isovaleraldehyde	2-methylheptane	1-hexene	1-Methyl-2-ethylbenzene (o-ethyltoluene)	1-Methyl-3-ethylbenzene (m-ethyltoluene)	Tolualdehyde	1-Methyl-4-ethylbenzene (p-ethyltoluene)	Cis-1,4-dimethylcyclohexane	Trans-2-butene	2-methyl-2-pentene
					9.31E-05	5.33E-05	0.000116	2.47E-05						0.000106	1.61E-05		0.00037	3.27E-05	7.75E-05	0.00014	3.22E-05			
					5.21E-05	2.99E-05	6.48E-05	1.38E-05						5.92E-05	9.02E-06		0.000207	1.83E-05	4.34E-05	7.84E-05	1.80E-05			
					9.19E-05	5.27E-05	0.000114	2.44E-05						0.000104	1.59E-05		0.000366	3.23E-05	7.65E-05	0.000138	3.18E-05			
					4.55E-05	2.61E-05	5.66E-05	1.21E-05						5.17E-05	7.87E-06		0.000181	1.60E-05	3.79E-05	6.84E-05	1.57E-05			
2.04E-06	2.57E-06	4.25E-06	9.70E-07	2.83E-06	9.70E-07	2.30E-06			3.73E-06	2.30E-06	3.73E-06	2.22E-06	3.11E-06	5.94E-06		2.30E-06	2.48E-06		1.42E-06			7.05E-07	7.89E-06	3.02E-06
					5.29E-07	3.09E-07	6.61E-07	1.43E-07						6.06E-07	8.82E-08		2.13E-06	1.87E-07	4.41E-07	8.05E-07	1.87E-07			
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.01**	**0.01**	**0.00**	**0.01**	**0.29**	**0.17**	**0.36**	**0.08**	**0.01**	**0.00**	**0.01**	**0.00**	**0.01**	**0.34**	**0.05**	**0.00**	**1.16**	**0.10**	**0.25**	**0.44**	**0.10**	**0.00**	**0.02**	**0.01**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.05**	**0.03**	**0.07**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.06**	**0.01**	**0.00**	**0.21**	**0.02**	**0.04**	**0.08**	**0.02**	**0.00**	**0.00**	**0.00**
1.49	**1.87**	**3.11**	**0.71**	**2.07**	**107.10**	**62.64**	**132.28**	**28.19**	**2.72**	**1.68**	**2.72**	**1.62**	**2.27**	**125.12**	**18.40**	**1.68**	**425.13**	**37.39**	**89.61**	**159.89**	**36.81**	**0.51**	**5.76**	**2.20**

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.29E-07	3.09E-07	6.61E-07	1.43E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.06E-07	8.82E-08	0.00E+00	2.13E-06	1.87E-07	4.41E-07	8.05E-07	1.87E-07	0.00E+00	0.00E+00	0.00E+00
2.04E-06	2.57E-06	4.25E-06	9.70E-07	2.83E-06	9.70E-07	2.30E-06	0.00E+00	0.00E+00	3.73E-06	2.30E-06	3.73E-06	2.22E-06	3.11E-06	5.94E-06	0.00E+00	2.30E-06	2.48E-06	0.00E+00	1.42E-06	0.00E+00	0.00E+00	7.05E-07	7.89E-06	3.02E-06
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.60E-06	2.63E-06	5.71E-06	1.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.22E-06	7.95E-07	0.00E+00	1.83E-05	1.61E-06	3.83E-06	6.91E-06	1.59E-06	0.00E+00	0.00E+00	0.00E+00
0	0	0	0	0	2.28E-06	1.3E-06	2.83E-06	6.03E-07	0	0	0	0	0	2.58E-06	3.94E-07	0	9.05E-06	8E-07	1.89E-06	3.42E-06	7.87E-07	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.01**	**0.01**	**0.00**	**0.01**	**0.02**	**0.01**	**0.02**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.01**	**0.03**	**0.00**	**0.00**	**0.06**	**0.01**	**0.02**	**0.02**	**0.01**	**0.00**	**0.02**	**0.01**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
1.49	**1.87**	**3.11**	**0.71**	**2.07**	**6.11**	**4.78**	**6.72**	**1.43**	**2.72**	**1.68**	**2.72**	**1.62**	**2.27**	**10.47**	**0.93**	**1.68**	**23.32**	**1.90**	**5.54**	**8.13**	**1.87**	**0.51**	**5.76**	**2.20**

0	0	0	0	0	9.31E-05	5.33E-05	0.000116	2.47E-05	0	0	0	0	0	0.000106	1.61E-05	0	0.00037	3.27E-05	7.75E-05	0.00014	3.22E-05	0	0	0
0	0	0	0	0	5.21E-05	2.99E-05	6.48E-05	1.38E-05	0	0	0	0	0	5.92E-05	9.02E-06	0	0.000207	1.83E-05	4.34E-05	7.84E-05	1.8E-05	0	0	0
0	0	0	0	0	4.6E-06	2.63E-06	5.71E-06	1.22E-06	0	0	0	0	0	5.22E-06	7.95E-07	0	1.83E-05	1.61E-06	3.83E-06	6.91E-06	1.59E-06	0	0	0
0	0	0	0	0	2.28E-06	1.3E-06	2.83E-06	6.03E-07	0	0	0	0	0	2.58E-06	3.94E-07	0	9.05E-06	8E-07	1.89E-06	3.42E-06	7.87E-07	0	0	0
-	-	-	-	-	**0.00**	**0.00**	**0.00**	**0.00**	-	-	-	-	-	**0.00**	**0.00**	-	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	-	-	-
-	-	-	-	-	**0.28**	**0.16**	**0.34**	**0.07**	-	-	-	-	-	**0.31**	**0.05**	-	**1.10**	**0.10**	**0.23**	**0.42**	**0.10**	-	-	-
-	-	-	-	-	**0.05**	**0.03**	**0.06**	**0.01**	-	-	-	-	-	**0.06**	**0.01**	-	**0.20**	**0.02**	**0.04**	**0.08**	**0.02**	-	-	-
-	-	-	-	-	**100.99**	**57.86**	**125.56**	**26.75**	-	-	-	-	-	**114.65**	**17.47**	-	**401.81**	**35.49**	**84.07**	**151.77**	**34.93**	-	-	-

Cis-2-pentene	N-tridecane	N-Tetradecane	N-Pentadecane	N-heptadecane	Trans-2-pentene	1-Methylcyclopentene	1-undecene	1-decene	2,3,5-trimethylhexane	1-Methyl-3-propylbenzene	N-undecane	2,6-dimethyloctane	2,4-dimethylheptane	2,5-dimethylheptane	3-methyloctane	4-methyloctane	2-methyloctane	2,2,5-trimethylhexane	Trans-2-hexene	Crotonaldehyde	T-2-Nonene	2-methyldecane	2,3-dimethyloctane	Cis-2-hexene
0.000139	0.000269	0.000209	8.70E-05	4.53E-06	0.000181			9.31E-05			0.000223								1.51E-05	0.00052				
7.78E-05	0.000151	0.000117	4.88E-05	2.54E-06	0.000101			5.21E-05			0.000125								8.45E-06	0.000291				
0.000137	0.000266	0.000207	8.60E-05	4.48E-06	0.000178			9.19E-05			0.000221								1.49E-05	0.000513				
6.79E-05	0.000132	0.000102	4.26E-05	2.22E-06	8.83E-05			4.55E-05			0.000109								7.39E-06	0.000254				
8.60E-06					7.28E-06	2.65E-07	1.25E-06		7.05E-07	1.42E-06	1.25E-06	6.17E-07	7.05E-07	1.16E-06	2.74E-06	3.46E-06	3.53E-07	2.13E-06		7.50E-06	1.51E-06	5.59E-06	4.61E-06	9.70E-07
7.94E-07	1.54E-06	1.20E-06	4.96E-07	2.20E-08	1.04E-06			5.29E-07			1.28E-06								8.82E-08	2.98E-06				
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.45	**0.84**	**0.66**	**0.27**	**0.01**	**0.58**	**0.00**	**0.00**	**0.29**	**0.00**	**0.00**	**0.70**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**	**0.00**	**0.05**	**1.64**	**0.00**	**0.01**	**0.01**	**0.00**
0.08	**0.15**	**0.12**	**0.05**	**0.00**	**0.11**	**0.00**	**0.00**	**0.05**	**0.00**	**0.00**	**0.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.30**	**0.00**	**0.00**	**0.00**	**0.00**
165.02	**307.71**	**239.27**	**99.50**	**5.17**	**211.79**	**0.19**	**0.91**	**106.40**	**0.51**	**1.04**	**256.28**	**0.45**	**0.51**	**0.84**	**2.00**	**2.53**	**0.26**	**1.55**	**17.25**	**599.60**	**1.10**	**4.08**	**3.36**	**0.71**

7.94E-07	1.54E-06	1.20E-06	4.96E-07	2.20E-08	1.04E-06	0.00E+00	0.00E+00	5.29E-07	0.00E+00	0.00E+00	1.28E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.82E-08	2.98E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
8.60E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E-06	2.65E-07	1.25E-06	0.00E+00	7.05E-07	1.42E-06	1.25E-06	6.17E-07	7.05E-07	1.16E-06	2.74E-06	3.46E-06	3.53E-07	2.13E-06	0.00E+00	7.50E-06	1.51E-06	5.59E-06	4.61E-06	9.70E-07
6.86E-06	1.33E-05	1.03E-05	4.30E-06	2.24E-07	8.92E-06	0.00E+00	0.00E+00	4.60E-06	0.00E+00	0.00E+00	1.10E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.45E-07	2.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
3.4E-06	6.58E-06	5.12E-06	2.13E-06	1.11E-07	4.42E-06	0	0	2.28E-06	0	0	5.46E-06	0	0	0	0	0	0	0	3.69E-07	1.27E-05	0	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.04	**0.04**	**0.03**	**0.01**	**0.00**	**0.04**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.04**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.10**	**0.00**	**0.01**	**0.01**	**0.00**
0.01	**0.01**	**0.01**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**
14.34	**15.63**	**12.16**	**5.05**	**0.26**	**15.80**	**0.19**	**0.91**	**5.40**	**0.51**	**1.04**	**13.88**	**0.45**	**0.51**	**0.84**	**2.00**	**2.53**	**0.26**	**1.55**	**0.88**	**35.65**	**1.10**	**4.08**	**3.36**	**0.71**

0.000139	0.000269	0.000209	8.7E-05	4.53E-06	0.000181	0	0	9.31E-05	0	0	0.000223	0	0	0	0	0	0	0	1.51E-05	0.00052	0	0	0	0
7.78E-05	0.000151	0.000117	4.88E-05	2.54E-06	0.000101	0	0	5.21E-05	0	0	0.000125	0	0	0	0	0	0	0	8.45E-06	0.000291	0	0	0	0
6.86E-06	1.33E-05	1.03E-05	4.3E-06	2.24E-07	8.92E-06	0	0	4.6E-06	0	0	1.1E-05	0	0	0	0	0	0	0	7.45E-07	2.57E-05	0	0	0	0
3.4E-06	6.58E-06	5.12E-06	2.13E-06	1.11E-07	4.42E-06	0	0	2.28E-06	0	0	5.46E-06	0	0	0	0	0	0	0	3.69E-07	1.27E-05	0	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**-**	**0.00**	**-**	**-**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.00**	**0.00**	**-**	**-**	**-**	**-**
0.41	**0.80**	**0.62**	**0.26**	**0.01**	**0.54**	**-**	**-**	**0.28**	**-**	**-**	**0.66**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.04**	**1.55**	**-**	**-**	**-**	**-**
0.08	**0.15**	**0.11**	**0.05**	**0.00**	**0.10**	**-**	**-**	**0.05**	**-**	**-**	**0.12**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.01**	**0.28**	**-**	**-**	**-**	**-**
150.68	**292.08**	**227.11**	**94.45**	**4.91**	**195.99**	**-**	**-**	**100.99**	**-**	**-**	**242.40**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**16.37**	**563.95**	**-**	**-**	**-**	**-**

Heptene	Dimethyl napthalene	C-1 Compounds	C-10 Compounds	C-10 Olefins	C-10 Paraffins	C-11 Compounds	C-12 Compounds	C-13 Compounds	C-14 Alkane	C-14 Compounds	C-15 Alkane	C-15 Compounds	C-16 Alkane	C-16 Compounds	C-17 Compounds	C-18 Alkane	C-18 Compounds	C-19 Compounds	C-2 Compounds	C-20 Compounds	C-21 Compounds	C-22 Compounds	C-23 Compounds	C-24 Compounds
0.00022	4.53E-05			0.00294	0.007349				9.36E-05		8.91E-05		7.35E-05			1.00E-06								
0.000123	2.54E-05			0.001647	0.004117				5.24E-05		4.99E-05		4.11E-05			5.62E-07								
0.000218	4.47E-05			0.002903	0.007257				9.24E-05		8.79E-05		7.25E-05			9.92E-07								
0.000108	2.21E-05			0.001438	0.003593				4.58E-05		4.35E-05		3.59E-05			4.96E-07								
		4.31E-05	2.61E-05			2.66E-05	1.63E-05	2.55E-05		3.30E-05		3.23E-05		2.59E-05	2.27E-05		1.51E-05	1.16E-05	0.000148	6.76E-06	5.57E-06	4.38E-06	3.56E-06	3.56E-06
1.27E-06	2.65E-07			1.69E-05	4.22E-05				5.40E-07		5.07E-07		4.19E-07			1.10E-08								
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.69	**0.14**	**0.09**	**0.05**	**9.21**	**23.02**	**0.05**	**0.03**	**0.05**	**0.29**	**0.07**	**0.28**	**0.06**	**0.23**	**0.05**	**0.05**	**0.00**	**0.03**	**0.02**	**0.30**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
0.13	**0.03**	**0.02**	**0.01**	**1.68**	**4.20**	**0.01**	**0.01**	**0.01**	**0.05**	**0.01**	**0.05**	**0.01**	**0.04**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**	**0.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
251.92	**51.77**	**31.44**	**19.08**	**3,360.66**	**8,400.77**	**19.41**	**11.93**	**18.60**	**106.98**	**24.12**	**101.80**	**23.59**	**83.97**	**18.92**	**16.59**	**1.15**	**11.06**	**8.46**	**108.21**	**4.93**	**4.06**	**3.19**	**2.60**	**2.60**

1.27E-06	2.65E-07	0.00E+00	0.00E+00	1.69E-05	4.22E-05	0.00E+00	0.00E+00	0.00E+00	5.40E-07	0.00E+00	5.07E-07	0.00E+00	4.19E-07	0.00E+00	0.00E+00	1.10E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	4.31E-05	2.61E-05	0.00E+00	0.00E+00	2.66E-05	1.63E-05	2.55E-05	0.00E+00	3.30E-05	0.00E+00	3.23E-05	0.00E+00	2.59E-05	2.27E-05	0.00E+00	1.51E-05	1.16E-05	1.48E-04	6.76E-06	5.57E-06	4.38E-06	3.56E-06	3.56E-06
1.09E-05	2.24E-06	0.00E+00	0.00E+00	1.45E-04	3.63E-04	0.00E+00	0.00E+00	0.00E+00	4.62E-06	0.00E+00	4.40E-06	0.00E+00	3.63E-06	0.00E+00	0.00E+00	4.96E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
5.39E-06	1.11E-06	0	0	7.19E-05	0.00018	0	0	0	2.29E-06	0	2.18E-06	0	1.8E-06	0	0	2.48E-08	0	0	0	0	0	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.04	**0.01**	**0.09**	**0.05**	**0.47**	**1.17**	**0.05**	**0.03**	**0.05**	**0.01**	**0.07**	**0.01**	**0.06**	**0.01**	**0.05**	**0.05**	**0.00**	**0.03**	**0.02**	**0.30**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**
0.01	**0.00**	**0.02**	**0.01**	**0.09**	**0.21**	**0.01**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**	**0.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
12.80	**2.63**	**31.44**	**19.08**	**170.74**	**426.81**	**19.41**	**11.93**	**18.60**	**5.44**	**24.12**	**5.17**	**23.59**	**4.26**	**18.92**	**16.59**	**0.06**	**11.06**	**8.46**	**108.21**	**4.93**	**4.06**	**3.19**	**2.60**	**2.60**

0.00022	4.53E-05	0	0	0.00294	0.007349	0	0	0	9.36E-05	0	8.91E-05	0	7.35E-05	0	0	1E-06	0	0	0	0	0	0	0	0
0.000123	2.54E-05	0	0	0.001647	0.004117	0	0	0	5.24E-05	0	4.99E-05	0	4.11E-05	0	0	5.62E-07	0	0	0	0	0	0	0	0
1.09E-05	2.24E-06	0	0	0.000145	0.000363	0	0	0	4.62E-06	0	4.4E-06	0	3.63E-06	0	0	4.96E-08	0	0	0	0	0	0	0	0
5.39E-06	1.11E-06	0	0	7.19E-05	0.00018	0	0	0	2.29E-06	0	2.18E-06	0	1.8E-06	0	0	2.48E-08	0	0	0	0	0	0	0	0
0.00	**0.00**	**-**	**-**	**0.00**	**0.01**	**-**	**-**	**-**	**0.00**	**-**	**0.00**	**-**	**0.00**	**-**	**-**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
0.66	**0.13**	**-**	**-**	**8.74**	**21.85**	**-**	**-**	**-**	**0.28**	**-**	**0.26**	**-**	**0.22**	**-**	**-**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
0.12	**0.02**	**-**	**-**	**1.59**	**3.99**	**-**	**-**	**-**	**0.05**	**-**	**0.05**	**-**	**0.04**	**-**	**-**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
239.12	**49.13**	**-**	**-**	**3,189.91**	**7,973.96**	**-**	**-**	**-**	**101.55**	**-**	**96.63**	**-**	**79.70**	**-**	**-**	**1.09**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

C-25 Compounds	C-26 Compounds	C-27 Compounds	C-28 Compounds	C-29 Compounds	C-3 Compounds	C-30 Compounds	C-31 Compounds	C-32 Compounds	C-33 Compounds	C-34 Compounds	C-35 Compounds	C-36 Compounds	C-37 Compounds	C-38 Compounds	C-39 Compounds	C-4 Compounds	C-40 Compounds	C-41 Compounds	C-42 Compounds	C-43 compounds	C-5 Compounds	C-6 Compounds	C-7 Compounds	C-8 Compounds
4.01E-06	3.26E-06	1.63E-06	2.38E-06	1.04E-06	3.87E-05	2.38E-06	2.15E-06	2.01E-06	1.63E-06	1.79E-06	1.19E-06	1.49E-06	5.95E-07	3.75E-07	8.16E-07	3.03E-05	1.43E-07	3.75E-07	1.43E-07	7.72E-08	1.75E-05	3.19E-05	2.15E-05	8.39E-06
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.01**	**0.00**	**0.00**	**0.00**	**0.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.06**	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	**0.06**	**0.04**	**0.02**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.00**
2.93	**2.38**	**1.19**	**1.74**	**0.76**	**28.24**	**1.74**	**1.57**	**1.46**	**1.19**	**1.30**	**0.87**	**1.09**	**0.43**	**0.27**	**0.60**	**22.12**	**0.10**	**0.27**	**0.10**	**0.06**	**12.79**	**23.31**	**15.67**	**6.12**

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4.01E-06	3.26E-06	1.63E-06	2.38E-06	1.04E-06	3.87E-05	2.38E-06	2.15E-06	2.01E-06	1.63E-06	1.79E-06	1.19E-06	1.49E-06	5.95E-07	3.75E-07	8.16E-07	3.03E-05	1.43E-07	3.75E-07	1.43E-07	7.72E-08	1.75E-05	3.19E-05	2.15E-05	8.39E-06
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.01**	**0.00**	**0.00**	**0.00**	**0.08**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.06**	**0.00**	**0.00**	**0.00**	**0.00**	**0.04**	**0.06**	**0.04**	**0.02**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.00**
2.93	**2.38**	**1.19**	**1.74**	**0.76**	**28.24**	**1.74**	**1.57**	**1.46**	**1.19**	**1.30**	**0.87**	**1.09**	**0.43**	**0.27**	**0.60**	**22.12**	**0.10**	**0.27**	**0.10**	**0.06**	**12.79**	**23.31**	**15.67**	**6.12**

0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

C-9 Compounds	Cyclopentylcyclopentane	Hexyne	Methylcyclooctane	Pentyne	T-1-Phenylbutene	Decanol	Dodecanol
						0.00294	0.00147
						0.001647	0.000823
						0.002903	0.001451
						0.001438	0.000719
5.57E-06	4.08E-06	1.76E-07	2.92E-06	1.69E-06	2.04E-06		
						1.69E-05	8.43E-06
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**9.21**	**4.60**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.68**	**0.84**
4.06	**2.98**	**0.13**	**2.13**	**1.23**	**1.49**	**3,360.66**	**1,680.04**

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.69E-05	8.43E-06
5.57E-06	4.08E-06	1.76E-07	2.92E-06	1.69E-06	2.04E-06	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-04	7.26E-05
0	0	0	0	0	0	7.19E-05	3.59E-05
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.47**	**0.23**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.09**	**0.04**
4.06	**2.98**	**0.13**	**2.13**	**1.23**	**1.49**	**170.74**	**85.36**

0	0	0	0	0	0	0.00294	0.00147
0	0	0	0	0	0	0.001647	0.000823
0	0	0	0	0	0	0.000145	7.26E-05
0	0	0	0	0	0	7.19E-05	3.59E-05
-	**-**	**-**	**-**	**-**	**-**	**0.00**	**0.00**
-	**-**	**-**	**-**	**-**	**-**	**8.74**	**4.37**
-	**-**	**-**	**-**	**-**	**-**	**1.59**	**0.80**
-	**-**	**-**	**-**	**-**	**-**	**3,189.91**	**1,594.68**

ATTACHMENT B - March Air Reserve Base - D1 Project - General Aviation Fleet Scenario - Speciated Organic Gases and Hazardous Air Pollutants - April 2022

Combined on and off-site

Mode	Formaldehyde (IRIS, CAA)	Methyl alcohol (IRIS, CAA)	Benzene (IRIS, CAA)	C-5 Benzene + C-4 Aroald	C-4 Benzene + C-3 Aroald	Acetaldehyde (IRIS, CAA)	Naphthalene (IRIS, CAA)	O-xylene (IRIS, CAA)	Isopropyl benzene (cumene) (IRIS, CAA)	Ethylbenzene (IRIS, CAA)	Styrene (IRIS, CAA)
Departure Below Mixing Height	0.00088905	0.00013	0.000121	2.34E-05	4.74E-05	0.000309	3.91E-05	1.20E-05	2.20E-07	1.26E-05	2.23E-05
Arrival Below Mixing Height	0.00060079	8.81E-05	8.20E-05	1.58E-05	3.20E-05	0.000209	2.64E-05	8.10E-06	1.43E-07	8.49E-06	1.51E-05
DepartureTaxi	0.00083326	0.000122	0.000114	2.19E-05	4.44E-05	0.000289	3.66E-05	1.12E-05	1.98E-07	1.18E-05	2.09E-05
ArrivalTaxi	0.00041468	6.08E-05	5.66E-05	1.09E-05	2.21E-05	0.000144	1.82E-05	5.59E-06	9.92E-08	5.86E-06	1.04E-05
Ground Service Equipment	2.58E-05		2.42E-05			8.74E-06		1.26E-05		9.25E-06	
Aircraft Auxiliary Power Units	2.73E-05	4.00E-06	3.73E-06	7.17E-07	1.46E-06	9.48E-06	1.20E-06	3.64E-07	1.10E-08	3.86E-07	6.83E-07
DAILY TOTAL (ST)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
DAILY TOTAL (LBS)	**3.09**	**0.44**	**0.46**	**0.08**	**0.16**	**1.07**	**0.13**	**0.07**	**0.00**	**0.06**	**0.08**
ANNUAL TOTAL (ST)	**0.56**	**0.08**	**0.08**	**0.01**	**0.03**	**0.20**	**0.02**	**0.01**	**0.00**	**0.01**	**0.01**
ANNUAL TOTAL (LBS)	**1,126.39**	**162.39**	**168.88**	**29.15**	**59.02**	**390.73**	**48.68**	**24.11**	**0.27**	**22.40**	**27.80**

Mode	M & P-xylene (IRIS, CAA)	1,3-butadiene (IRIS, CAA)	Acrolein (IRIS, CAA)	M-xylene (IRIS, CAA)	Toluene (IRIS, CAA)	Phenol (carbolic acid) (IRIS, CAA)	N-hexane (IRIS, CAA)	2,2,4-trimethyl pentane (IRIS, CAA)	Propionaldehyde (CAA)	Acetone (IRIS)	2-methylnaphthalene (IRIS)
Departure Below Mixing Height	2.04E-05	0.000122	0.000177		4.64E-05	5.24E-05			5.25E-05	2.67E-05	1.49E-05
Arrival Below Mixing Height	1.38E-05	8.23E-05	0.00012		3.13E-05	3.54E-05			3.55E-05	1.80E-05	1.01E-05
DepartureTaxi	1.91E-05	0.000114	0.000166		4.35E-05	4.91E-05			4.92E-05	2.50E-05	1.39E-05
ArrivalTaxi	9.50E-06	5.68E-05	8.25E-05		2.16E-05	2.45E-05			2.45E-05	1.24E-05	6.94E-06
Ground Service Equipment				2.57E-05	4.11E-05		2.11E-05	2.07E-05	5.31E-06		
Aircraft Auxiliary Power Units	6.28E-07	3.75E-06	5.43E-06		1.42E-06	1.61E-06			1.61E-06	8.16E-07	4.52E-07
DAILY TOTAL (ST)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
DAILY TOTAL (LBS)	**0.07**	**0.42**	**0.60**	**0.05**	**0.24**	**0.18**	**0.04**	**0.04**	**0.19**	**0.09**	**0.05**
ANNUAL TOTAL (ST)	**0.01**	**0.08**	**0.11**	**0.01**	**0.04**	**0.03**	**0.01**	**0.01**	**0.03**	**0.02**	**0.01**
ANNUAL TOTAL (LBS)	**25.38**	**151.78**	**220.33**	**18.75**	**87.80**	**65.32**	**15.42**	**15.12**	**69.28**	**33.20**	**18.53**

On-Site

Mode	Formaldehyde (IRIS, CAA)	Methyl alcohol (IRIS, CAA)	Benzene (IRIS, CAA)	C-5 Benzene + C-4 Aroald	C-4 Benzene + C-3 Aroald	Acetaldehyde (IRIS, CAA)	Naphthalene (IRIS, CAA)	O-xylene (IRIS, CAA)	Isopropyl benzene (cumene) (IRIS, CAA)	Ethylbenzene (IRIS, CAA)	Styrene (IRIS, CAA)
Aircraft Auxiliary Power Units	2.73E-05	4.00E-06	3.73E-06	7.17E-07	1.46E-06	9.48E-06	1.20E-06	3.64E-07	1.10E-08	3.86E-07	6.83E-07
Ground Service Equipment	2.58E-05	0.00E+00	2.42E-05	0.00E+00	0.00E+00	8.74E-06	0.00E+00	1.26E-05	0.00E+00	9.25E-06	0.00E+00
Taxi out - 5% Assigned **	4.17E-05	6.11E-06	5.69E-06	1.10E-06	2.22E-06	1.45E-05	1.83E-06	5.62E-07	9.92E-09	5.89E-07	1.05E-06
Taxi in - 5% Assigned **	2.0734E-05	3.04E-06	2.83E-06	5.46E-07	1.11E-06	7.2E-06	9.11E-07	2.79E-07	4.96E-09	2.93E-07	5.2E-07
DAILY ON-SITE TOTAL (ST)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
DAILY ON-SITE TOTAL (LBS)	**0.23**	**0.03**	**0.07**	**0.00**	**0.01**	**0.08**	**0.01**	**0.03**	**0.00**	**0.02**	**0.00**
ANNUAL ON-SITE TOTAL (ST)	**0.04**	**0.00**	**0.01**	**0.00**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**
ANNUAL ON-SITE TOTAL (LBS)	**84.36**	**9.60**	**26.58**	**1.72**	**3.49**	**29.11**	**2.88**	**10.05**	**0.02**	**7.68**	**1.64**

Mode	M & P-xylene (IRIS, CAA)	1,3-butadiene (IRIS, CAA)	Acrolein (IRIS, CAA)	M-xylene (IRIS, CAA)	Toluene (IRIS, CAA)	Phenol (carbolic acid) (IRIS, CAA)	N-hexane (IRIS, CAA)	2,2,4-trimethyl pentane (IRIS, CAA)	Propionaldehyde (CAA)	Acetone (IRIS)	2-methylnaphthalene (IRIS)
Aircraft Auxiliary Power Units	6.28E-07	3.75E-06	5.43E-06	0.00E+00	1.42E-06	1.61E-06	0.00E+00	0.00E+00	1.61E-06	8.16E-07	4.52E-07
Ground Service Equipment	0.00E+00	0.00E+00	0.00E+00	2.57E-05	4.11E-05	0.00E+00	2.11E-05	2.07E-05	5.31E-06	0.00E+00	0.00E+00
Taxi out - 5% Assigned **	9.55E-07	5.71E-06	8.29E-06	0.00E+00	2.17E-06	2.46E-06	0.00E+00	0.00E+00	2.46E-06	1.25E-06	6.97E-07
Taxi in - 5% Assigned **	4.75E-07	2.84E-06	4.12E-06	0	1.08E-06	1.22E-06	0	0	1.22E-06	6.22E-07	3.47E-07
DAILY ON-SITE TOTAL (ST)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
DAILY ON-SITE TOTAL (LBS)	**0.00**	**0.02**	**0.04**	**0.05**	**0.09**	**0.01**	**0.04**	**0.04**	**0.02**	**0.01**	**0.00**
ANNUAL ON-SITE TOTAL (ST)	**0.00**	**0.00**	**0.01**	**0.01**	**0.02**	**0.00**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**
ANNUAL ON-SITE TOTAL (LBS)	**1.50**	**8.98**	**13.03**	**18.75**	**33.45**	**3.86**	**15.42**	**15.12**	**7.74**	**1.96**	**1.09**

Off-Site

Mode	Formaldehyde (IRIS, CAA)	Methyl alcohol (IRIS, CAA)	Benzene (IRIS, CAA)	C-5 Benzene + C-4 Aroald	C-4 Benzene + C-3 Aroald	Acetaldehyde (IRIS, CAA)	Naphthalene (IRIS, CAA)	O-xylene (IRIS, CAA)	Isopropyl benzene (cumene) (IRIS, CAA)	Ethylbenzene (IRIS, CAA)	Styrene (IRIS, CAA)
Departure Below Mixing Height	0.00088905	0.00013	0.000121	2.34E-05	4.74E-05	0.000309	3.91E-05	1.2E-05	2.2E-07	1.26E-05	2.23E-05
Arrival Below Mixing Height	0.00060079	8.81E-05	8.2E-05	1.58E-05	3.2E-05	0.000209	2.64E-05	8.1E-06	1.43E-07	8.49E-06	1.51E-05
Taxi out - 5% subtracted out **	4.1663E-05	6.11E-06	5.69E-06	1.1E-06	2.22E-06	1.45E-05	1.83E-06	5.62E-07	9.92E-09	5.89E-07	1.05E-06
Taxi in - 5% subtracted out **	2.0734E-05	3.04E-06	2.83E-06	5.46E-07	1.11E-06	7.2E-06	9.11E-07	2.79E-07	4.96E-09	2.93E-07	5.2E-07
DAILY ON-SITE TOTAL (ST)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
DAILY ON-SITE TOTAL (LBS)	**2.85**	**0.42**	**0.39**	**0.08**	**0.15**	**0.99**	**0.13**	**0.04**	**0.00**	**0.04**	**0.07**
ANNUAL ON-SITE TOTAL (ST)	**0.52**	**0.08**	**0.07**	**0.01**	**0.03**	**0.18**	**0.02**	**0.01**	**0.00**	**0.01**	**0.01**
ANNUAL ON-SITE TOTAL (LBS)	**1,042.03**	**152.79**	**142.30**	**27.43**	**55.53**	**361.62**	**45.80**	**14.06**	**0.25**	**14.73**	**26.16**

Mode	M & P-xylene (IRIS, CAA)	1,3-butadiene (IRIS, CAA)	Acrolein (IRIS, CAA)	M-xylene (IRIS, CAA)	Toluene (IRIS, CAA)	Phenol (carbolic acid) (IRIS, CAA)	N-hexane (IRIS, CAA)	2,2,4-trimethyl pentane (IRIS, CAA)	Propionaldehyde (CAA)	Acetone (IRIS)	2-methylnaphthalene (IRIS)
Departure Below Mixing Height	2.04E-05	0.000122	0.000177	0	4.64E-05	5.24E-05	0	0	5.25E-05	2.67E-05	1.49E-05
Arrival Below Mixing Height	1.38E-05	8.23E-05	0.00012	0	3.13E-05	3.54E-05	0	0	3.55E-05	1.8E-05	1.01E-05
Taxi out - 5% subtracted out **	9.55E-07	5.71E-06	8.29E-06	0	2.17E-06	2.46E-06	0	0	2.46E-06	1.25E-06	6.97E-07
Taxi in - 5% subtracted out **	4.75E-07	2.84E-06	4.12E-06	0	1.08E-06	1.22E-06	0	0	1.22E-06	6.22E-07	3.47E-07
DAILY ON-SITE TOTAL (ST)	**0.00**	**0.00**	**0.00**	**-**	**0.00**	**0.00**	**-**	**-**	**0.00**	**0.00**	**0.00**
DAILY ON-SITE TOTAL (LBS)	**0.07**	**0.39**	**0.57**	**-**	**0.15**	**0.17**	**-**	**-**	**0.17**	**0.09**	**0.05**
ANNUAL ON-SITE TOTAL (ST)	**0.01**	**0.07**	**0.10**	**-**	**0.03**	**0.03**	**-**	**-**	**0.03**	**0.02**	**0.01**
ANNUAL ON-SITE TOTAL (LBS)	**23.88**	**142.80**	**207.30**	**-**	**54.35**	**61.46**	**-**	**-**	**61.54**	**31.24**	**17.44**

* Speciated Organic Gasses and Hazardous Air Pollutant information is not available for aircraft engine startup
** Sub totals above for on-site and off-site assume that 5% of taxiing aircraft emissions occur within the project boundary and 95% occur outside of the project boundary
** For off-site sub totals, taxi emissions are included in the "departure below mixing height" and "arrival below mixing height". Therefore, 5% of taxi emissions are subtracted from the off-site sub total to reflect 95% of all taxi emissions occuring off-site.
* Blank cells reflect data not available

Benzaldehyde (IRIS)	N-heptane (IRIS)	Hexaldehyde	Methane	Ethane	Ethylene	Acetylene	Propane	1-propyne	Isobutane	2,2-dimethyl butane	Isopentane	Isoprene	2-methyl-2-propenal (methacrolein)	Methylglyoxal	2,3-dimethyl butane	1-Methylnaphthalene	1,2,4-trimethyl benzene (1,3,4-trimethyl benzene)	3-methylpentane	Methylcyclopentane	N-propylbenzene	N-butylbenzene	p-Tolualdehyde	N-butane	4-Phenyl-1-butene
3.39E-05	4.62E-06			3.76E-05	0.001117	0.000284	5.63E-06						3.10E-05	0.000109		1.78E-05	2.53E-05			3.83E-06		3.46E-06		
2.29E-05	3.12E-06			2.54E-05	0.000755	0.000192	3.80E-06						2.09E-05	7.34E-05		1.21E-05	1.71E-05			2.59E-06		2.35E-06		
3.18E-05	4.33E-06			3.53E-05	0.001047	0.000267	5.28E-06						2.90E-05	0.000102		1.67E-05	2.37E-05			3.58E-06		3.25E-06		
1.58E-05	2.16E-06			1.75E-05	0.000521	0.000133	2.62E-06						1.45E-05	5.06E-05		8.32E-06	1.18E-05			1.79E-06		1.62E-06		
1.65E-06	1.01E-05	2.43E-07	3.38E-05	9.52E-06	6.01E-05	3.67E-05		3.32E-06	4.74E-05	3.04E-06	0.000152	1.38E-06			1.35E-05		1.99E-05	2.13E-05	1.53E-05	4.28E-06	2.90E-06		0.00031	3.59E-06
1.05E-06	1.43E-07			1.16E-06	3.43E-05	8.74E-06	1.76E-07						9.48E-07	3.34E-06		5.51E-07	7.72E-07			1.21E-07		1.10E-07		
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.12	**0.04**	**0.00**	**0.07**	**0.15**	**3.93**	**1.04**	**0.02**	**0.01**	**0.09**	**0.01**	**0.30**	**0.00**	**0.11**	**0.37**	**0.03**	**0.06**	**0.13**	**0.04**	**0.03**	**0.02**	**0.01**	**0.01**	**0.62**	**0.01**
0.02	**0.01**	**0.00**	**0.01**	**0.03**	**0.72**	**0.19**	**0.00**	**0.00**	**0.02**	**0.00**	**0.06**	**0.00**	**0.02**	**0.07**	**0.00**	**0.01**	**0.02**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.11**	**0.00**
43.49	**13.11**	**0.18**	**24.70**	**53.83**	**1,434.87**	**381.20**	**7.02**	**2.42**	**34.57**	**2.22**	**111.27**	**1.01**	**38.59**	**135.23**	**9.87**	**22.23**	**46.00**	**15.52**	**11.19**	**7.89**	**2.12**	**4.32**	**225.97**	**2.62**

1.05E-06	1.43E-07	0.00E+00	0.00E+00	1.16E-06	3.43E-05	8.74E-06	1.76E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.48E-07	3.34E-06	0.00E+00	5.51E-07	7.72E-07	0.00E+00	0.00E+00	1.21E-07	0.00E+00	1.10E-07	0.00E+00	0.00E+00
1.65E-06	1.01E-05	2.43E-07	3.38E-05	9.52E-06	6.01E-05	3.67E-05	0.00E+00	3.32E-06	4.74E-05	3.04E-06	1.52E-04	1.38E-06	0.00E+00	0.00E+00	1.35E-05	0.00E+00	1.99E-05	2.13E-05	1.53E-05	4.28E-06	2.90E-06	0.00E+00	3.10E-04	3.59E-06
1.59E-06	2.17E-07	0.00E+00	0.00E+00	1.76E-06	5.23E-05	1.33E-05	2.64E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.45E-06	5.09E-06	0.00E+00	8.36E-07	1.18E-06	0.00E+00	0.00E+00	1.79E-07	0.00E+00	1.63E-07	0.00E+00	0.00E+00
7.91E-07	1.08E-07	0	0	8.77E-07	2.6E-05	6.63E-06	1.31E-07	0	0	0	0	0	7.23E-07	2.53E-06	0	4.16E-07	5.9E-07	0	0	8.93E-08	0	8.1E-08	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.02**	**0.00**	**0.07**	**0.03**	**0.35**	**0.13**	**0.00**	**0.01**	**0.09**	**0.01**	**0.30**	**0.00**	**0.01**	**0.02**	**0.03**	**0.00**	**0.04**	**0.04**	**0.03**	**0.01**	**0.01**	**0.00**	**0.62**	**0.01**
0.00	**0.00**	**0.00**	**0.01**	**0.00**	**0.06**	**0.02**	**0.00**	**0.00**	**0.02**	**0.00**	**0.06**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.11**	**0.00**
3.71	**7.70**	**0.18**	**24.70**	**9.73**	**126.11**	**47.77**	**0.42**	**2.42**	**34.57**	**2.22**	**111.27**	**1.01**	**2.28**	**8.00**	**9.87**	**1.32**	**16.37**	**15.52**	**11.19**	**3.41**	**2.12**	**0.26**	**225.97**	**2.62**

3.39E-05	4.62E-06	0	0	3.76E-05	0.001117	0.000284	5.63E-06	0	0	0	0	0	3.1E-05	0.000109	0	1.78E-05	2.53E-05	0	0	3.83E-06	0	3.46E-06	0	0
2.29E-05	3.12E-06	0	0	2.54E-05	0.000755	0.000192	3.8E-06	0	0	0	0	0	2.09E-05	7.34E-05	0	1.21E-05	1.71E-05	0	0	2.59E-06	0	2.35E-06	0	0
1.59E-06	2.17E-07	0	0	1.76E-06	5.23E-05	1.33E-05	2.64E-07	0	0	0	0	0	1.45E-06	5.09E-06	0	8.36E-07	1.18E-06	0	0	1.79E-07	0	1.63E-07	0	0
7.91E-07	1.08E-07	0	0	8.77E-07	2.6E-05	6.63E-06	1.31E-07	0	0	0	0	0	7.23E-07	2.53E-06	0	4.16E-07	5.9E-07	0	0	8.93E-08	0	8.1E-08	0	0
0.00	**0.00**	-	-	**0.00**	**0.00**	**0.00**	**0.00**	-	-	-	-	-	**0.00**	**0.00**	-	**0.00**	**0.00**	-	-	**0.00**	-	**0.00**	-	-
0.11	**0.01**	-	-	**0.12**	**3.59**	**0.91**	**0.02**	-	-	-	-	-	**0.10**	**0.35**	-	**0.06**	**0.08**	-	-	**0.01**	-	**0.01**	-	-
0.02	**0.00**	-	-	**0.02**	**0.65**	**0.17**	**0.00**	-	-	-	-	-	**0.02**	**0.06**	-	**0.01**	**0.01**	-	-	**0.00**	-	**0.00**	-	-
39.78	**5.41**	-	-	**44.10**	**1,308.76**	**333.44**	**6.60**	-	-	-	-	-	**36.31**	**127.23**	-	**20.91**	**29.63**	-	-	**4.49**	-	**4.06**	-	-

3-methyl-1-butene	2-methyl-1-butene	1-butene	Glyoxal	2,4,4-trimethyl-1-pentene	2-methylpentane	2,4-dimethylpentane	1,3,5-trimethylbenzene	Methylcyclohexane	N-pentane	1-pentene	2-methyl-1-pentene	4-methyl-1-pentene	Valeraldehyde	Cyclohexene	N-octane	1-octene	N-nonane	N-dodecane	Propylene	Butyraldehyde	1-nonene	N-decane	1,2-diethylbenzene (ortho)	(1-Methylpropyl)benzene
8.09E-06	1.01E-05	0.000127	0.000131		2.95E-05		3.90E-06		1.43E-05	5.60E-05	2.46E-06	4.98E-06	1.77E-05		4.48E-06	1.99E-05	4.48E-06	3.34E-05	0.000327	8.60E-06	1.78E-05	2.31E-05		
5.47E-06	6.83E-06	8.56E-05	8.86E-05		1.99E-05		2.63E-06		9.67E-06	3.79E-05	1.66E-06	3.37E-06	1.20E-05		3.03E-06	1.35E-05	3.03E-06	2.26E-05	0.000221	5.81E-06	1.20E-05	1.56E-05		
7.58E-06	9.48E-06	0.000119	0.000123		2.76E-05		3.66E-06		1.34E-05	5.25E-05	2.30E-06	4.67E-06	1.66E-05		4.20E-06	1.87E-05	4.20E-06	3.13E-05	0.000307	8.06E-06	1.67E-05	2.17E-05		
3.77E-06	4.72E-06	5.91E-05	6.12E-05		1.37E-05		1.82E-06		6.67E-06	2.61E-05	1.15E-06	2.33E-06	8.26E-06		2.08E-06	9.29E-06	2.08E-06	1.56E-05	0.000153	4.01E-06	8.29E-06	1.08E-05		
1.93E-06		1.53E-05		2.39E-05	3.88E-05	8.84E-06	1.67E-05	3.59E-06	6.71E-05	5.67E-06				2.18E-05	3.32E-06		1.52E-06		2.17E-05			1.52E-06	4.14E-06	6.94E-07
2.54E-07	3.09E-07	3.89E-06	4.03E-06		9.04E-07		1.21E-07		4.41E-07	1.72E-06	7.72E-08	1.54E-07	5.40E-07		1.32E-07	6.17E-07	1.32E-07	1.03E-06	1.01E-05	2.65E-07	5.51E-07	7.05E-07		
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.03	**0.03**	**0.46**	**0.45**	**0.05**	**0.18**	**0.02**	**0.05**	**0.01**	**0.18**	**0.20**	**0.01**	**0.02**	**0.06**	**0.04**	**0.02**	**0.07**	**0.02**	**0.11**	**1.16**	**0.03**	**0.06**	**0.08**	**0.01**	**0.00**
0.01	**0.01**	**0.08**	**0.08**	**0.01**	**0.03**	**0.00**	**0.01**	**0.00**	**0.03**	**0.04**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**	**0.02**	**0.21**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**
11.49	**12.59**	**168.99**	**163.38**	**17.44**	**65.03**	**6.45**	**17.06**	**2.62**	**66.80**	**73.95**	**3.07**	**6.21**	**22.04**	**15.92**	**8.00**	**24.83**	**6.69**	**41.57**	**423.75**	**10.71**	**22.14**	**29.90**	**3.03**	**0.51**

2.54E-07	3.09E-07	3.89E-06	4.03E-06	0.00E+00	9.04E-07	0.00E+00	1.21E-07	0.00E+00	4.41E-07	1.72E-06	7.72E-08	1.54E-07	5.40E-07	0.00E+00	1.32E-07	6.17E-07	1.32E-07	1.03E-06	1.01E-05	2.65E-07	5.51E-07	7.05E-07	0.00E+00	0.00E+00
1.93E-06	0.00E+00	1.53E-05	0.00E+00	2.39E-05	3.88E-05	8.84E-06	1.67E-05	3.59E-06	6.71E-05	5.67E-06	0.00E+00	0.00E+00	0.00E+00	2.18E-05	3.32E-06	0.00E+00	1.52E-06	0.00E+00	2.17E-05	0.00E+00	0.00E+00	1.52E-06	4.14E-06	6.94E-07
3.79E-07	4.74E-07	5.94E-06	6.15E-06	0.00E+00	1.38E-06	0.00E+00	1.83E-07	0.00E+00	6.70E-07	2.63E-06	1.15E-07	2.34E-07	8.29E-07	0.00E+00	2.10E-07	9.34E-07	2.10E-07	1.56E-06	1.53E-05	4.03E-07	8.33E-07	1.08E-06	0.00E+00	0.00E+00
1.88E-07	2.36E-07	2.95E-06	3.06E-06	0	6.87E-07	0	9.09E-08	0	3.33E-07	1.31E-06	5.73E-08	1.16E-07	4.13E-07	0	1.04E-07	4.65E-07	1.04E-07	7.78E-07	7.64E-06	2.01E-07	4.14E-07	5.39E-07	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.00**	**0.06**	**0.03**	**0.05**	**0.08**	**0.02**	**0.03**	**0.01**	**0.14**	**0.02**	**0.00**	**0.00**	**0.00**	**0.04**	**0.01**	**0.00**	**0.00**	**0.01**	**0.11**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**
0.00	**0.00**	**0.01**	**0.00**	**0.01**	**0.02**	**0.00**	**0.01**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
2.01	**0.74**	**20.52**	**9.66**	**17.44**	**30.49**	**6.45**	**12.49**	**2.62**	**50.04**	**8.26**	**0.18**	**0.37**	**1.30**	**15.92**	**2.75**	**1.47**	**1.44**	**2.46**	**39.94**	**0.63**	**1.31**	**2.81**	**3.03**	**0.51**

8.09E-06	1.01E-05	0.000127	0.000131	0	2.95E-05	0	3.9E-06	0	1.43E-05	5.6E-05	2.46E-06	4.98E-06	1.77E-05	0	4.48E-06	1.99E-05	4.48E-06	3.34E-05	0.000327	8.6E-06	1.78E-05	2.31E-05	0	0
5.47E-06	6.83E-06	8.56E-05	8.86E-05	0	1.99E-05	0	2.63E-06	0	9.67E-06	3.79E-05	1.66E-06	3.37E-06	1.2E-05	0	3.03E-06	1.35E-05	3.03E-06	2.26E-05	0.000221	5.81E-06	1.2E-05	1.56E-05	0	0
3.79E-07	4.74E-07	5.94E-06	6.15E-06	0	1.38E-06	0	1.83E-07	0	6.7E-07	2.63E-06	1.15E-07	2.34E-07	8.29E-07	0	2.1E-07	9.34E-07	2.1E-07	1.56E-06	1.53E-05	4.03E-07	8.33E-07	1.08E-06	0	0
1.88E-07	2.36E-07	2.95E-06	3.06E-06	0	6.87E-07	0	9.09E-08	0	3.33E-07	1.31E-06	5.73E-08	1.16E-07	4.13E-07	0	1.04E-07	4.65E-07	1.04E-07	7.78E-07	7.64E-06	2.01E-07	4.14E-07	5.39E-07	0	0
0.00	**0.00**	**0.00**	**0.00**	**-**	**0.00**	**-**	**0.00**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**-**
0.03	**0.03**	**0.41**	**0.42**	**-**	**0.09**	**-**	**0.01**	**-**	**0.05**	**0.18**	**0.01**	**0.02**	**0.06**	**-**	**0.01**	**0.06**	**0.01**	**0.11**	**1.05**	**0.03**	**0.06**	**0.07**	**-**	**-**
0.00	**0.01**	**0.07**	**0.08**	**-**	**0.02**	**-**	**0.00**	**-**	**0.01**	**0.03**	**0.00**	**0.00**	**0.01**	**-**	**0.00**	**0.01**	**0.00**	**0.02**	**0.19**	**0.01**	**0.01**	**0.01**	**-**	**-**
9.48	**11.85**	**148.48**	**153.72**	**-**	**34.53**	**-**	**4.57**	**-**	**16.76**	**65.69**	**2.88**	**5.84**	**20.74**	**-**	**5.25**	**23.36**	**5.25**	**39.11**	**383.80**	**10.08**	**20.82**	**27.09**	**-**	**-**

1,3-diethylbenzene (meta)	Cyclopentene	Cyclopentane	1,2-propadiene	Indan	2-methyl-2-butene	1,2,3-trimethylbenzene	o-Tolualdehyde	N-Hexadecane	2,3,3-trimethylpentane	2,3,4-trimethylpentane	2,4-dimethylhexane	4-methylheptane	3-methylheptane	Cis-2-butene	Isovaleraldehyde	2-methylheptane	1-hexene	1-Methyl-2-ethylbenzene (o-ethyltoluene)	1-Methyl-3-ethylbenzene (m-ethyltoluene)	Tolualdehyde	1-Methyl-4-ethylbenzene (p-ethyltoluene)	Cis-1,4-dimethylcyclohexane	Trans-2-butene	2-methyl-2-pentene
					1.34E-05	7.65E-06	1.66E-05	3.54E-06						1.52E-05	2.31E-06		5.32E-05	4.70E-06	1.11E-05	2.01E-05	4.62E-06			
					9.03E-06	5.17E-06	1.12E-05	2.39E-06						1.03E-05	1.57E-06		3.59E-05	3.17E-06	7.52E-06	1.36E-05	3.12E-06			
					1.25E-05	7.18E-06	1.56E-05	3.32E-06						1.42E-05	2.17E-06		4.98E-05	4.40E-06	1.04E-05	1.88E-05	4.33E-06			
					6.23E-06	3.57E-06	7.75E-06	1.65E-06						7.08E-06	1.08E-06		2.48E-05	2.19E-06	5.19E-06	9.37E-06	2.16E-06			
3.17E-06	4.00E-06	6.62E-06	1.52E-06	4.42E-06	1.52E-06	3.59E-06			5.80E-06	3.59E-06	5.80E-06	3.45E-06	4.83E-06	9.25E-06		3.59E-06	3.87E-06		2.20E-06			1.10E-06	1.23E-05	4.70E-06
					4.08E-07	2.31E-07	5.07E-07	1.10E-07						4.63E-07	6.61E-08		1.63E-06	1.43E-07	3.42E-07	6.17E-07	1.43E-07			
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.01**	**0.01**	**0.00**	**0.01**	**0.05**	**0.03**	**0.06**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.07**	**0.01**	**0.01**	**0.19**	**0.02**	**0.04**	**0.07**	**0.02**	**0.00**	**0.02**	**0.01**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.03**	**0.00**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**
2.32	**2.92**	**4.84**	**1.11**	**3.23**	**17.75**	**12.15**	**20.69**	**4.41**	**4.23**	**2.62**	**4.23**	**2.52**	**3.52**	**25.65**	**2.88**	**2.62**	**69.04**	**5.85**	**15.47**	**25.01**	**5.75**	**0.80**	**8.97**	**3.43**

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.08E-07	2.31E-07	5.07E-07	1.10E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.63E-07	6.61E-08	0.00E+00	1.63E-06	1.43E-07	3.42E-07	6.17E-07	1.43E-07	0.00E+00	0.00E+00	0.00E+00
3.17E-06	4.00E-06	6.62E-06	1.52E-06	4.42E-06	1.52E-06	3.59E-06	0.00E+00	0.00E+00	5.80E-06	3.59E-06	5.80E-06	3.45E-06	4.83E-06	9.25E-06	0.00E+00	3.59E-06	3.87E-06	0.00E+00	2.20E-06	0.00E+00	0.00E+00	1.10E-06	1.23E-05	4.70E-06
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.26E-07	3.59E-07	7.78E-07	1.66E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.11E-07	1.09E-07	0.00E+00	2.49E-06	2.20E-07	5.21E-07	9.41E-07	2.17E-07	0.00E+00	0.00E+00	0.00E+00
0	0	0	0	0	3.11E-07	1.79E-07	3.87E-07	8.27E-08	0	0	0	0	0	3.54E-07	5.4E-08	0	1.24E-06	1.1E-07	2.6E-07	4.68E-07	1.08E-07	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.01**	**0.01**	**0.00**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.02**	**0.00**	**0.01**	**0.02**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.02**	**0.01**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
2.32	**2.92**	**4.84**	**1.11**	**3.23**	**2.09**	**3.18**	**1.22**	**0.26**	**4.23**	**2.62**	**4.23**	**2.52**	**3.52**	**7.87**	**0.17**	**2.62**	**6.74**	**0.35**	**2.43**	**1.48**	**0.34**	**0.80**	**8.97**	**3.43**

0	0	0	0	0	1.34E-05	7.65E-06	1.66E-05	3.54E-06	0	0	0	0	0	1.52E-05	2.31E-06	0	5.32E-05	4.7E-06	1.11E-05	2.01E-05	4.62E-06	0	0	0
0	0	0	0	0	9.03E-06	5.17E-06	1.12E-05	2.39E-06	0	0	0	0	0	1.03E-05	1.57E-06	0	3.59E-05	3.17E-06	7.52E-06	1.36E-05	3.12E-06	0	0	0
0	0	0	0	0	6.26E-07	3.59E-07	7.78E-07	1.66E-07	0	0	0	0	0	7.11E-07	1.09E-07	0	2.49E-06	2.2E-07	5.21E-07	9.41E-07	2.17E-07	0	0	0
0	0	0	0	0	3.11E-07	1.79E-07	3.87E-07	8.27E-08	0	0	0	0	0	3.54E-07	5.4E-08	0	1.24E-06	1.1E-07	2.6E-07	4.68E-07	1.08E-07	0	0	0
-	-	-	-	-	**0.00**	**0.00**	**0.00**	**0.00**	-	-	-	-	-	**0.00**	**0.00**	-	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	-	-	-
-	-	-	-	-	**0.04**	**0.02**	**0.05**	**0.01**	-	-	-	-	-	**0.05**	**0.01**	-	**0.17**	**0.02**	**0.04**	**0.06**	**0.01**	-	-	-
-	-	-	-	-	**0.01**	**0.00**	**0.01**	**0.00**	-	-	-	-	-	**0.01**	**0.00**	-	**0.03**	**0.00**	**0.01**	**0.01**	**0.00**	-	-	-
-	-	-	-	-	**15.66**	**8.97**	**19.47**	**4.15**	-	-	-	-	-	**17.78**	**2.71**	-	**62.30**	**5.50**	**13.04**	**23.53**	**5.41**	-	-	-

Cis-2-pentene	N-tridecane	N-Tetradecane	N-Pentadecane	N-heptadecane	Trans-2-pentene	1-Methylcyclopentene	1-undecene	1-decene	2,3,5-trimethylhexane	1-Methyl-3-propylbenzene	N-undecane	2,6-dimethyloctane	2,4-dimethylheptane	2,5-dimethylheptane	3-methyloctane	4-methyloctane	2-methyloctane	2,2,5-trimethylhexane	Trans-2-hexene	Crotonaldehyde	T-2-Nonene	2-methyldecane	2,3-dimethyloctane	Cis-2-hexene
1.99E-05	3.86E-05	3.00E-05	1.25E-05	6.50E-07	2.59E-05			1.34E-05			3.21E-05								2.17E-06	7.46E-05				
1.35E-05	2.61E-05	2.03E-05	8.44E-06	4.41E-07	1.75E-05			9.03E-06			2.17E-05								1.47E-06	5.04E-05				
1.87E-05	3.62E-05	2.82E-05	1.17E-05	6.06E-07	2.43E-05			1.25E-05			3.00E-05								2.03E-06	6.99E-05				
9.29E-06	1.80E-05	1.40E-05	5.83E-06	3.09E-07	1.21E-05			6.23E-06			1.50E-05								1.01E-06	3.48E-05				
1.34E-05					1.13E-05	4.19E-07	1.93E-06		1.10E-06	2.20E-06	1.93E-06	9.70E-07	1.10E-06	1.80E-06	4.28E-06	5.38E-06	5.51E-07	3.32E-06		3.03E-06	2.35E-06	8.70E-06	7.18E-06	1.52E-06
6.17E-07	1.19E-06	9.26E-07	3.86E-07	2.20E-08	7.94E-07			4.08E-07			9.81E-07								6.61E-08	2.29E-06				
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.09	**0.13**	**0.10**	**0.04**	**0.00**	**0.11**	**0.00**	**0.00**	**0.05**	**0.00**	**0.00**	**0.11**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**	**0.01**	**0.01**	**0.26**	**0.00**	**0.02**	**0.01**	**0.00**
0.02	**0.02**	**0.02**	**0.01**	**0.00**	**0.02**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.05**	**0.00**	**0.00**	**0.00**	**0.00**
34.61	**48.14**	**37.43**	**15.56**	**0.81**	**40.56**	**0.31**	**1.41**	**16.64**	**0.80**	**1.61**	**41.35**	**0.71**	**0.80**	**1.31**	**3.12**	**3.93**	**0.40**	**2.42**	**2.70**	**95.15**	**1.71**	**6.35**	**5.24**	**1.11**

6.17E-07	1.19E-06	9.26E-07	3.86E-07	2.20E-08	7.94E-07	0.00E+00	0.00E+00	4.08E-07	0.00E+00	0.00E+00	9.81E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.61E-08	2.29E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.34E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E-05	4.19E-07	1.93E-06	0.00E+00	1.10E-06	2.20E-06	1.93E-06	9.70E-07	1.10E-06	1.80E-06	4.28E-06	5.38E-06	5.51E-07	3.32E-06	0.00E+00	3.03E-06	2.35E-06	8.70E-06	7.18E-06	1.52E-06
9.34E-07	1.81E-06	1.41E-06	5.85E-07	3.03E-08	1.22E-06	0.00E+00	0.00E+00	6.26E-07	0.00E+00	0.00E+00	1.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.01E-07	3.50E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00
4.65E-07	9.01E-07	7.01E-07	2.92E-07	1.54E-08	6.05E-07	0	0	3.11E-07	0	0	7.48E-07	0	0	0	0	0	0	0	5.07E-08	1.74E-06	0	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.03	**0.01**	**0.01**	**0.00**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.01**	**0.01**	**0.00**	**0.01**	**0.00**	**0.02**	**0.00**	**0.02**	**0.01**	**0.00**
0.01	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
11.25	**2.85**	**2.22**	**0.92**	**0.05**	**10.17**	**0.31**	**1.41**	**0.98**	**0.80**	**1.61**	**3.77**	**0.71**	**0.80**	**1.31**	**3.12**	**3.93**	**0.40**	**2.42**	**0.16**	**7.71**	**1.71**	**6.35**	**5.24**	**1.11**

1.99E-05	3.86E-05	3E-05	1.25E-05	6.5E-07	2.59E-05	0	0	1.34E-05	0	0	3.21E-05	0	0	0	0	0	0	0	2.17E-06	7.46E-05	0	0	0	0
1.35E-05	2.61E-05	2.03E-05	8.44E-06	4.41E-07	1.75E-05	0	0	9.03E-06	0	0	2.17E-05	0	0	0	0	0	0	0	1.47E-06	5.04E-05	0	0	0	0
9.34E-07	1.81E-06	1.41E-06	5.85E-07	3.03E-08	1.22E-06	0	0	6.26E-07	0	0	1.5E-06	0	0	0	0	0	0	0	1.01E-07	3.5E-06	0	0	0	0
4.65E-07	9.01E-07	7.01E-07	2.92E-07	1.54E-08	6.05E-07	0	0	3.11E-07	0	0	7.48E-07	0	0	0	0	0	0	0	5.07E-08	1.74E-06	0	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**-**	**0.00**	**-**	**-**	**0.00**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.00**	**0.00**	**-**	**-**	**-**	**-**
0.06	**0.12**	**0.10**	**0.04**	**0.00**	**0.08**	**-**	**-**	**0.04**	**-**	**-**	**0.10**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.01**	**0.24**	**-**	**-**	**-**	**-**
0.01	**0.02**	**0.02**	**0.01**	**0.00**	**0.02**	**-**	**-**	**0.01**	**-**	**-**	**0.02**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**0.00**	**0.04**	**-**	**-**	**-**	**-**
23.36	**45.29**	**35.22**	**14.64**	**0.76**	**30.38**	**-**	**-**	**15.66**	**-**	**-**	**37.59**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2.54**	**87.45**	**-**	**-**	**-**	**-**

Heptene	Dimethyl napthalene	C-1 Compounds	C-10 Compounds	C-10 Olefins	C-10 Paraffins	C-11 Compounds	C-12 Compounds	C-13 Compounds	C-14 Alkane	C-14 Compounds	C-15 Alkane	C-15 Compounds	C-16 Alkane	C-16 Compounds	C-17 Compounds	C-18 Alkane	C-18 Compounds	C-19 Compounds	C-2 Compounds	C-20 Compounds	C-21 Compounds	C-22 Compounds	C-23 Compounds	C-24 Compounds
3.16E-05	6.50E-06			0.000422	0.001055				1.34E-05		1.28E-05		1.05E-05			1.43E-07								
2.14E-05	4.39E-06			0.000285	0.000713				9.08E-06		8.64E-06		7.12E-06			9.92E-08								
2.97E-05	6.10E-06			0.000396	0.000989				1.26E-05		1.20E-05		9.89E-06			1.32E-07								
1.48E-05	3.03E-06			0.000197	0.000492				6.26E-06		5.96E-06		4.92E-06			6.61E-08								
		1.74E-05	1.06E-05			1.07E-05	6.60E-06	1.03E-05		1.34E-05		1.31E-05		1.05E-05	9.18E-06		6.13E-06	4.68E-06	5.99E-05	2.73E-06	2.25E-06	1.77E-06	1.44E-06	1.44E-06
9.70E-07	1.98E-07			1.30E-05	3.24E-05				4.08E-07		3.97E-07		3.20E-07			0								
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.11	**0.02**	**0.03**	**0.02**	**1.44**	**3.60**	**0.02**	**0.01**	**0.02**	**0.05**	**0.03**	**0.04**	**0.03**	**0.04**	**0.02**	**0.02**	**0.00**	**0.01**	**0.01**	**0.12**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**
0.02	**0.00**	**0.01**	**0.00**	**0.26**	**0.66**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
39.41	**8.10**	**12.71**	**7.72**	**525.69**	**1,314.10**	**7.85**	**4.82**	**7.52**	**16.74**	**9.75**	**15.93**	**9.54**	**13.13**	**7.65**	**6.70**	**0.18**	**4.47**	**3.42**	**43.74**	**2.00**	**1.64**	**1.30**	**1.05**	**1.05**

9.70E-07	1.98E-07	0.00E+00	0.00E+00	1.30E-05	3.24E-05	0.00E+00	0.00E+00	0.00E+00	4.08E-07	0.00E+00	3.97E-07	0.00E+00	3.20E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	1.74E-05	1.06E-05	0.00E+00	0.00E+00	1.07E-05	6.60E-06	1.03E-05	0.00E+00	1.34E-05	0.00E+00	1.31E-05	0.00E+00	1.05E-05	9.18E-06	0.00E+00	6.13E-06	4.68E-06	5.99E-05	2.73E-06	2.25E-06	1.77E-06	1.44E-06	1.44E-06
1.48E-06	3.05E-07	0.00E+00	0.00E+00	1.98E-05	4.94E-05	0.00E+00	0.00E+00	0.00E+00	6.29E-07	0.00E+00	5.99E-07	0.00E+00	4.94E-07	0.00E+00	0.00E+00	6.61E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
7.38E-07	1.52E-07	0	0	9.84E-06	2.46E-05	0	0	0	3.13E-07	0	2.98E-07	0	2.46E-07	0	0	3.31E-09	0	0	0	0	0	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.01	**0.00**	**0.03**	**0.02**	**0.09**	**0.21**	**0.02**	**0.01**	**0.02**	**0.00**	**0.03**	**0.00**	**0.03**	**0.00**	**0.02**	**0.02**	**0.00**	**0.01**	**0.01**	**0.12**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.00**	**0.01**	**0.00**	**0.02**	**0.04**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
2.33	**0.48**	**12.71**	**7.72**	**31.08**	**77.71**	**7.85**	**4.82**	**7.52**	**0.99**	**9.75**	**0.94**	**9.54**	**0.77**	**7.65**	**6.70**	**0.01**	**4.47**	**3.42**	**43.74**	**2.00**	**1.64**	**1.30**	**1.05**	**1.05**

3.16E-05	6.5E-06	0	0	0.000422	0.001055	0	0	0	1.34E-05	0	1.28E-05	0	1.05E-05	0	0	1.43E-07	0	0	0	0	0	0	0	0
2.14E-05	4.39E-06	0	0	0.000285	0.000713	0	0	0	9.08E-06	0	8.64E-06	0	7.12E-06	0	0	9.92E-08	0	0	0	0	0	0	0	0
1.48E-06	3.05E-07	0	0	1.98E-05	4.94E-05	0	0	0	6.29E-07	0	5.99E-07	0	4.94E-07	0	0	6.61E-09	0	0	0	0	0	0	0	0
7.38E-07	1.52E-07	0	0	9.84E-06	2.46E-05	0	0	0	3.13E-07	0	2.98E-07	0	2.46E-07	0	0	3.31E-09	0	0	0	0	0	0	0	0
0.00	**0.00**	-	-	**0.00**	**0.00**	-	-	-	**0.00**	-	**0.00**	-	**0.00**	-	-	**0.00**	-	-	-	-	-	-	-	-
0.10	**0.02**	-	-	**1.36**	**3.39**	-	-	-	**0.04**	-	**0.04**	-	**0.03**	-	-	**0.00**	-	-	-	-	-	-	-	-
0.02	**0.00**	-	-	**0.25**	**0.62**	-	-	-	**0.01**	-	**0.01**	-	**0.01**	-	-	**0.00**	-	-	-	-	-	-	-	-
37.08	**7.62**	-	-	**494.60**	**1,236.39**	-	-	-	**15.75**	-	**14.99**	-	**12.36**	-	-	**0.17**	-	-	-	-	-	-	-	-

C-25 Compounds	**C-26 Compounds**	**C-27 Compounds**	**C-28 Compounds**	**C-29 Compounds**	**C-3 Compounds**	**C-30 Compounds**	**C-31 Compounds**	**C-32 Compounds**	**C-33 Compounds**	**C-34 Compounds**	**C-35 Compounds**	**C-36 Compounds**	**C-37 Compounds**	**C-38 Compounds**	**C-39 Compounds**	**C-4 Compounds**	**C-40 Compounds**	**C-41 Compounds**	**C-42 Compounds**	**C-43 compounds**	**C-5 Compounds**	**C-6 Compounds**	**C-7 Compounds**	**C-8 Compounds**
1.62E-06	1.32E-06	6.61E-07	9.59E-07	4.19E-07	1.56E-05	9.59E-07	8.71E-07	8.16E-07	6.61E-07	7.17E-07	4.85E-07	5.95E-07	2.43E-07	1.54E-07	3.31E-07	1.22E-05	5.51E-08	1.54E-07	5.51E-08	3.31E-08	7.09E-06	1.29E-05	8.68E-06	3.40E-06
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.03**	**0.02**	**0.01**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
1.18	**0.97**	**0.48**	**0.70**	**0.31**	**11.42**	**0.70**	**0.64**	**0.60**	**0.48**	**0.52**	**0.35**	**0.43**	**0.18**	**0.11**	**0.24**	**8.94**	**0.04**	**0.11**	**0.04**	**0.02**	**5.17**	**9.42**	**6.33**	**2.48**
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
1.62E-06	1.32E-06	6.61E-07	9.59E-07	4.19E-07	1.56E-05	9.59E-07	8.71E-07	8.16E-07	6.61E-07	7.17E-07	4.85E-07	5.95E-07	2.43E-07	1.54E-07	3.31E-07	1.22E-05	5.51E-08	1.54E-07	5.51E-08	3.31E-08	7.09E-06	1.29E-05	8.68E-06	3.40E-06
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.03**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.03**	**0.02**	**0.01**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
1.18	**0.97**	**0.48**	**0.70**	**0.31**	**11.42**	**0.70**	**0.64**	**0.60**	**0.48**	**0.52**	**0.35**	**0.43**	**0.18**	**0.11**	**0.24**	**8.94**	**0.04**	**0.11**	**0.04**	**0.02**	**5.17**	**9.42**	**6.33**	**2.48**
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

C-9 Compounds	Cyclopentylcyclopentane	Hexyne	Methylcyclooctane	Pentyne	T-1-Phenylbutene	Decanol	Dodecanol
						0.000422	0.000211
						0.000285	0.000143
						0.000396	0.000198
						0.000197	9.84E-05
2.25E-06	6.35E-06	2.76E-07	4.55E-06	2.62E-06	3.17E-06		
						1.30E-05	6.48E-06
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.01**	**0.00**	**0.01**	**0.01**	**0.01**	**1.44**	**0.72**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.26**	**0.13**
1.64	**4.63**	**0.20**	**3.32**	**1.92**	**2.32**	**525.69**	**262.80**

0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.30E-05	6.48E-06
2.25E-06	6.35E-06	2.76E-07	4.55E-06	2.62E-06	3.17E-06	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.98E-05	9.89E-06
0	0	0	0	0	0	9.84E-06	4.92E-06
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
0.00	**0.01**	**0.00**	**0.01**	**0.01**	**0.01**	**0.09**	**0.04**
0.00	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.01**
1.64	**4.63**	**0.20**	**3.32**	**1.92**	**2.32**	**31.08**	**15.54**

0	0	0	0	0	0	0.000422	0.000211
0	0	0	0	0	0	0.000285	0.000143
0	0	0	0	0	0	1.98E-05	9.89E-06
0	0	0	0	0	0	9.84E-06	4.92E-06
-	**-**	**-**	**-**	**-**	**-**	**0.00**	**0.00**
-	**-**	**-**	**-**	**-**	**-**	**1.36**	**0.68**
-	**-**	**-**	**-**	**-**	**-**	**0.25**	**0.12**
-	**-**	**-**	**-**	**-**	**-**	**494.60**	**247.26**