APPENDIX B1

AIR QUALITY IMPACT ANALYSIS

Gateway South Building 4

AIR QUALITY IMPACT ANALYSIS

CITY OF SAN BERNARDINO

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(1)	Reference
µg/m3	Microgram per Cubic Meter
AADT	Annual Average Daily Trips
AQIA	Air Quality Impact Analysis
AQMD	Air Quality Management District
AQMP	Air Quality Management Plan
ARB	California Air Resources Board
BACMs	Best Available Control Measures
BMPs	Best Management Practices
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
DPM	Diesel Particulate Matter
EPA	Environmental Protection Agency
LST	Localized Significance Threshold
MMs	Mitigation Measures
NAAQS	National Ambient Air Quality Standards
NO2	Nitrogen Dioxide
NOx	Oxides of Nitrogen
Pb	Lead
PM10	Particulate Matter 10 microns in diameter or less
PM2.5	Particulate Matter 2.5 microns in diameter or less
PPM	Parts Per Million
Project	Gateway South Building 4
ROG	Reactive Organic Gases
SCAB	South Coast Air Basin
SCAQMD	South Coast Air Quality Management District
SIPs	State Implementation Plans
SRA	Source Receptor Area

TAC	Toxic Air Contaminant
TIA	Traffic Impact Analysis
TOG	Total Organic Gases
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds

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EXECUTIVE SUMMARY

CONSTRUCTION-SOURCE EMISSIONS

REGIONAL IMPACTS

For regional emissions, the Project will exceed the numerical thresholds of significance established by the South Coast Air Quality Management District (SCAQMD) for emissions of Nitrogen Oxides (NO_x) prior to implementation of mitigation measures (MMs).

MM AQ-1 is recommended to reduce the severity of the NOx impacts. After implementation of MM AQ-1, construction activity emissions would not exceed the numerical thresholds established by the SCAQMD for any criteria pollutant. Therefore, a less than significant impact would occur for Project-related construction-source emissions.

LOCALIZED IMPACTS

For localized emissions, the Project will not exceed the SCAQMD's localized significance threshold for any criteria pollutant.

ODORS

Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people. Potential construction-source odor impacts are therefore considered less-than-significant.

OPERATIONAL-SOURCE EMISSIONS

REGIONAL IMPACTS

For regional emissions, the Project would exceed the numerical thresholds of significance established by the SCAQMD for emissions of VOCs and NO_x. No feasible mitigation measures exist that would reduce these emissions to levels that are less-than-significant. Thus a significant impact would occur even with implementation of the proposed mitigation measure MM AQ-2 through MM AQ-5. Project operational-source NO_x emissions exceedances of applicable SCAQMD regional thresholds are therefore considered significant and unavoidable.

LOCALIZED IMPACTS

Project operational-source emissions would result in or cause a significant localized air quality impact as discussed in the operational LSTs section of this report. The proposed Project would not result in a significant CO "hotspot" as a result of Project related traffic during ongoing operations.

ODORS

Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills or various heavy industrial uses. The Project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential sources of operational odors generated by the Project would include disposal of miscellaneous refuse. Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances (1). Consistent with City requirements, all Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations. Potential operational-source odor impacts are therefore considered less-than-significant.

1 INTRODUCTION

This report presents the results of the air quality impact analysis (AQIA) prepared by Urban Crossroads, Inc., for the proposed Gateway South Building 4 ("Project"). The purpose of this AQIA is to evaluate the potential impacts to air quality associated with construction and operation of the proposed Project, and recommend measures to mitigate impacts considered potentially significant in comparison to thresholds established by the South Coast Air Quality Management District (SCAQMD).

1.1 SITE LOCATION

The proposed Gateway South Building 4 site is generally located south of Dumas Street and west of Waterman Avenue in the City of San Bernardino, as shown on Exhibit 1-A.

1.2 STUDY AREA

The Project site is currently occupied by the San Bernardino Public Golf Course. Existing structures on-site totaling approximately 17,575 square feet (s.f) will be demolished prior to building construction. The Project site is bordered by the San Bernardino County Flood Control Channel to the west, a golf driving range that is the site of a future industrial warehouse building to the north, various office industrial land uses to the east, and the Santa Ana River to the south.

1.3 PROJECT DESCRIPTION

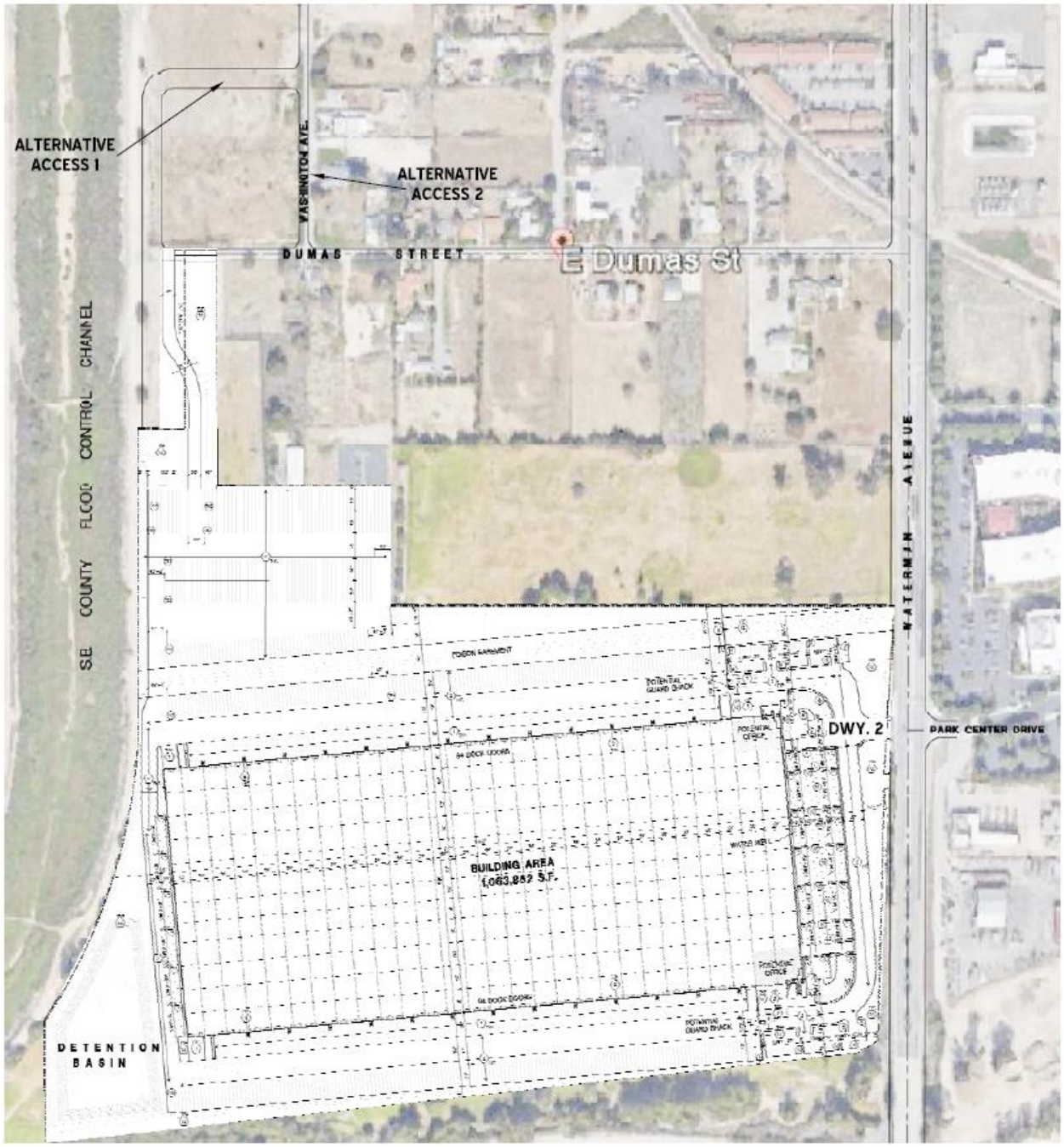
The Project is proposed to consist of a total of 1,063,853 square feet (sf) of high-cube warehouse/distribution center use (as a conservative measure, the analysis herein evaluates 1,064,880 sf of high-cube warehouse/distribution center use; therefore, the impacts disclosed herein are slightly overstated), as shown on Exhibit 1-B. For the purposes of this AQIA, the Project is anticipated to be developed in a single phase with an anticipated opening year of 2018.

The Project also provides for a proposed off-site private street access easement extending from the Project site's northern boundary. The easement would extend to Dumas Street, then north and east to existing Washington Avenue, then north to intersect with Orange Show Road. Interim roadway improvements would occur within this easement to provide ingress and egress between the Project site and Orange Show Road.

As part of the Project's design, all on-site outdoor cargo handling equipment (CHE) (including yard trucks, hostlers, yard goats, pallet jacks, forklifts, and other on-site equipment) will be powered by non-diesel fueled engines (e.g., electric or natural gas) and all on-site indoor forklifts shall be electric.

EXHIBIT 1-A: LOCATION MAP

EXHIBIT 1-B: SITE PLAN



1.4 REGULATORY REQUIREMENTS AND MITIGATION MEASURES

1.4.1 MONITORING OF AND COMPLIANCE WITH STANDARD REGULATORY REQUIREMENTS/BEST AVAILABLE CONTROL MEASURES (BACMS)

Measures listed below (or equivalent language) shall appear on all Project grading plans, construction specifications and bid documents, and the City shall ensure such language is incorporated prior to issuance of any development permits.

SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1113 (Architectural Coatings) (2); Rule 431.2 (Low Sulfur Fuel); Rule 403 (Fugitive Dust) (3); and Rule 1186 / 1186.1 (Street Sweepers) (4). It should be noted that BACMs are not mitigation as they are standard regulatory requirements.

BACM AQ-1

The following measures shall be incorporated into Project plans and specifications as implementation of Rule 403 (4):

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less.

BACM AQ-2

The following measures shall be incorporated into Project plans and specifications as implementation of Rule 1113 (5):

- Only "Low-Volatile Organic Compounds" paints (no more than 50 gram/liter of VOC) and/or High Pressure Low Volume (HPLV) applications consistent with South Coast Air Quality Management District Rule 1113 shall be used.

BACM AQ-3

Plans, specifications, and contract documents shall note that a sign shall be posted on-site stating that construction workers shall not idle diesel engines in excess of five (5) minutes (6).

1.4.2 MITIGATION

MM AQ-1

During site preparation and grading activity, all graders, scrapers, and rubber tired dozers shall be California Air Resources Board (CARB) Tier 3 Certified or better.

1.5 OPERATIONAL-SOURCE AIR POLLUTANT EMISSIONS MITIGATION MEASURES

Measures listed below would provide for generalized reductions in Project operational air pollutant emissions. Notwithstanding, these reductions cannot be definitively quantified; and in any case, such reductions as may be realized would not materially affect the analyses or conclusions presented herein. For the purposes of this analysis, unmitigated and mitigated area-source air pollutant emissions generated by the Project are considered substantively equal. As a conservative measure, no reduction for any of the measures listed under MM AQ-2 through MM AQ-5 is taken in the analysis.

MM AQ-2

- Up to three electric-vehicle charging stations will be provided.
- Solar or light-emitting diodes (LEDs) lights shall be installed for outdoor lighting.
- Any yard trucks used on-site to move trailers in or around the loading areas shall be electric or natural gas.
- Service equipment, such as forklifts, used at the Project site shall be electric.
- Applicant shall provide bicycle racks in convenient locations to facilitate bicycle access to the Project site.
- Applicant shall use low-VOC emission paints consistent with SCAQMD standards.
- Applicant must design and construct the roof of the buildings to accommodate maximally sized photovoltaic (PV) solar arrays taking into consideration limitations imposed by other rooftop equipment, roof warranties, building and fire code requirements, and other physical or legal limitations. Applicant must develop each Project building with the necessary electrical system and other infrastructure to accommodate maximally sized PV arrays in the future. The electrical system and infrastructure must be clearly labeled with noticeable and permanent signage which informs future tenant/purchasers of the existence of this infrastructure.
- Applicant shall design and construct the Project to achieve the equivalent of an LEED™ "Certified" rating under the current U.S. Green Building Council standards, and will be built in compliance with those standards. To achieve this, the design, construction, and operation of the proposed Project shall incorporate a series of green building strategies, which shall be selected and implemented in the sole discretion of the Applicant. Upon completion of the Project, Applicant shall provide the City with documentation demonstrating that the Project has achieved LEED Certified equivalency. The Project shall not be required to obtain USGBC certification.

MM AQ-3:

Prior to the issuance of building permits, the Project applicant shall ensure that the Project is designed to achieve efficiency equal to or exceeding then incumbent (2016 or later) California Building Code Title 24 requirements.

MM AQ-4:

To reduce water consumption and the associated energy-usage, the Project will be designed to comply with the mandatory reductions in indoor water usage contained in the incumbent

CalGreen Code (7) and any mandated reduction in outdoor water usage contained in the City's water efficient landscape requirements. Additionally, the Project shall implement the following:

- Landscaping palette emphasizing drought tolerant plants;
- Use of water-efficient irrigation techniques;
- U.S. EPA Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads.

MM AQ-5:

The truck access gates and loading docks within the truck court on the Project site shall be posted with signs which state:

a) Truck drivers shall turn off engines when not in use;

b) Truck drivers shall shut down the engine after 300 seconds of continuous idling operation once the vehicle is stopped, the transmission is set to "neutral" or "park", and the parking brake is engaged (8). [1]; and

c) Telephone numbers of the building facilities manager and the CARB to report violations.

[1] While restricted idling is required per MM AQ-1, the analysis presented here takes no quantified credit or reduction in emissions for restricted idling, and reflects an assumed 15-minute "worst case" idling condition.

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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 (9). 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 discussed above, the Project site is located within the South Coast Air Basin, a 6,745-square mile subregion of the SCAQMD, which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The larger South Coast district boundary includes 10,743 square miles.

The SCAB is bound by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Los Angeles County portion of the Mojave Desert Air Basin is bound by the San Gabriel Mountains to the south and west, the Los Angeles / Kern County border to the north, and the Los Angeles / San Bernardino County border to the east. The Riverside County portion of the Salton Sea Air Basin is bound by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley.

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). 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 to sulfates 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 percent 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 percent 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 14 1/2 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 NOX and 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 Basin 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 on-shore 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 EXISTING AIR QUALITY

Existing air quality is measured at established SCAQMD air quality monitoring stations. Monitored air quality is evaluated and 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, as well health effects of each pollutant regulated under these standards are shown in Table 2-1 (10) (11).

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 presented in Table 2-1. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for O3, CO, SO2, NO2, PM10, and PM2.5 are not equaled or exceeded at any time in any consecutive three-year period; and the federal standards (other than O3, PM10, PM2.5, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O3 standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

TABLE 2-1: AMBIENT AIR QUALITY STANDARDS

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)[10]	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas)[10]	—	
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 13	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 ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (10/1/15)

2.5 REGIONAL AIR QUALITY

The SCAQMD monitors levels of various criteria pollutants at 38 permanent monitoring stations and 5 single-pollutant source Lead (Pb) air monitoring sites throughout the air district (12). In 2015, the federal and state ambient air quality standards (NAAQS and CAAQS) were exceeded on one or more days for ozone, PM10, and PM2.5 at most monitoring locations (13). No areas of the SCAB exceeded federal or state standards for NO2, SO2, CO, sulfates or lead. See Table 2-2, for attainment designations for the SCAB (14) (15). Appendix 3.1 provides geographic representation of the state and federal attainment status for applicable criteria pollutants within the SCAB.

TABLE 2-2: ATTAINMENT STATUS OF CRITERIA POLLUTANTS IN THE SOUTH COAST AIR BASIN (SCAB)

Criteria Pollutant	State Designation	Federal Designation
Ozone – 1 hour standard	Nonattainment	No Standard
Ozone - 8 hour standard	Nonattainment	Nonattainment (Extreme)
PM_{10}	Nonattainment	Attainment (Maintanence)
$PM_{2.5}$	Nonattainment	Nonattainment (Serious)
Carbon Monoxide	Attainment	Attainment (Maintanence)
Nitrogen Dioxide	Attainment	Attainment (Maintanence)
Sulfur Dioxide	Attainment	Attainment
Lead[1]	Attainment	Nonattainment (Partial)

Source: State/Federal designations were taken from http://www.arb.ca.gov/desig/adm/adm.htm
Note: See Appendix 3.1 for a detailed map of State/National Area Designations within the South Coast Air Basin

2.6 LOCAL AIR QUALITY

Relative to the Project site, the nearest long-term air quality monitoring site for Ozone (O_3), Carbon Monoxide (CO), Nitrogen Dioxide (NO_2), Inhalable Particulates (PM_{10}), and Ultra-Fine Particulates ($PM_{2.5}$) is the South Coast Air Quality Management District Central San Bernardino Valley 2 monitoring station, located approximately 2.20 miles northeast of the Project site in San Bernardino (SRA 34).

The most recent three (3) years of data available is shown on Table 2-3 and identifies the number of days ambient air quality standards were exceeded for the study area, which is was considered to be representative of the local air quality at the Project site (16) (17). Additionally, data for SO2 has been omitted as attainment is regularly met in the South Coast Air Basin and few monitoring stations measure SO2 concentrations.

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

TABLE 2-3: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2013-2015

POLLUTANT	STANDARD	YEAR		
		2013	2014	2015
Ozone (O_3)				
Maximum 1-Hour Concentration (ppm)		0.139	0.121	0.133
Maximum 8-Hour Concentration (ppm)		0.112	0.099	0.111
Number of Days Exceeding State 1-Hour Standard	> 0.09 ppm	22	38	36
Number of Days Exceeding State 8-Hour Standard	> 0.07 ppm	53	76	59
Number of Days Exceeding Federal 1-Hour Standard	> 0.12 ppm	2	0	3
Number of Days Exceeding Federal 8-Hour Standard	> 0.075 ppm	36	51	39
Number of Days Exceeding Health Advisory	≥ 0.15 ppm	0	0	0
Carbon Monoxide (CO)				
Maximum 1-Hour Concentration (ppm)		--	4.0	--
Maximum 8-Hour Concentration (ppm)		1.7	2.4	--
Number of Days Exceeding State 1-Hour Standard	> 20 ppm	0	0	--
Number of Days Exceeding Federal / State 8-Hour Standard	> 9.0 ppm	0	0	--
Number of Days Exceeding Federal 1-Hour Standard	> 35 ppm	0	0	--
Nitrogen Dioxide (NO_2)				
Maximum 1-Hour Concentration (ppm)		0.072	0.073	0.071
Annual Arithmetic Mean Concentration (ppm)		0.018	0.018	0.015
Number of Days Exceeding State 1-Hour Standard	> 0.18 ppm	0	0	0
Particulate Matter ≤ 10 Microns (PM_{10})				
Maximum 24-Hour Concentration (µg/m^3)		102	136	56
Number of Samples		60	60	--
Number of Samples Exceeding State Standard	> 50 µg/m^3	3	4	2
Number of Samples Exceeding Federal Standard	> 150 µg/m^3	0	0	0
Particulate Matter ≤ 2.5 Microns ($PM_{2.5}$)				
Maximum 24-Hour Concentration (µg/m^3)		55.3	32.2	53.5
Annual Arithmetic Mean (µg/m^3)		11.41	--	10.7
Number of Samples Exceeding Federal 24-Hour Standard	> 35 µg/m^3	1	0	2

-- = data not available from SCAQMD or ARB

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 effects are identified below:

- Carbon Monoxide (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, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.
- Sulfur Dioxide (SO2): Is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO2 oxidizes in the atmosphere, it forms sulfates (SO4). Collectively, these pollutants are referred to as sulfur oxides (SOX).
- Nitrogen Oxides (Oxides of Nitrogen, or NOx): Nitrogen oxides (NOx) consist of nitric oxide (NO), nitrogen dioxide (NO2) and nitrous oxide (N2O) and are formed when nitrogen (N2) combines with oxygen (O2). Their lifespan in the atmosphere ranges from one to seven days for nitric oxide and nitrogen dioxide, to 170 years for nitrous oxide. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition. NO2 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, NO2 is the most abundant in the atmosphere. As ambient concentrations of NO2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO2 than those indicated by regional monitors.
- Ozone (O3): Is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NOX), both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone 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.
- PM10 (Particulate Matter less than 10 microns): A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. 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 deposited, resulting in adverse health effects. PM10 also causes visibility reduction and is a criteria air pollutant.
- PM2.5 (Particulate Matter less than 2.5 microns): A similar air pollutant 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 sulfates formed from SO2 release from power plants and industrial facilities and nitrates that are formed from NOX 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. PM2.5 is a criteria air pollutant.
- Volatile Organic Compounds (VOC): Volatile organic compounds 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 ozone to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include: carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O3, which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG (see below) interchangeably.

- Reactive Organic Gases (ROG): Similar to VOC, Reactive Organic Gases (ROG) are also precursors in forming ozone 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 nitrogen oxides react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O3, which is a criteria pollutant. The SCAQMD uses the terms ROG and VOC (see previous) interchangeably.
- Lead (Pb): Lead is a heavy metal that is highly persistent in the environment. In the past, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. As a result of the removal of lead from gasoline, there have been no violations at any of the SCAQMD's regular air monitoring stations since 1982. Currently, emissions of lead are largely limited to stationary sources such as lead smelters. It should be noted that the Project is not anticipated to generate a quantifiable amount of lead emissions. Lead is a criteria air pollutant.

Health Effects of Air Pollutants

Ozone

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 ozone effects. Short-term exposure (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone 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 sports and live in communities with high ozone levels.

Ozone 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 ozone may be more toxic than exposure to ozone 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.

Carbon Monoxide

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 supply to the heart. Inhaled CO

has no direct toxic effect on the lungs, but exerts its effect on tissues by interfering with oxygen transport and competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen 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 (oxygen deficiency) as seen at high altitudes.

Reduction in birth weight and impaired neurobehavioral development have been observed in animals chronically exposed to CO, resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels; these include pre-term births and heart abnormalities.

Particulate Matter

A consistent correlation between elevated ambient fine particulate matter (PM10 and PM2.5) 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 recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer.

Daily fluctuations in PM2.5 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 PM10 and PM2.5.

Nitrogen Dioxide

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposure to NO2 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 NO2 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 NO2 considerably higher than ambient concentrations results 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 ozone exposure increases when animals are exposed to a combination of ozone and NO2.

Sulfur Dioxide

A few minutes of exposure to low levels of SO2 can result in airway constriction in some 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 SO2. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO2.

Animal studies suggest that despite SO2 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 SO2 levels. In these studies, efforts to separate the effects of SO2 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.

Lead

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 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.

Odors

The science of odor as a health concern is still new. Merely identifying the hundreds of VOCs that cause odors poses a big challenge. 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.

2.7 REGULATORY BACKGROUND

2.7.1 FEDERAL REGULATIONS

The U.S. EPA is responsible for setting and enforcing the NAAQS for O3, CO, NOx, SO2, PM10, and lead (10). The U.S. 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 U.S. EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the 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 (18). The CAA also mandates that states submit and implement State Implementation Plans (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). Title I provisions were established with the goal of attaining the NAAQS for the following criteria pollutants O3, NO2, SO2, PM10, CO, PM2.5, and lead. The NAAQS were amended in July 1997 to include an additional standard for O3 and to adopt a NAAQS for PM2.5. Table 3-1 (previously presented) provides the NAAQS within the basin.

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 nitrogen oxides (NOx). NOx is a collective term that includes all forms of nitrogen oxides (NO, NO2, NO3) which are emitted as byproducts of the combustion process.

2.7.2 CALIFORNIA REGULATIONS

The CARB, which became part of the California EPA 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. The California CAA 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. The CARB established the CAAQS for all pollutants for which the federal government has NAAQS and, in addition, establishes standards for sulfates, visibility, hydrogen sulfide, and vinyl chloride. However at this time, hydrogen sulfide and vinyl chloride 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 (11) (10).

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 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 five percent or more annual reduction in emissions or 15 percent or more in a period of three years for ROGs, NOx, CO and PM10. However, air basins may use alternative emission reduction strategy that achieves a reduction of less than five percent per year under certain circumstances.

2.7.3 AIR QUALITY MANAGEMENT PLANNING

Currently, the NAAQS and CAAQS are exceeded in most parts of the SCAB. In response, the SCAQMD has adopted a series of Air Quality Management Plans (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 3.8.

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 is known as the Basin. 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 Basin 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 Basin. 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 Basin. SCAQMD created AQMPs which represent a regional blueprint for achieving healthful air on behalf of the 16 million residents of the South Coast Basin. 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 Air Quality Management Plans (AQMPs) and by utilizing uniform CEQA review throughout the Basin.

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," (20). Ozone, NOx, VOC, and CO have been decreasing in the Basin since 1975 and are projected to continue to decrease through 2020 (21). These decreases result primarily from motor vehicle controls and reductions in evaporative emissions. Although vehicle miles traveled in the Basin continue to increase, NOx and VOC levels are decreasing because of the mandated controls on motor vehicles and the replacement of older polluting vehicles with lower-emitting vehicles. NOx emissions from electric utilities have also decreased due to use of cleaner fuels and renewable energy. Ozone contour maps show that the number of days exceeding the national 8-hour standard has decreased between 1997 and 2007. In the 2007 period, there was an overall decrease in exceedance days compared with the 1997 period. The overall trends of PM10 and PM2.5 in the air (not emissions) show an overall improvement since 1975. Direct emissions of PM10 have remained somewhat constant in the Basin and direct emissions of PM2.5 have decreased slightly since 1975. Area wide sources (fugitive dust from roads, dust from construction and demolition, and other sources) contribute the greatest amount of direct particulate matter emissions.

Ozone levels in the SCAB have decreased substantially over the last 30 years as shown in Table 2-4 (22). Today, the maximum measured concentrations are approximately one-third of concentrations within the late 70's.

As with other pollutants, the most recent PM10 statistics also show overall improvement as illustrated in Table 2-5. During the period for which data are available, the 24-hour national annual average decreased by almost 45 percent, from 103.7 $\mu g/m^3$ in 1989 to 57.6 $\mu g/m^3$ in 2014. Although the values in the late 1990's show some variability, this is probably due to meteorology rather than a change in emissions. Despite the overall decrease, ambient concentrations still exceed the State annual and 24-hour PM10 standards. Similar to the ambient concentrations, the calculated number of days above the 24-hour PM10 standards has also shown an overall drop. During 1995, there were 25 calculated days above the national standard. By 2014, there was one calculated national standard exceedance days (23).

Table 2-6 shows the most recent 24-hour average $PM_{2.5}$ concentrations (national) in the SCAB from 1999 through 2014. Overall, the annual average concentrations have decreased by almost 52 percent. The calculated number of days above the national standard also decreased, from about 88 days in 1999 to about 9 days in 2014. The SCAB is currently designated as nonattainment for the State and national $PM_{2.5}$ standards. Measures adopted as part of the upcoming $PM_{2.5}$ SIP, as well as programs to reduce ozone and diesel PM will help in reducing public exposure to $PM_{2.5}$ in this region.

The most recent carbon dioxide concentrations in the SCAB 1986 are shown in Table 2-7 (24). Carbon monoxide concentrations in the SCAB have decreased markedly — a total decrease of more about 80 percent in the peak 8-hour concentration since 1986. 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 2-4: SOUTH COAST AIR BASIN OZONE TREND

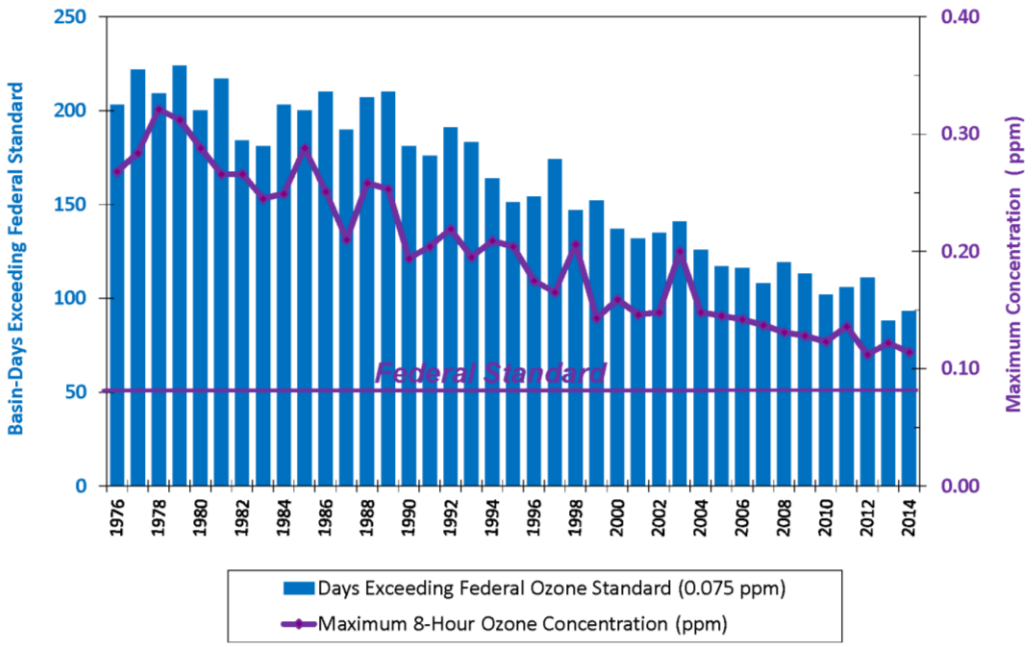


TABLE 2-5: SOUTH COAST AIR BASIN PM_{10} TREND

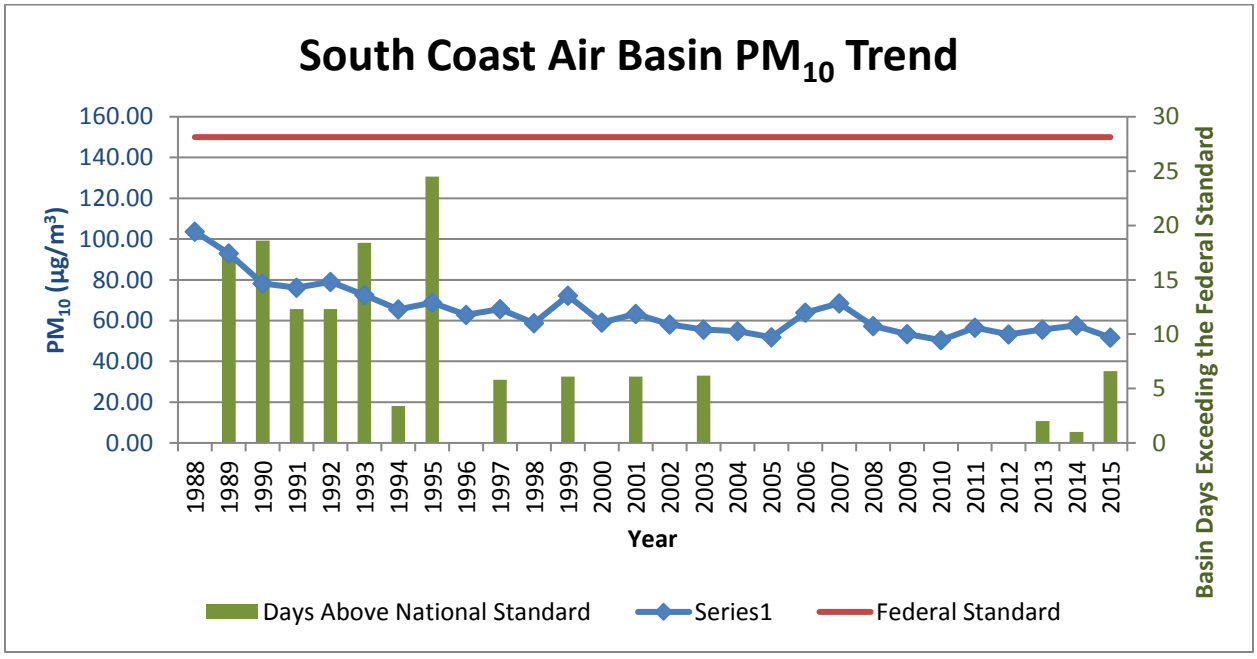


TABLE 2-6: SOUTH COAST AIR BASIN $PM_{2.5}$ TREND

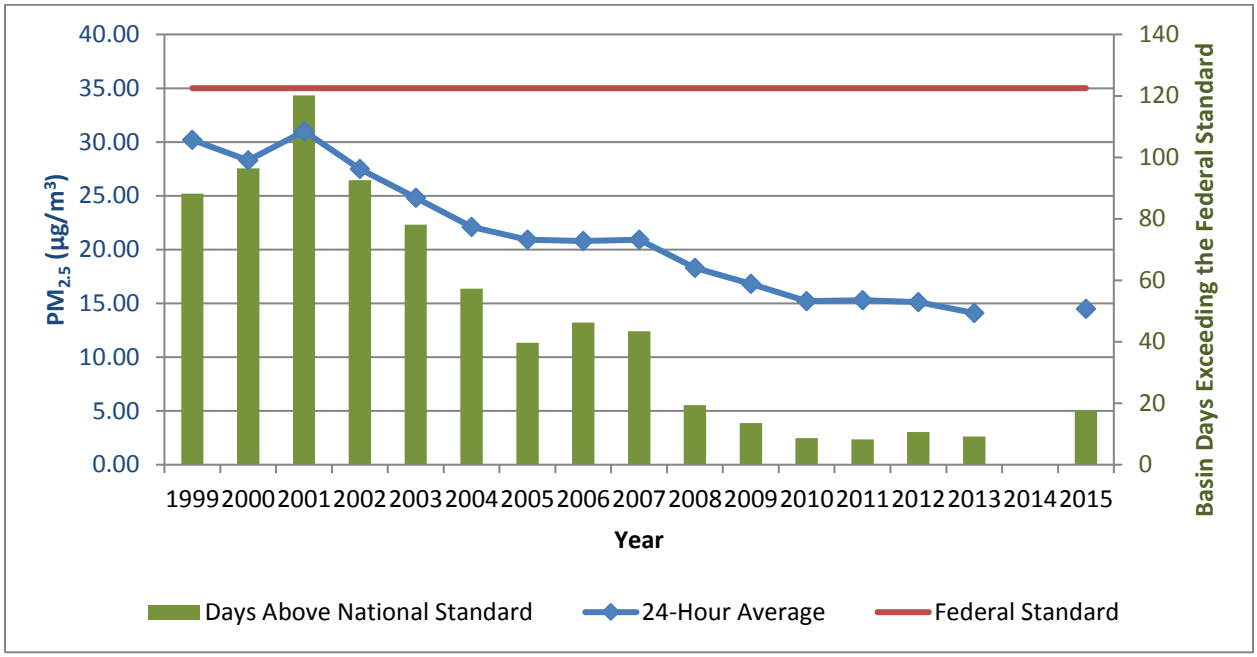
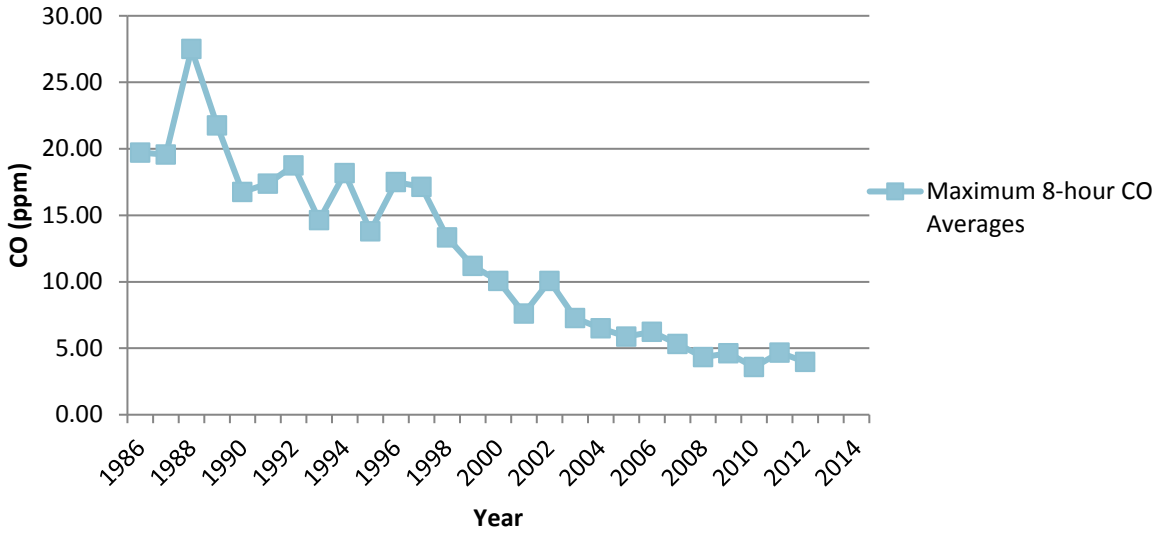


TABLE 2-7: SOUTH COAST AIR BASIN CARBON MONOXIDE TREND



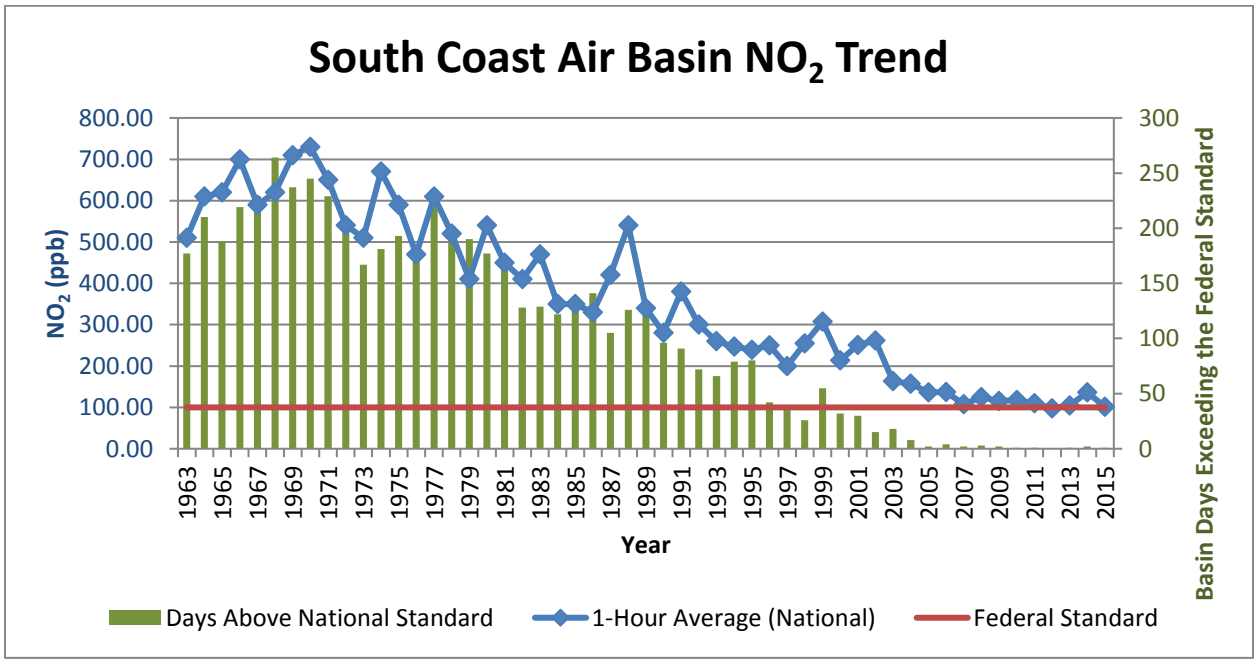
Part of the control process of the SCAQMD's duty to greatly improve the air quality in the Basin is the uniform CEQA review procedures required by SCAQMD's CEQA Handbook (25). The single threshold of significance used to assess Project direct and cumulative impacts has in fact "worked" as evidenced by the track record of the air quality in the Basin 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 Table 2-8 (24). Over the last 50 years, NO_2 values have decreased significantly; the peak 1-hour average for 2013 was almost 74 percent 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 parts per million was adopted by the ARB in February 2007 (26). The new standard is just barely exceeded in the South Coast. NO_2 is formed from NO_x emissions, which also contribute to ozone. As a result, the majority of the future emission control measures will be implemented as part of the overall ozone control strategy. Many of these control measures will target mobile sources, which account for more than three-quarters of California's NO_x emissions. These measures are expected to bring the South Coast into attainment of the State annual average standard.

The American Lung Association website includes data collected from State air quality monitors that are used to compile an annual State of the Air report. These reports have been published over the last 13 years. The latest State of the Air Report compiled for the Basin was in 2010 (27). As noted in this report, air quality in the Basin has significantly improved in terms of both pollution levels and high pollution days over the past three decades. The area's average number of high ozone days dropped from 189.5 day per year in the initial 2000 State of the Air report (1996–1998) to 141.8 in the 2006–2008 report. The region has seen dramatic reduction in particle pollution since the initial State of the Air report (27).

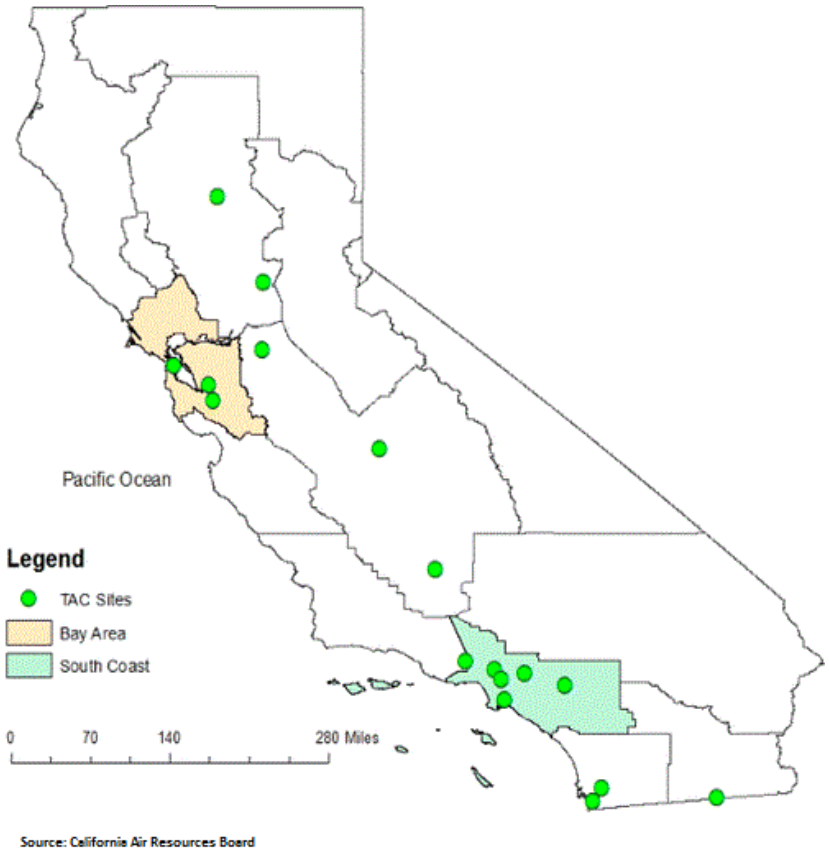
TABLE 2-8: SOUTH COAST AIR BASIN NITROGEN DIOXIDE TREND



TOXIC AIR CONTAMINANTS (TACS) TRENDS

In 1984, as a result of public concern for exposure to airborne carcinogens, the CARB adopted regulations to reduce the amount of air toxic contaminant emissions resulting from mobile and area sources, such as cars, trucks, stationary products, and consumer products. According to the *Ambient and Emission Trends of Toxic Air Contaminants in California* journal article 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 (28). The seven TACs studied shown below include those that are derived from mobile sources: diesel particulate matter (DPM), benzene, and 1,3-butadiene; those that are derived from stationary sources: perchloroethylene and hexavalent chromium; and those derived from photochemical reactions of emitted VOCs: formaldehyde and acetaldehyde[2]. TACs data was gathered at monitoring sites from both the Bay Area and South Coast Air Basins, as shown on Exhibit 2-A; Several of the sites in the SCAB include Reseda, Compton, Rubidoux, Burbank, and Fontana. The decline in ambient concentration and emission trends of these TACs are a result of various regulations CARB has implemented to address cancer risk.

EXHIBIT 2-A: CALIFORNIA TOXIC AIR CONTAMINANT SITES



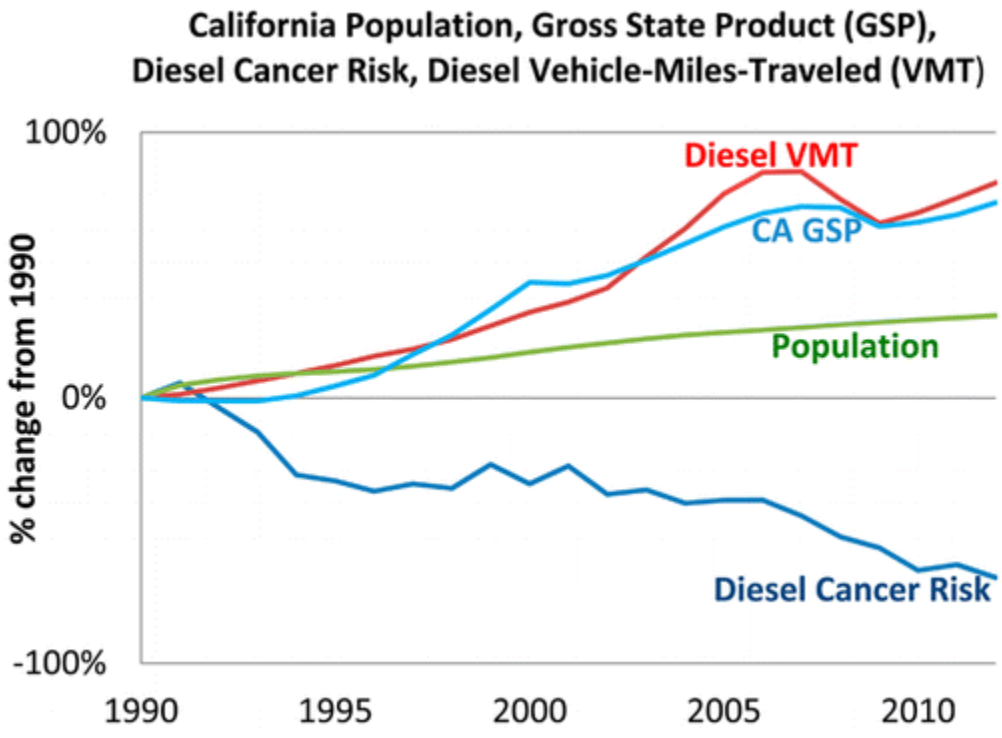
[2] It should be noted that ambient DPM concentrations are not measured directly. Rather, a surrogate method using the coefficient of haze (COH) and elemental carbon (EC) is used to estimate DPM concentrations.

Mobile Source TACs

The CARB introduced two programs that aimed at reducing mobile emissions for light and medium duty vehicles through vehicle emissions controls and cleaner fuel. Since 1996, light-duty vehicles sold in California are equipped with California's second-generation On-Board Diagnostic (OBD-II) system as a result of about half of total car emissions stemming from emissions control device malfunctions. CARB's phase II Reformulated Gasoline (RFG-2) regulation, 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 motor vehicle regulations (28).

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 (<15ppm) diesel fuel. As a result of these measures, DPM concentrations have declined 68%, 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, ARB expects a DPM decline of 71% for 2000-2020.

EXHIBIT 2-B: DIESEL PARTICULATE MATTER AND DIESEL VEHICLE MILES TREND



Source: California Air Resources Board

Stationary Source TACs

Various regulations led to a decrease in perchloroethylene and hexavalent chromium, with a 92% and 86% decline, respectively. By 1993, several local air districts required dry cleaning businesses to use a carbon absorber and refrigerated condenser, as well as, dry-to-dry machines and closed-looped machines instead of vented transfer machines. Starting in 2003, California provided financial incentives for dry cleaners to use other solvents and soon after, the CARB banned the use of perchloroethylene in automotive products, aerosol coatings, and most consumer products. In 2007, CARB's dry cleaning regulation was amended to require phase-out of perchloroethylene machines by 2023, which would further reduce emissions to minimal levels (28).

Hexavalent chromium emissions began to decline in 1988 with the ARB-regulated regulations contributing to more than 97% emission reduction within four years. The various regulations include prohibiting the use of hexavalent chromium in cooling towers (1989), in motor vehicle and mobile equipment coatings (2001), and in thermal spraying operations (2005). By 2005, hexavalent chromium emissions were 99.97% less than in 1987, far exceeding expectations. In 2006, hexavalent chromium emissions were further reduced with the 2006 ARB regulation requiring add-on air pollution control devices and chemical fume suppressants.

Secondary TACs

Between 1996-2012, ambient concentrations of formaldehyde and acetaldehyde declined 22% and 21%, respectively. The decline in these TACs are attributed from increasingly stringent motor vehicle exhaust emission standards, vehicle fleet turnover, fuel reformulation, and the switch from MTBE (formaldehyde precursor) to ethanol in gasoline (28).

As previously discussed, ambient and emissions levels of TACs have reduced significantly from 1990-2012. The overall declining trend in TACs is expected to continue in California from implementation of toxic air controls.

DIESEL REGULATIONS

The CARB and the Ports of Los Angeles and Long Beach have adopted several iterations of regulations for diesel trucks that are aimed at reducing diesel particulate matter (DPM). More specifically, the CARB Drayage Truck Regulation (29), the CARB statewide On-road Truck and Bus Regulation (30), and the Ports of Los Angeles and Long Beach "Clean Truck Program" (CTP) require accelerated implementation of "clean trucks" into the statewide truck fleet (31). In other words, older more polluting trucks will be replaced with newer, cleaner trucks as a function of these regulatory requirements.

Moreover, the average statewide DPM emissions for Heavy Duty Trucks (HHDT), in terms of grams of DPM generated per mile traveled, will 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 basin has had a declining trend since 1990. In 1998, following an exhaustive 10-year scientific assessment process, the State of California Air Resources Board (ARB) identified particulate matter from diesel-fueled engines as a toxic air contaminant. The SCAQMD initiated a comprehensive urban toxic air pollution study, called MATES-II (for Multiple Air Toxics Exposure Study). Diesel particulate matter (DPM) accounts for more than 70 percent of the cancer risk.

In 2008 the SCAQMD prepared an update to the MATES-II study, referred to as MATES-III. MATES-III estimates the average excess cancer risk level from exposure to TACs is an approximately 17% decrease in comparison to the MATES-II study.

Nonetheless, the SCAQMD's most recent in-depth analysis of the toxic air contaminants and their resulting health risks for all of Southern California was from the *Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES IV,"* which shows that cancer risk has decreased more than 55% between MATES III (2005) and MATES IV (2012) (25).

MATES-IV study represents the baseline health risk for a cumulative analysis. MATES-IV calculated cancer risks based on monitoring data collected at ten fixed sites within the South Coast Air Basin (SCAB). None of the fixed monitoring sites are within the local area of the Project site. However, MATES-IV has extrapolated the excess cancer risk levels throughout the basin by modeling the specific grids. MATES-IV modeling predicted an excess cancer risk of 826.01 in one million for the Project area. DPM is included in this cancer risk along with all other TAC sources. DPM accounts for 68% of the total risk shown in MATES-IV. Cumulative Project generated TACs are limited to DPM.

2.9 EXISTING PROJECT SITE AIR QUALITY CONDITIONS

Existing air quality conditions at the Project site would generally reflect ambient monitored conditions previously presented previously at Table 2-3.

3 PROJECT AIR QUALITY IMPACT

3.1 INTRODUCTION

The Project has been evaluated to determine if it will violate an air quality standard or contribute to an existing or projected air quality violation. Additionally, the Project has been evaluated to 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 federal or state ambient air quality standard. The significance of these potential impacts is described in the following section.

3.2 STANDARDS OF SIGNIFICANCE

The SCAQMD has developed regional and localized significance thresholds for regulated pollutants, as summarized at Table 3-1 (32). The SCAQMD's CEQA Air Quality Significance Thresholds (March 2015) 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 3-1: MAXIMUM DAILY EMISSIONS THRESHOLDS[A]

Pollutant	Construction	Operations
Regional Thresholds		
NOx	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM10	150 lbs/day	150 lbs/day
PM2.5	55 lbs/day	55 lbs/day
Sox	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Localized Thresholds		
CO (1-Hour)	20.0 ppm	20.0 ppm
CO (8-Hour)	9.0 ppm	9.0 ppm
NO2	0.18 ppm	0.18 ppm
PM10	10.4 µg/m3	2.5 µg/m3
PM2.5	10.4 µg/m3	2.5 µg/m3

[A]: Based on SCAQMD Air Quality Significance Thresholds, March 2015

3.3 CALIFORNIA EMISSIONS ESTIMATOR MODEL™ EMPLOYED TO ESTIMATE AQ EMISSIONS

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

On October 14, 2016, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) and other California air districts, released the latest version of the California Emissions Estimator Model™ (CalEEMod™) v2016.3.1. The purpose of this model is to calculate construction-source and operational-source criteria pollutant (NO_x, VOC, PM_{10}, $PM_{2.5}$, SO_x, and CO) and greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures (33). 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 Appendix 3.2.

3.4 CONSTRUCTION EMISSIONS

Construction activities associated with the Project will result in emissions of CO, VOCs, NOx, SOx, PM10, and PM2.5. Construction related emissions are expected from the following construction activities:

- Demolition
- Site Preparation
- Grading
- Building Construction
- Architectural Coating
- Paving
- Construction Workers Commuting

Construction is expected to commence in June 2017 and will last through December 2018. The construction schedule utilized in the analysis, shown in Table 3-2, 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.[3] The duration of construction activity was estimated based on past project experience and a 2018 opening year. A detailed summary of construction equipment, shown in Table 3-3, was based on past project experience and consultation with the Project engineer. The site specific construction fleet may vary due to specific project needs at the time of construction. The duration of construction activity and associated equipment both represent a reasonable approximation of the expected construction fleet as required per CEQA guidelines. Please refer to specific detailed modeling inputs/outputs contained in Appendix 3.1 of this analysis.

Dust is typically a major concern during rough 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

[3] As shown in the California Emissions Estimator Model (CalEEMod) User's Guide Version 2013.2, Table 3.4 "OFFROAD Equipment Emission Factors" 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 3-2: CONSTRUCTION DURATION

Phase Name	Start Date	End Date	Days
Demolition	06/01/2017	07/12/2017	30
Site Preparation	07/13/2017	09/06/2017	40
Grading	09/07/2017	11/22/2017	55
Building Construction	11/23/2017	09/12/2018	210
Architectural Coating	09/13/2018	11/21/2018	50
Paving	11/22/2018	12/19/2018	20

TABLE 3-3: CONSTRUCTION EQUIPMENT ASSUMPTIONS

Activity	Equipment	Number	Hours Per Day
Demolition	Concrete/ Industrial Saws	1	8
	Excavators	1	8
	Rubber Tired Dozers	1	8
	Water Truck	1	8
Site Preparation	Water Trucks	2	8
	Rubber Tired Dozer	2	8
	Graders	1	8
	Tractors/Loaders/Backhoes	1	8
Grading	Water Trucks	2	8
	Scraper	8	8
	Grader	1	8
	Rubber Tired Dozer	2	8
	Tractors/Loaders/Backhoes	2	8
Building Construction	Welder	2	8
	Forklift	5	8
	Generator Sets	2	8
	Water Trucks	1	8
	Cranes	2	8
Paving	Pavers	2	8
	Rollers	2	8
	Paving Equipment	2	8
	Water Trucks	1	8
Architectural Coatings	Air Compressor	2	8

moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). The CalEEMod model was utilized to calculate fugitive dust emissions resulting from this phase of activity. It is our understanding the Project will be balanced (will not require import/export of soil).

The Project site is currently occupied by the San Bernardino Public Golf Course. Existing structures on-site totaling approximately 15,575 square feet will be demolished prior to building construction. The concrete debris will be broken up and hauled off-site to a nearby recycling facility.

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 the applicant and the CalEEMod model.

OFF-SITE UTILITY AND INFRASTRUCTURE IMPROVEMENTS

The Project will also construct a proposed off-site private street access easement extending from the Project site's northern boundary. The easement would extend to Dumas Street, then north and east to existing Washington Avenue, then north to intersect with Orange Show Road. Interim roadway improvements would occur within this easement to provide ingress and egress between the Project site and Orange Show Road. Additionally, 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.

Notwithstanding, impacts associated with the off-site private street access and other off-site utility and infrastructure improvements would not exceed the maximum emissions identified for Project-related construction activities. As such, no impacts beyond what has already been identified in this report are expected to occur.

3.4.1 CONSTRUCTION EMISSIONS SUMMARY

Impacts Without Mitigation

Impacts without mitigation assume compliance with applicable SCAQMD Rules. The SCAQMD Rules that are currently applicable during construction activity for this Project include but are not limited to: Rule 1113 (Architectural Coatings) (34); Rule 431.2 (Low Sulfur Fuel) (35); Rule 403 (Fugitive Dust) (36); and Rule 1186 / 1186.1 (Street Sweepers) (37). As such, credit for Rule 1113 and Rule 403 have been taken.

The estimated maximum daily construction emissions without mitigation are summarized on Table 3-4. Detailed construction model outputs are presented in Appendix 3.1. Under the assumed scenarios, emissions resulting from the Project construction would exceed criteria pollutant thresholds established by the SCAQMD for emissions of NOx (before mitigation).

TABLE 3-4: MAXIMUM DAILY PEAK CONSTRUCTION EMISSIONS SUMMARY (WITHOUT MITIGATION)

Year	Emissions (pounds per day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
2017	15.87	187.77	107.23	0.24	16.61	10.40
2018	35.35	82.32	80.08	0.24	13.90	5.47
Maximum Daily Emissions	**35.35**	**187.77**	**107.23**	**0.24**	**16.61**	**10.40**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Impacts With Mitigation

The estimated maximum daily construction emissions with mitigation are summarized in Table 3-5. Detailed construction model outputs are presented in Appendix 3.1. Mitigation measure MM AQ-1 is recommended to reduce the severity of the impact. After implementation of the recommended mitigation measures, construction activity emissions would not exceed the numerical thresholds established by the SCAQMD for any criteria pollutant. Therefore, a less than significant impact would occur for Project-related construction-source emissions.

TABLE 3-5: MAXIMUM DAILY PEAK CONSTRUCTION EMISSIONS SUMMARY (WITH MITIGATION)

Year	Emissions (pounds per day)					
	VOC	NOx	CO	SOx	PM10	PM2.5
2017	12.82	91.27	90.27	0.24	14.40	6.69
2018	35.35	82.32	80.08	0.24	13.90	5.47
Maximum Daily Emissions	**35.35**	**91.27**	**90.27**	**0.24**	**14.4**	**6.69**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

3.5 OPERATIONAL EMISSIONS

Operational activities associated with the proposed Project will result in emissions of VOC, NOX, CO, SOX, PM10, and PM2.5. Operational emissions would be expected from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- On-Site Equipment Emissions

3.5.1 AREA SOURCE EMISSIONS

Architectural Coatings

Over a period of time the buildings that are 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 the CalEEMod model.

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 ozone and other photochemically reactive pollutants. The emissions associated with use of consumer products were calculated based on defaults provided within the CalEEMod model.

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. The emissions associated with landscape maintenance equipment were calculated based on assumptions provided in the CalEEMod model.

3.5.2 ENERGY SOURCE EMISSIONS

Combustion Emissions Associated with Natural Gas and Electricity

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 is generally excluded from the evaluation of significance and only natural gas use is considered. The emissions associated with natural gas use were calculated using the CalEEMod model.

3.5.3 MOBILE SOURCE EMISSIONS

Vehicles

Project-related operational air quality impacts derive predominantly from mobile sources. In this regard, approximately 94 percent (by weight) of all Project operational-source emissions would be generated by mobile sources (vehicles). Neither the Project Applicant nor the City has any regulatory control over these tail pipe emissions. Rather, vehicle tail pipe source emissions are regulated by CARB and USEPA. As summarized previously herein, as the result of CARB and USEPA actions, Basin-wide vehicular-source emissions have been reduced dramatically over the past years and are expected to further decline as clean vehicle and fuel technologies improve.

Project mobile source air quality impacts are dependent on both overall daily vehicle trip generation and the effect of the Project on peak hour traffic volumes and traffic operations in the vicinity of the Project. The Project related operational air quality impacts derive primarily from vehicle trips generated by the Project. Trip characteristics available from the report, Gateway South Building 4 Traffic Impact Analysis (Urban Crossroads) 2017 were utilized in this analysis (38). It should be noted that the Project's traffic study presents the total Project vehicle trips in terms of Passenger Car Equivalents (PCEs) in an effort to recognize and acknowledge the effects of heavy vehicles at the study area intersections. Notwithstanding, for purposes of the air quality study, the PCE trips were not used. Rather, to more accurately estimate and model vehicular-source emissions, the actual number of vehicles, by vehicle classification (e.g., passenger cars (including light trucks), heavy trucks) were used in the analysis.

For purposes of this analysis, the following ITE land use code 152 (High-Cube Warehousing) has been used to derive site specific trip generation. High-cube warehouse/distribution centers (ITE Land Use Code 152) are a unique land use type within the larger, more generalized industrial land use category. ITE's most recent edition of the Trip Generation manual (ITE 9th Edition), published in 2012, defines "high-cube warehouses" as "…used for storage of materials, goods and merchandise prior to their distribution to retail outlets, distribution centers or other warehouses. These facilities are typically characterized by ceiling heights of at least 24 feet with small employment counts due to a high level of mechanization." The average square footage for the sites surveyed for high-cube warehouse/distribution center (Land Use 152) use is above 500,000 square feet. The number of sites observed in the compilation of this data ranges from 57-70 sites of which more than 20 sites exceed 1,000,000 square feet in gross floor area.

The weighted average daily trip generation rate for high-cube warehouse (Land Use 152) use is 1.68 trips per thousand square feet (TSF). Total vehicle mix percentages were also obtained from the ITE Trip Generation manual in conjunction with the South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type (39). The SCAQMD is currently recommending the use of the ITE Trip Generation manual in conjunction with their truck mix by axle-type to better quantify trip rates associated with local warehouse and distribution projects, as truck emission represent more than 90 percent of air quality impacts from these projects. This recommended procedure has been utilized for the purposes of this analysis in effort to be consistent with other technical studies being prepared for the Project.

The percentage of trucks has been determined from the table shown on page 267 of the ITE *Trip Generation* manual. As shown on page 267, the truck trip generation rate for weekday daily traffic is 0.64 or 38.1% of the total traffic. Trip generation for heavy trucks was further broken down by truck type (or axle type). The total truck percentage is comprised of 3 different truck types: 2-axle, 3-axle, and 4+-axle trucks. For the purposes of this analysis, the percentage of trucks, by axle type, were obtained from the SCAQMD interim recommended truck mix. The SCAQMD has recently performed surveys of existing facilities and compiled the data to provide interim guidance on the mix of heavy trucks for these types of high-cube warehousing/distribution

facilities. Based on this interim guidance from the SCAQMD, the following truck fleet mix was utilized for the purposes of estimating the truck trip generation for the site: 22.03% of the total trucks as 2-axle trucks, 17.76% of the total trucks as 3-axle trucks, and 60.31% of the total trucks as 4+-axle trucks.

3.5.3.1 Trip Length

Background

A technical deficiency inherent in calculating the projected vehicle emissions associated with any project is related to the estimation of trip length and vehicle miles traveled (VMT). VMT for a given project is calculated by the total number of vehicle trips to/from the Project x average trip length. This method of estimating VMT for use in calculating vehicle emissions likely results in the over-estimation and double-counting of emissions because, for a distribution warehouse center such as the Project, the land use is likely to attract (divert) existing vehicle trips that are already on the circulation system as opposed to generating new trips. In this regard, the Project would, to a large extent, redistribute existing mobile-source emissions rather than generate additional emissions within the Basin. As such, the estimation of the Gateway South Building 4 Project's vehicular-source emissions is likely overstated in that no credit for, or reduction in, emissions is assumed based on diversion of existing trips.

Provided below is a summary of the VMT recommendations of the SCAQMD and SCAG, followed by a description of the methodology used to calculate the VMT rates used in this AQIA.

SCAQMD Recommendation

In the last five years, the SCAQMD has provided numerous comments on the trip length for warehouse/distribution and industrial land use projects (40). The SCAQMD asserts that the model-default trip length in CalEEMod™ and the URBan EMISsions (URBEMIS) 2007 model (version 9.2.4) would underestimate emissions. The SCAQMD asserts that for warehouse, distribution center, and industrial land use projects, most of the heavy-duty trucks would be hauling consumer goods, often from the Ports of Long Beach and Los Angeles (POLA and POLB) and/or to destinations outside of California. The SCAQMD states that for this reason, the CalEEMod™ and the URBan EMISsions model default trip length (approximately 12.6 miles) would not be representative of activities at like facilities. The SCAQMD generally recommends the use of a 40-mile one-way trip length.

Southern California Association of Government (SCAG) Heavy Duty Truck Model

SCAG is comprised of six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 190 cities in Southern California, and is the organization charged with addressing and resolving short- and long-term regional policy issues. The SCAG region also consists of 14 sub-regional entities recognized by the Regional Council as partners in the regional policy planning process. The SCAG region has more than 19 million residents and encompasses more than 38,000 square miles, representing the largest and most diverse region in the country.

SCAG maintains a regional transportation model. In its most recent (2008) transportation validation for the 2003 Regional Model, SCAG indicates the average internal truck trip length for the SCAG region is 5.92 miles for Light Duty Trucks, 13.06 miles for Medium Duty Trucks, and 24.11 miles for Heavy Duty Trucks.

Approach for Analysis of the Project

The SCAQMD approach identified above is deemed to be the most applicable for the Project. This same methodology is employed in analyses for similar projects in the City and other jurisdictions within the County, and is considered by the Lead Agency to be appropriate and accurate.

Two separate model runs were utilized in order to more accurately model emissions resulting from vehicle operations. The first run analyzed passenger car emissions, which incorporated a default trip length of 16.6 miles for passenger cars within San Bernardino County and a fleet mix of 100% Light-Duty-Auto vehicles (LDA). The second run analyzed truck emissions, which incorporated an average truck trip length of 40 miles and a fleet mix of: 22.03% of Light-Heavy-Duty (LHD), 17.66% of Medium-Heavy-Duty (MHD), and 60.31% of Heavy-Heavy-Duty (HHD). This proportional truck mix by axle type is based on information provided in the Project's traffic study. The estimated emissions resulting from vehicle operations are summarized in Section 3.5.5 (presented later in this report.) Detailed emission calculations are provided in Appendix 3.2.

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 tire wear particulates. The emissions estimates for travel on paved roads were calculated using the CalEEMod model.

3.5.4 ON-SITE EQUIPMENT EMISSIONS

It is common for an industrial warehouse project to require cargo handling equipment to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. Yard trucks have a horsepower (hp) range of approximately 175 hp to 200 hp (41). Based on the latest available information from SCAQMD (42); high-cube warehouse projects typically have 3.6 yard trucks per million square feet of building space. For this particular Project, on-site modeled operational equipment includes four) yard tractors operating at 4 hours a day (43) for 365 days of the year[4]. In addition to the use of yard trucks operating at the Project site, forklifts are a common piece of equipment used in warehouse operations. The Project includes four 89 hp yard forklifts operating at 4 hours a day for 365 days of the year interior to the building. However, for purposes of the

[4] 4 hour daily on-site operation of the yard trucks is based on the Southern California International Gateway Recirculated Draft EIR. Table C1.2-BL-17 *Activity Data for Existing Business CHE – 2010 Baseline* indicates that the average annual hours of operation for all diesel Container Handling Equipment, Forklifts, and Yard Tractors totaled 72,187 annual operating hours. The total number of pieces of equipment equals 52. As such, 72,187/52 = 1,388 annual hours per piece of equipment. 1,388 annual hours per piece of equipment/365 days = an average of 3.80 hours per day per piece of equipment. As a conservative measure this is rounded up to 4 hours for analytical purposes.

AQIA forklifts are not included in the calculations since there is no diesel exhaust associated with the forklifts as they are assumed to be electric consistent with industry standards.

3.5.5 OPERATIONAL EMISSIONS SUMMARY

Impacts Without Mitigation

Operational-source emissions without implementation of mitigation measures are summarized on Table 3-6. As indicated, the Project would exceed regional thresholds of significance established by the SCAQMD for emissions of VOCs and NOx.

TABLE 3-6: SUMMARY OF OPERATIONAL EMISSIONS (WITHOUT MITIGATION

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	22.03	3.24E-03	0.35	3.00E-05	1.25E-03	1.25E-03
Energy Source	0.06	0.56	0.47	3.35E-03	0.04	0.04
Mobile (Trucks)	8.46	246.82	66.96	0.80	26.19	8.65
Mobile (Passenger Cars)	2.23	3.16	44.01	0.13	14.04	3.77
On-Site Equipment	0.67	8.99	3.23	0.01	0.29	0.27
Total Maximum Daily Emissions	**33.45**	**259.53**	**115.02**	**0.93**	**40.27**	**12.46**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	22.03	3.24E-03	0.35	3.00E-05	1.25E-03	1.25E-03
Energy Source	0.06	0.56	0.05	3.35E-03	4.00E-02	4.00E-02
Mobile (Trucks)	8.54	253.73	67.64	0.79	26.2	8.66
Mobile (Passenger Cars)	1.84	3.3	35.57	0.12	14.04	3.77
On-Site Equipment	0.67	8.99	3.23	0.01	0.29	0.27
Total Maximum Daily Emissions	**33.14**	**257.59**	**106.84**	**0.91**	**40.28**	**12.47**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Impacts With Mitigation Measures

Operational-source emissions with implementation of mitigation measures are summarized on Table 3-7. Application of MM AQ-2 through MM AQ-5 would generally reduce area-source pollutant emissions. However, as noted previously herein, for the purposes of this analysis, unmitigated and mitigated area-source air pollutant emissions generated by the Project are considered substantively equal. As a conservative measure, no reduction for any of the measures listed under MM AQ-2 through MM AQ-5 is taken in the analysis. Moreover, and as also discussed previously, approximately 94 percent of all operational-source emissions (by weight) would be

generated by Project mobile sources (traffic). Neither the Project Applicant nor the Lead Agency can substantively or materially affect reductions in Project mobile-source emissions.

Accordingly, and as indicated at Table 3-7, even after implementation of the recommended mitigation measure, Project operational-source NOx emissions exceedances would persist.

TABLE 3-7: SUMMARY OF OPERATIONAL EMISSIONS (WITH MITIGATION)

Operational Activities – Summer Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	22.03	3.24E-03	0.35	3.00E-05	1.25E-03	1.25E-03
Energy Source	0.06	0.56	0.47	3.35E-03	0.04	0.04
Mobile (Trucks)	8.46	246.82	66.96	0.80	26.19	8.65
Mobile (Passenger Cars)	2.23	3.16	44.01	0.13	14.04	3.77
On-Site Equipment	0.67	8.99	3.23	0.01	0.29	0.27
Total Maximum Daily Emissions	**33.45**	**259.53**	**115.02**	**0.93**	**40.27**	**12.46**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

Operational Activities – Winter Scenario	Emissions (pounds per day)					
	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Area Source	22.03	3.24E-03	0.35	3.00E-05	1.25E-03	1.25E-03
Energy Source	0.06	0.56	0.05	3.35E-03	4.00E-02	4.00E-02
Mobile (Trucks)	8.54	253.73	67.64	0.79	26.2	8.66
Mobile (Passenger Cars)	1.84	3.3	35.57	0.12	14.04	3.77
On-Site Equipment	0.67	8.99	3.23	0.01	0.29	0.27
Total Maximum Daily Emissions	**33.14**	**257.59**	**106.84**	**0.91**	**40.28**	**12.47**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**YES**	**NO**	**NO**	**NO**	**NO**

3.6 LOCALIZED SIGNIFICANCE - CONSTRUCTION ACTIVITY

BACKGROUND ON LOCALIZED SIGNIFICANCE THRESHOLD (LST) DEVELOPMENT

The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (Methodology) (44). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs).

The significance of localized emissions impacts depends on whether ambient levels in the vicinity of any given project are above or below State standards. In the case of CO and NO2, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already

exceed a state or federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM10 and PM2.5; both of which are non-attainment pollutants.

The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4[5]. 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 SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology) (45).

APPLICABILITY OF LSTS FOR THE PROJECT

For this Project, the appropriate Source Receptor Area (SRA) for the LST analysis is the San Bernardino County 2 monitoring station (SRA 34). LSTs apply to carbon monoxide (CO), nitrogen dioxide (NO2), particulate matter ≤ 10 microns (PM10), and particulate matter ≤ 2.5 microns (PM2.5). The SCAQMD produced look-up tables for projects less than or equal to 5 acres in size.

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:

- CalEEMod is utilized to determine the maximum daily on-site emissions that will occur during construction activity.
- The SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds (46) is used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod.
- If the total acreage disturbed is less than or equal to five 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 pounds per day that can be compared to CalEEMod outputs.
- If the total acreage disturbed is greater than five acres per day (as is the case with the Project), then LST impacts are appropriately evaluated through dispersion modeling.

EMISSIONS CONSIDERED

SCAQMD's Methodology clearly states that "off-site mobile emissions from the Project should NOT be included in the emissions compared to LSTs (47)." Therefore, for purposes of the

5 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."

construction LST analysis only emissions included in the CalEEMod "on-site" emissions outputs were considered.

MAXIMUM DAILY DISTURBED-ACREAGE

Maximum localized air pollutant emissions concentrations would occur during Project site grading activities. Table 3-8 is used to determine the maximum daily disturbed-acreage during site grading for purposes of modeling localized emissions. Based on Table 3-8, the proposed Project could actively disturb approximately 9.5 acres per day during the grading phase of construction.

TABLE 3-8 : MAXIMUM DAILY DISTURBED-ACREAGE

Construction Phase	Equipment Type	Equipment Quantity	Acres graded per 8-hour day	Operating Hours per Day	Acres graded per day
Grading	Rubber Tired Dozers	2	0.5	8	1
	Crawler Tractors	0	0.5	8	0
	Graders	1	0.5	8	0.5
	Scrapers	8	1	8	8
Total acres graded per day during Grading					9.5

Sensitive 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"; they are also known to be locations where an individual can remain for 24 hours.

Sensitive receptors in the vicinity of the Project site are illustrated at Exhibit 3-A, and include the single-family residential home at location R1 and R2, the church uses at locations R3 and R4, and the Santa Ana River at location R6. Location R5 represents the nearest business office use, and location R6 represents a nearby hotel use south of the Project site. The nearest sensitive receptor is existing residential home represented at location R1 at a distance of approximately 104 feet/32 meters northeast of the Project's proposed street connection to Washington Avenue.

Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. To assess the stationary source operational and construction air impacts, the following 6 sensitive receptor locations, as shown on Exhibit 3-A, were identified.

R1: Located roughly 140 feet southeast of the Project site on Washington Avenue, R1 represents the existing residential homes near proposed Project site access.

R2: Located approximately 218 feet east of the Project site on Dumas Street, R2 represents the existing residential homes closest to the Project site.

EXHIBIT 3-A: SENSITIVE RECEPTOR LOCATIONS

R3: Location R2 represents existing church located roughly 292 feet north of the Project site on Dumas Street.

R4: Location R3 represents the existing church situated north of the Project site at a distance of approximately 585 feet on Dumas Street.

R5: Location R4 represents the existing Inland Regional Center at a distance of approximately 228 feet east of the Project site across Waterman Avenue.

R6: Location R5 represents the Santa Ana River area located south of the Project site at a distance of approximately 245 feet.

R7: Location R6 represents the existing Quality Inn situated approximately 911 feet south of the Project site on Waterman Avenue.

DISPERSION MODELING

In order to estimate localized pollutant concentrations resulting from Project construction, the SCAQMD-approved AERMOD dispersion model was utilized. The modeling approach utilized is discussed as follows:

Sources

Universal Transverse Mercator (UTM) coordinates for North American Datum (NAD) 83 were used to locate the project boundaries, each volume source location, and receptor locations in the project vicinity.

As discussed above, construction activity is anticipated to disturb a maximum area of approximately 9.5 acres on any given day (during peak grading activity), thus it was conservatively estimated that emissions would be concentrated over this area. It should be noted that in order to model worst-case conditions, the highest daily peak emissions resulting from grading activity were utilized.

In order to model fugitive dust emissions (PM_{10} and $PM_{2.5}$) resulting from Project grading activity, an area source of 9.5 acres was utilized. Per SCAQMD LST methodology, a ground level release height and a 1 meter (~3.28 feet) initial vertical dimension (sigma z) were utilized in order to account for the vertical spread of emissions.

In order to account for equipment exhaust emissions of PM_{10}, $PM_{2.5}$, NO_2, and CO, a total of 25 volume sources measuring 40 meters by 40 meters were spread over an area of approximately 9.5 acres. In order to represent equipment exhaust emissions, a release height of 5.0 meters was utilized, which is consistent with SCAQMD's LST guidance.

Meteorological Data and Model Options

In order to account for meteorological conditions at the Project site, data from the Fontana monitoring station was utilized, as this is the nearest station to the Project site for which meteorological data is available. Additionally, a receptor height of 2 meters and regulatory default options, and the urban dispersion coefficient were utilized.

Impacts Without BACMs and Mitigation

Without BACMs and mitigation, emissions during the peak construction activity would not exceed the SCAQMD's localized significance thresholds. Table 3-9 identifies the localized impacts without BACMs and mitigation at the nearest receptor location in the vicinity of the Project.

TABLE 3-9: LOCALIZED SIGNIFICANCE SUMMARY PEAK CONSTRUCTION (WITHOUT MITIGATION)

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.10	0.08	0.09	4.9	2.31
Background Concentration [A]	4.0	2.4	0.07		
Total Concentration	**4.10**	**2.48**	**0.16**	**4.9**	**2.31**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data
Note: PM10 and PM2.5 concentrations are expressed in µg/m3. All others are expressed in ppm

Impacts with BACMs and Mitigation

After the implementation of applicable BACMs and mitigation measures (outlined in Section 4.0), emissions during the peak construction activity will be reduced further and would not exceed the SCAQMD's localized significance threshold for any of the applicable emissions. Table 3-10 identifies the localized impacts with implementation of BACMs and mitigation measures at the nearest receptor location in the vicinity of the Project. Outputs from the model runs for construction LSTs are provided in Appendix 3.3.

TABLE 3-10: LOCALIZED SIGNIFICANCE SUMMARY PEAK CONSTRUCTION (WITH MITIGATION)

Peak Construction	CO		NO_2	PM_{10}	$PM_{2.5}$
	Averaging Time				
	1-Hour	8-Hour	1-Hour	24-Hours	24-Hours
Peak Day Localized Emissions	0.03	0.03	0.04	4.38	1.86
Background Concentration [A]	4.0	2.4	0.07		
Total Concentration	**4.03**	**2.43**	**0.11**	**4.38**	**1.86**
SCAQMD Localized Significance Threshold	20	9	0.18	10.4	10.4
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**

[A] Highest concentration from the last three years of available data
Note: PM_{10} and $PM_{2.5}$ concentrations are expressed in $\mu g/m^3$. All others are expressed in ppm

3.7 LOCALIZED SIGNIFICANCE – LONG-TERM OPERATIONAL ACTIVITY

For operational LSTS, on-site passenger car and truck travel emissions were modeled in AERMOD using emission factors for CO, NO2, PM10, and PM2.5 generated with the 2014 version of the Emission FACtor model (EMFAC) developed by the ARB. EMFAC 2014 is a mathematical model that was developed to calculate emission rates from motor vehicles that operate on highways, freeways, and local roads in California and is commonly used by the ARB to project changes in future emissions from on-road mobile sources (48). Outputs from the model runs for operational LSTs are provided in Appendix 3.3.

For this Project, criteria pollutant emission factors were generated by running EMFAC 2014 in EMFAC Mode for vehicles in the SCAQMD district. The EMFAC Mode generates emission factors in terms of grams of pollutant emitted per vehicle activity and can calculate a matrix of emission factors at specific values of temperature, relative humidity, and vehicle speed. The model was run for speeds traveled in the vicinity of the Project. The vehicle travel speeds for each segment modeled are summarized below.

- Idling – assumed 15 minutes of idling per two-way vehicle trip for passenger cars and trucks
- 5 miles per hour – on-site vehicle movement including driving and maneuvering

Modeled sensitive receptors were placed at discrete residential and non-residential locations adjacent to the Project site.

Each on-site idling and travel route was modeled as a line source (made up of multiple adjacent volume sources). The emission rate for each volume source was calculated by multiplying the emission factor by the number of trips and the distance traveled along each roadway segment and dividing the result by the number of volume sources along that roadway. Emissions factors calculations are provided in more detail at Appendix 3.3.

On-site vehicular idling was estimated to occur as vehicles enter and travel through the facility. Although the Project is required to comply with CARB's idling limit of 5 minutes, staff at SCAQMD recommends that the on-site idling emissions should be estimated for 15 minutes of idling (49). As such, this analysis estimated truck idling at 15 minutes, consistent with SCAQMD's recommendation.

LOCALIZED THRESHOLDS FOR OPERATIONAL ACTIVITY

As Shown on Table 3-11, operational emissions would not exceed the SCAQMD's localized significance thresholds for any criteria pollutant at the nearest sensitive receptor. Therefore, the Project will have a less than significant localized impact during operational activity, and no mitigation is required.

TABLE 3-11 LOCALIZED SIGNIFICANCE SUMMARY OPERATIONS

Operation	CO		NO_2		PM_{10}		$PM_{2.5}$
	Averaging Time						
	1-Hour	8-Hour	1-Hour	Annual	24-Hours	Annual	24-Hours
Peak Day Localized Emissions	0.016	0.011	0.022	0.004	0.68	0.22	0.62
Background Concentration [A]	4.0	2.4	0.07	0.021			
Total Concentration	**4.02**	**2.41**	**0.09**	**0.025**	**0.68**	**0.22**	**0.62**
SCAQMD Localized Significance Threshold	20	9	0.18	0.03	2.5	1	2.5
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

A Highest concentration from the last three years of available data (see Table 2-3 presented previously).
Note: PM10 and PM2.5 concentrations are expressed in µg/m3. All others are expressed in ppm

3.8 CO "HOT SPOT" ANALYSIS

As discussed below, the Project would not result in potentially adverse CO concentrations or "hot spots." Further, detailed modeling of Project-specific carbon monoxide (CO) "hot spots" 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 1993 Handbook, the SCAB was designated nonattainment under the California AAQS and National AAQS for CO (50).

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, as previously noted in Table 2-2. Also, CO concentrations in the Project vicinity have steadily declined, as indicated by historical emissions data presented previously at Table 2-3.

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 3-14.

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, 9.3 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 8.6 ppm were due to the ambient air

measurements at the time the 2003 AQMP was prepared (50). In contrast, the ambient 8-hr CO concentration within the Project study area is estimated at 1.4 ppm—1.6 ppm (please refer to previous Table 2-3). 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.

Similar considerations are also employed by other Air Districts when evaluating potential CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact (51).

Traffic volumes generating the CO concentrations for the "hot spot" analysis, shown on Table 3-15. The busiest intersection evaluated was that at Wilshire Blvd. and Veteran Ave., which has a daily traffic volume of approximately 100,000 vehicles per day. The 2003 AQMP estimated that the 1-hour concentration for this 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).[6] At buildout of the Project, the highest average daily trips on a segment of road would be 47,900 daily trips on S. Waterman Ave. north of I-10 Fwy which is lower than the highest daily traffic volumes generated at the busiest intersection in the CO "hot spot" analysis (52).

The proposed 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, as shown on Table 3-16. Therefore, CO "hot spots" are not an environmental impact of concern for the proposed Project. Localized air quality impacts related to mobile-source emissions would therefore be less than significant.

TABLE 3-14: CO MODEL RESULTS

Intersection Location	Carbon Monoxide Concentrations (ppm)		
	Morning 1-hour	Afternoon 1-hour	8-hour
Wilshire-Veteran	4.6	3.5	4.2
Sunset-Highland	4	4.5	3.9
La Cienega-Century	3.7	3.1	5.8
Long Beach-Imperial	3	3.1	9.3

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

TABLE 3-15: TRAFFIC VOLUMES FOR INTERSECTIONS EVALUATED IN AQMP

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

TABLE 3-16: PROJECT PEAK HOUR TRAFFIC VOLUMES

Intersection Location	Peak Traffic Volumes (vph)				
	Northbound (AM/PM)	Southbound (AM/PM)	Eastbound (AM/PM)	Westbound (AM/PM)	Total (AM/PM)
S.E. St./ W. Orange Show Rd.	475/865	242/789	2,286/1,887	576/1,456	3,579/4,997
S. Waterman Ave./ E. Hospitality Ln.	2,099/1,631	870/1,660	495/1,127	1,008/1,161	4,471/5,670
S. Waterman Ave./ I-10 WB Ramp	2,395/2,196	1,177/2,447	0/0	0/0	3,771/4,644
S. Waterman Ave./I-10 EB Ramp	1,496/1,820	1,001/1,677	0/0	1,216/812	3,713/4,310

Source: Gateway South Building 4 Traffic Impact Analysis (Urban Crossroads, Inc., 2017).

3.9 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 use 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 Southern California Association of Governments (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 Basin. In response, the SCAQMD has adopted a series of Air Quality Management Plans (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.

The Final 2012 AQMP was adopted by the AQMD Governing Board on December 7, 2012 (19). The 2012 AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories.

Similar to the 2007 AQMP, the 2012 AQMP was based on assumptions provided by both CARB and SCAG in the latest available EMFAC model for the most recent motor vehicle and

demographics information, respectively. The air quality levels projected in the 2012 AQMP are based on several assumptions. For example, the 2012 AQMP has assumed that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG in its 2012 RTP. The 2012 AQMP also has assumed that such development projects will implement strategies to reduce emissions generated during the construction and operational phases of development.

In March 2017, the AQMD 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 (53). Similar to the 2012 AQMP, the 2016 AQMP incorporates scientific and technological information and planning assumptions, including the 2016 RTP/SCS and updated emission inventory methodologies for various source categories (54). The Project's consistency with the AQMP will be determined using the 2016 AQMP is discussed below.

Criteria for determining consistency with the AQMP are defined in Chapter 12, Section 12.2 and Section 12.3 of the SCAQMD's CEQA Air Quality Handbook (1993) (25). These indicators are discussed below:

- 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.

Construction Impacts

The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if LSTs were exceeded. The Project would not exceed the applicable LST thresholds for construction activity. Therefore, the Project would not conflict with the AQMP according to this criterion.

Operational Impacts

The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if LSTs were exceeded. The Project would not exceed the applicable LST thresholds for operational activity. Therefore, the Project would not conflict with the AQMP according to this criterion.

On the basis of the preceding discussion, the Project is consistent with the first criterion.

- Consistency Criterion No. 2: The Project will not exceed the assumptions in the AQMP based on the years of Project build-out phase.

Overview

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 Southern California Association of Governments (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 City of San Bernardino General Plan is considered to be consistent with the AQMP.

Construction Impacts

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

The City of San Bernardino's General Plan Land Use designation for the Project site is Open Space (OS), which allows for "a full spectrum of active and passive recreational uses such as parks, trails, athletic fields, golf courses, fair grounds, and stadiums, as well as those areas intended to remain in natural open space (55)." The Project site is currently zoned as Public/Commercial Recreation (PCR), which allows public and private commercial recreation facilities such as baseball stadiums, arenas, gold courses, hotels, and farmer markets (56).

The Project has a proposed land use designation change to Light Industrial (IL), which would allow for a variety of light industrial uses such as warehousing/distribution, assembly, research and development, and mini storage (55). The Project has a proposed zone change to Light Industrial (LI), which is "intended to retain, enhance, and intensify existing and provide for the new development of lighter industrial uses along major vehicular, rail, and air transportation routes serving the City (56)." The increased development intensity on the Project site results in a significant impact because it has the potential to cause a substantial effect on the environment resulting from the land use inconsistency.

As such, the Project proposes a more intense land use than what is currently allowed under the City's General Plan and thereby included in the AQMP. Therefore the Project has the potential to conflict with the AQMP according to this criterion.

AQMP Consistency Conclusion

Based on the preceding discussion, the Project would have a potentially significant impact with respect to consistency with the growth projections in the 2016 AQMP.

3.10 POTENTIAL IMPACTS TO SENSITIVE RECEPTORS

The potential impact of Project-generated air pollutant emissions at 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, child care centers, and athletic facilities can also be considered as sensitive receptors.

Results of the LST analysis indicate that, with application of mitigation, the Project will 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 will 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.

3.11 ODORS

Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills or various heavy industrial uses. The Project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential sources of operational odors generated by the Project would include disposal of miscellaneous commercial refuse. Consistent with City requirements, all Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations, thereby precluding substantial generation of odors due to temporary holding of refuse on-site Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances (1).

3.12 CUMULATIVE IMPACTS

The Project area is designated as an extreme non-attainment area for ozone, and a non-attainment area for PM_{10}, $PM_{2.5}$, and lead.

The AQMD 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* (57). In this report the AQMD 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 toxic air contaminant (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. For this Project, a significant project-specific and thus cumulatively considerable impact would occur since the Project's emissions exceed the SCAQMD thresholds for on-going construction and operational activity.

CRITERION 1; REGIONAL ANALYSIS

Construction Impacts

Prior to implementation of BACMs and MMs, the Project-specific evaluation of emissions presented in the preceding analysis demonstrates that Project construction-source air pollutant emissions will result in exceedances of regional threshold of VOCs and NOx. After implementation of applicable BACMs and MMs, Project construction-source air pollutant emissions would not result in exceedances for any criteria pollutant. As such, Project construction-source emissions would be considered less than significant on a project-specific and cumulative basis.

Operational Impacts

Project operational-source VOC and NOx emissions will exceed applicable SCAQMD regional thresholds. Per SCAQMD significance guidance, these impacts at the Project level are also considered cumulatively significant and would persist over the life of the Project. VOCs and NO_x emissions are ozone precursors and would therefore contribute considerably to existing ozone non-attainment conditions within the Basin. This is a cumulatively significant impact persisting over the life of the Project.

CRITERION 2; LIST APPROACH

A list approach is used, in accordance with Section 15130(b) of the CEQA Guidelines, which states the following:

> *The following elements are necessary to an adequate discussion of significant cumulative impacts: 1) Either: (A) A list of past, present, and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the agency, or (B) A summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact.*

The SCAQMD has recognized that there is typically insufficient information to quantitatively evaluate the cumulative contributions of multiple projects because each project applicant has no control over nearby projects.

The cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the City of San Bernardino. As shown on Table 3-17, the cumulative project list includes known and foreseeable projects that are anticipated to contribute emissions to the air basin in the vicinity of the Project.

Cumulative projects could contribute to an existing or projected air quality exceedance because the Basin is currently nonattainment for ozone, PM10, and PM2.5. As previously noted, since the Project results in a project-specific impact for emissions of VOCs and NOx, cumulative impacts are determined to be significant and unavoidable.

TABLE 3-17: CUMULATIVE DEVELOPMENT LIST

TAZ	Project Name	Land Use[1]	Quantity	Units[2]
City of San Bernardino				
CSB1	ADP 15-49	Urgent Care Center	12.648	TSF
CSB2	CUP 17-02	Car Wash	6.265	TSF
CSB3	CUP 11-13, TTM 18829 & DA12-02	Senior Housing	74	DU
		Multi-Family Housing	337	DU
		Condos	38	DU
CSB4	CUP 12-04	Religious Facility Addition	0.714	TSF
CSB5	CUP 12-06	Commercial Retail	9.180	TSF
		Fast Food w/ Drive Thru	2.400	TSF
CSB6	CUP 12-12	K-6 Charter School	300	STU
CSB7	CUP 12-13	Auditorium, Community Center	20.000	TSF
CSB8	CUP 12-14	Discount Store	9.026	TSF
CSB9	CUP 12-20	Discount Store	10.500	TSF
CSB10	CUP 12-22	Auditorium, Banquet Hall	5.233	TSF
		Restaurant	0.800	TSF
CSB11	CUP 13-01	Discount Store	26.907	TSF
CSB12	CUP 13-07	Discount Store	12.500	TSF
CSB13	CUP 13-14	Gas Station w/ Convenience Market	2.789	TSF
CSB14	CUP 16-07	Car Sales	2.780	TSF
CSB15	CUP 16-10	Used Car Sales	0.644	TSF
CSB16	Raising Cane's (CUP 16-12)	Fast Food w/ Drive Thru	3.823	TSF
CSB17	CUP 16-14	Used Car Sales	6.480	TSF
CSB18	CUP 14-13	Restaurant/Night Club	6.400	TSF
CSB19	MUP 17-02	Auto Repair	9.290	TSF
CSB20	CUP 14-20	Holistic Learning Center	16.266	TSF
CSB21	CUP 16-17	Gas Station w/ Convenience Market	12	VFP
		Car Wash	3.800	TSF
CSB22	Orange Show Road Warehouse	High-Cube Warehouse	342.000	TSF
CSB23	Waterman Industrial Center	High-Cube Warehouse	564.652	TSF
CSB24	CUP 15-02	Gas Station w/ Convenience Market	2.800	TSF
CSB25	CUP 15-03	Two Restaurants w/ Drive Thru	3.000	TSF
CSB26	Alliance California Gateway South Building 3	High-Cube Warehouse	1199.360	TSF
CSB27	CUP 16-18	Used Car Sales	7.531	TSF

CSB28	CUP 15-10	Banquet Hall	12.000	TSF
CSB29	CUP 15-12	Restaurant w/ Drive Thru	2.800	TSF
CSB30	CUP 15-14	Gas Station w/ Convenience Market	5.542	TSF
CSB31	CUP 15-17	Charter School	6.832	TSF
CSB32	CUP 15-19	High School Expansion	26.718	TSF
CSB33	CUP 15-20	Hotel	32.000	TSF
CSB34	CUP 16-02	Convenience Market	3.800	TSF
		Drive Thru Car Wash	2.800	TSF
		Restaurant	2.000	TSF
		Gas Station	16	VFP
CSB35	CUP 16-24	Religious Facility	15.340	TSF
CSB36	National Orange Show Industrial	High-Cube Warehouse	616.000	TSF
		General Light Industrial	57.750	TSF
		Warehousing	78.960	TSF
CSB37	CUP 16-08	Car Dealership/Auto Repair	1.37	AC
CSB38	CUP 17-03	Starbucks w/Drive Thru	2.260	TSF
		Gas Station w/Convenience Market and Car Wash	6	VFP
CSB39	DP2 12-02	Warehousing	345.802	TSF
CSB40	DP2 12-03	Automobile Parts and Service Center	24.953	TSF
CSB41	DP-D16-23	Dental Office	2.682	TSF
CSB42	DP2 12-10	General Light Industrial	480.570	TSF
CSB43	DP2 12-14	General Light Industrial	871.900	TSF
CSB44	DP2 12-18	Automobile Dealership	30.300	TSF
CSB45	DP-D13-01	Shipping Container Storage Yard	12.0	AC
CSB46	DP-D13-02	Discount Store	12.406	TSF
CSB47	DP-D13-05	Commercial Retail	9.180	TSF
CSB48	DP-D14-17	Restaurant	11.300	TSF
CSB49	CUP 16-26	Preschool	7.680	TSF
CSB50	DP-D15-03	Recreational Facility	33.600	TSF
CSB51	CUP 16-29	Veterinary Hospital	7.660	TSF
CSB52	CUP 17-04	Storage Yard w/Steel Fabrication	5.000	TSF
CSB53	DP-D15-06	Industrial Building	202.000	TSF
		Industrial Building	177.000	TSF
CSB54	CUP 17-08	Motel	30	RM
CSB55	DP-D16-20	Commercial	5.164	TSF
CSB56	DP-D15-09	Industrial Building	154.560	TSF
CSB57	DP-D15-12	Office Building	153.077	TSF
CSB58	CUP 17-05	Gas Station w/Convenience Market and Car Wash	8	VFP
CSB59	DP-D15-14	Industrial Building	127.327	TSF
CSB60	DP-P16-07	Mixed Use	1.276	TSF
		Residential	1.448	TSF
CSB61	DP-D16-06	Commercial Building Expansion	44.190	TSF
CSB62	DP-D16-07	Building	32.000	TSF
CSB63	DP-P16-04	Apartment	38	DU
CSB64	DP-P14-06	Commercial Building	5.200	TSF
CSB65	DP-P14-07	Senior Housing	82	DU
CSB66	DP-D16-22	Warehouse	14.202	TSF

CSB67	DP-P15-01	Industrial Park	94.965	TSF
CSB68	DP-P15-04	Industrial Building	14.857	TSF
CSB69	DP-D16-24	Industrial Building	476.632	TSF
CSB70	DP-D16-27	Office Building	43.953	TSF
City of Colton				
C1	Steel Road/Santa Ana Redevelopment	Industrial Park	159.276	TSF
C2	Pacific Rail - Metal Shredder	Metal Shredder	1	MS
C3	Education/Office Building	General Office	114.071	TSF
C4	Soil Safe Land Improvement Project	Soil Safe Project	19	AC
San Bernardino County				
SBC1	DP2 12-09	Industrial Park	1,789.990	TSF
SBC2	DP-D15-13	Industrial Building	337.000	TSF
SBC3	CUP 16-15	Self-Storage Facility	91.500	TSF

[1] SFDR = Single Family Detached Residential

[2] DU = Dwelling Units; TSF = Thousand Square Feet; STU = Students; VFP = Vehicle Fueling Positions; MS = Metal Shredder

4 FINDINGS & CONCLUSIONS

CONSTRUCTION-SOURCE EMISSIONS

REGIONAL IMPACTS

For regional emissions, the Project will exceed the numerical thresholds of significance established by the SCAQMD for emissions of NO_x prior to implementation of mitigation measures MMs.

MM AQ-1 is recommended to reduce the severity of the NOx impacts. After implementation of MM AQ-1, construction activity emissions would not exceed the numerical thresholds established by the SCAQMD for any criteria pollutant. Therefore, a less than significant impact would occur for Project-related construction-source emissions.

LOCALIZED IMPACTS

For localized emissions, the Project will not exceed the SCAQMD's localized significance threshold for any criteria pollutant.

ODORS

Established requirements addressing construction equipment operations, and construction material use, storage, and disposal requirements act to minimize odor impacts that may result from construction activities. Moreover, construction-source odor emissions would be temporary, short-term, and intermittent in nature and would not result in persistent impacts that would affect substantial numbers of people. Potential construction-source odor impacts are therefore considered less-than-significant.

OPERATIONAL-SOURCE EMISSIONS

REGIONAL IMPACTS

For regional emissions, the Project would exceed the numerical thresholds of significance established by the SCAQMD for emissions of VOCs and NO_x. No feasible mitigation measures exist that would reduce these emissions to levels that are less-than-significant. Thus a significant impact would occur even with implementation of the proposed mitigation measure MM AQ-2 through MM AQ-5. Project operational-source NO_x emissions exceedances of applicable SCAQMD regional thresholds are therefore considered significant and unavoidable.

LOCALIZED IMPACTS

Project operational-source emissions would result in or cause a significant localized air quality impact as discussed in the operational LSTs section of this report. The proposed Project would not result in a significant CO "hotspot" as a result of Project related traffic during ongoing operations.

ODORS

Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills or various heavy industrial uses. The Project does not propose any such uses or activities that would result in potentially significant operational-source odor impacts. Potential sources of operational odors generated by the Project would include disposal of miscellaneous refuse. Moreover, SCAQMD Rule 402 acts to prevent occurrences of odor nuisances (1). Consistent with City requirements, all Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations. Potential operational-source odor impacts are therefore considered less-than-significant.

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6 CERTIFICATION

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Gateway South Building 4 Project. The information contained in this air quality impact report is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 336-5987.

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Master of Science in Environmental Studies
California State University, Fullerton • May, 2010

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University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Environmental Site Assessment – American Society for Testing and Materials • June, 2013
Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August, 2007
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Air Dispersion Modeling – Lakes Environmental • June, 2006

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APPENDIX 3.1:

CALEEMOD EMISSIONS MODEL OUTPUTS

Building 4 Construction- Unmitigated

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Winter

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space required significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 parking spaces

Construction Phase - Based on 2018 opening year and past project experience

Off-road Equipment - Based on information provided by the project engineer

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water truckd

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water trucks

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Trips and VMT -

Demolition -

Grading -

Architectural Coating - Based on Rule 1113 and information provided by the Project engineer

Vehicle Trips - Construction only

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Construction Off-road Equipment Mitigation -

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	532,440.00	202,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,597,320.00	207,820.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	75.00	50.00
tblConstructionPhase	NumDays	1,110.00	210.00
tblConstructionPhase	NumDays	70.00	30.00
tblConstructionPhase	NumDays	110.00	55.00
tblConstructionPhase	NumDays	75.00	20.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-10
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	1.20	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.39	0.00
tblEnergyUse	T24NG	2.02	0.00
tblLandscapeEquipment	NumberSummerDays	250	0.1
tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Winter

tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64
tblRoadDust	RoadPercentPave	100	0
tblSolidWaste	SolidWasteGenerationRate	1,000.99	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	246,253,500.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	15.8645	187.7742	106.8059	0.2249	21.4832	7.9680	29.4511	7.7064	7.3305	15.0370	0.0000	22,783.6686	22,783.6686	5.2578	0.0000	22,837.6363
2018	35.3462	82.3205	73.0973	0.2220	11.3527	2.5490	13.9017	3.0580	2.4155	5.4735	0.0000	22,461.1665	22,461.1665	2.0590	0.0000	22,512.6423
Maximum	**35.3462**	**187.7742**	**106.8059**	**0.2249**	**21.4832**	**7.9680**	**29.4511**	**7.7064**	**7.3305**	**15.0370**	**0.0000**	**22,783.6686**	**22,783.6686**	**5.2578**	**0.0000**	**22,837.6363**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	15.8645	187.7742	106.8059	0.2249	11.3527	7.9680	16.6055	3.0742	7.3305	10.4048	0.0000	22,783.6686	22,783.6686	5.2578	0.0000	22,837.6363
2018	35.3462	82.3205	73.0973	0.2220	11.3527	2.5490	13.9017	3.0580	2.4155	5.4735	0.0000	22,461.1665	22,461.1665	2.0590	0.0000	22,512.6423
Maximum	**35.3462**	**187.7742**	**106.8059**	**0.2249**	**11.3527**	**7.9680**	**16.6055**	**3.0742**	**7.3305**	**10.4048**	**0.0000**	**22,783.6686**	**22,783.6686**	**5.2578**	**0.0000**	**22,837.6363**

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	30.85	0.00	29.63	43.03	0.00	22.58	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**	**0.0000**	**0.7816**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**	**0.0000**	**0.7816**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2017	7/12/2017	5	30	
2	Site Preparation	Site Preparation	7/13/2017	9/6/2017	5	40	
3	Grading	Grading	9/7/2017	11/22/2017	5	55	
4	Building Construction	Building Construction	11/23/2017	9/12/2018	5	210	
5	Architectural Coating	Architectural Coating	9/13/2018	11/21/2018	5	50	
6	Paving	Paving	11/22/2018	12/19/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 467.5

Acres of Paving: 20.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 207,820; Non-Residential Outdoor: 202,500; Striped Parking Area: 54,648 (Architectural Coating – sqft)

OffRoad Equipment

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Off-Highway Trucks	1	8.00	189	0.50
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Off-Highway Trucks	2	8.00	189	0.50
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	2	8.00	189	0.50
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	8	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	5	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	189	0.50
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	2	8.00	78	0.48
Paving	Off-Highway Trucks	1	8.00	189	0.50
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	15	38.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	830.00	324.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	166.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5767	0.0000	0.5767	0.0873	0.0000	0.0873			0.0000			0.0000
Off-Road	2.8607	28.8254	14.6338	0.0280		1.4682	1.4682		1.3753	1.3753		2,819.1951	2,819.1951	0.7344		2,837.5538
Total	**2.8607**	**28.8254**	**14.6338**	**0.0280**	**0.5767**	**1.4682**	**2.0449**	**0.0873**	**1.3753**	**1.4626**		**2,819.1951**	**2,819.1951**	**0.7344**		**2,837.5538**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	0.8214	0.1348	2.1000e-003	0.0467	4.0900e-003	0.0508	0.0128	3.9200e-003	0.0167		222.9007	222.9007	0.0139		223.2483
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0544	0.5317	1.1200e-003	0.1118	8.1000e-004	0.1126	0.0296	7.4000e-004	0.0304		111.4393	111.4393	4.4700e-003		111.5511
Total	**0.0956**	**0.8757**	**0.6665**	**3.2200e-003**	**0.1585**	**4.9000e-003**	**0.1634**	**0.0424**	**4.6600e-003**	**0.0471**		**334.3400**	**334.3400**	**0.0184**		**334.7994**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2249	0.0000	0.2249	0.0341	0.0000	0.0341			0.0000			0.0000
Off-Road	2.8607	28.8254	14.6338	0.0280		1.4682	1.4682		1.3753	1.3753	0.0000	2,819.1951	2,819.1951	0.7344		2,837.5538
Total	**2.8607**	**28.8254**	**14.6338**	**0.0280**	**0.2249**	**1.4682**	**1.6931**	**0.0341**	**1.3753**	**1.4093**	**0.0000**	**2,819.1951**	**2,819.1951**	**0.7344**		**2,837.5538**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	0.8214	0.1348	2.1000e-003	0.0467	4.0900e-003	0.0508	0.0128	3.9200e-003	0.0167		222.9007	222.9007	0.0139		223.2483
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0544	0.5317	1.1200e-003	0.1118	8.1000e-004	0.1126	0.0296	7.4000e-004	0.0304		111.4393	111.4393	4.4700e-003		111.5511
Total	**0.0956**	**0.8757**	**0.6665**	**3.2200e-003**	**0.1585**	**4.9000e-003**	**0.1634**	**0.0424**	**4.6600e-003**	**0.0471**		**334.3400**	**334.3400**	**0.0184**		**334.7994**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.5744	0.0000	12.5744	6.6777	0.0000	6.6777			0.0000			0.0000
Off-Road	4.7055	51.8078	19.4494	0.0430		2.4103	2.4103		2.2174	2.2174		4,396.7864	4,396.7864	1.3472		4,430.4656
Total	**4.7055**	**51.8078**	**19.4494**	**0.0430**	**12.5744**	**2.4103**	**14.9847**	**6.6777**	**2.2174**	**8.8951**		**4,396.7864**	**4,396.7864**	**1.3472**		**4,430.4656**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1093	0.0815	0.7975	1.6800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		167.1589	167.1589	6.7100e-003		167.3267
Total	**0.1093**	**0.0815**	**0.7975**	**1.6800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**167.1589**	**167.1589**	**6.7100e-003**		**167.3267**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9040	0.0000	4.9040	2.6043	0.0000	2.6043			0.0000			0.0000
Off-Road	4.7055	51.8078	19.4494	0.0430		2.4103	2.4103		2.2174	2.2174	0.0000	4,396.7864	4,396.7864	1.3472		4,430.4656
Total	**4.7055**	**51.8078**	**19.4494**	**0.0430**	**4.9040**	**2.4103**	**7.3143**	**2.6043**	**2.2174**	**4.8217**	**0.0000**	**4,396.7864**	**4,396.7864**	**1.3472**		**4,430.4656**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1093	0.0815	0.7975	1.6800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		167.1589	167.1589	6.7100e-003		167.3267
Total	**0.1093**	**0.0815**	**0.7975**	**1.6800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**167.1589**	**167.1589**	**6.7100e-003**		**167.3267**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					21.0584	0.0000	21.0584	7.5938	0.0000	7.5938			0.0000			0.0000
Off-Road	15.5878	187.5676	104.7856	0.1672		7.9649	7.9649		7.3277	7.3277		17,104.4245	17,104.4245	5.2408		17,235.4436
Total	**15.5878**	**187.5676**	**104.7856**	**0.1672**	**21.0584**	**7.9649**	**29.0233**	**7.5938**	**7.3277**	**14.9215**		**17,104.4245**	**17,104.4245**	**5.2408**		**17,235.4436**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2768	0.2066	2.0203	4.2600e-003	0.4248	3.0600e-003	0.4278	0.1127	2.8300e-003	0.1155		423.4693	423.4693	0.0170		423.8942
Total	**0.2768**	**0.2066**	**2.0203**	**4.2600e-003**	**0.4248**	**3.0600e-003**	**0.4278**	**0.1127**	**2.8300e-003**	**0.1155**		**423.4693**	**423.4693**	**0.0170**		**423.8942**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.2128	0.0000	8.2128	2.9616	0.0000	2.9616			0.0000			0.0000
Off-Road	15.5878	187.5676	104.7856	0.1672		7.9649	7.9649		7.3277	7.3277	0.0000	17,104.4245	17,104.4245	5.2408		17,235.4436
Total	**15.5878**	**187.5676**	**104.7856**	**0.1672**	**8.2128**	**7.9649**	**16.1777**	**2.9616**	**7.3277**	**10.2893**	**0.0000**	**17,104.4245**	**17,104.4245**	**5.2408**		**17,235.4436**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2768	0.2066	2.0203	4.2600e-003	0.4248	3.0600e-003	0.4278	0.1127	2.8300e-003	0.1155		423.4693	423.4693	0.0170		423.8942
Total	**0.2768**	**0.2066**	**2.0203**	**4.2600e-003**	**0.4248**	**3.0600e-003**	**0.4278**	**0.1127**	**2.8300e-003**	**0.1155**		**423.4693**	**423.4693**	**0.0170**		**423.8942**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.2166	44.5481	26.1739	0.0455		2.6254	2.6254		2.4839	2.4839		4,446.9857	4,446.9857	1.0443		4,473.0928
Total	**5.2166**	**44.5481**	**26.1739**	**0.0455**		**2.6254**	**2.6254**		**2.4839**	**2.4839**		**4,446.9857**	**4,446.9857**	**1.0443**		**4,473.0928**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.5623	42.2130	10.9608	0.0863	2.0753	0.3547	2.4300	0.5976	0.3393	0.9369		9,087.2219	9,087.2219	0.7432		9,105.8013
Worker	6.0457	4.5122	44.1274	0.0931	9.2774	0.0669	9.3443	2.4604	0.0617	2.5221		9,249.4610	9,249.4610	0.3713		9,258.7423
Total	**7.6080**	**46.7251**	**55.0882**	**0.1794**	**11.3527**	**0.4216**	**11.7743**	**3.0580**	**0.4011**	**3.4590**		**18,336.6829**	**18,336.6829**	**1.1144**		**18,364.5435**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.2166	44.5481	26.1739	0.0455		2.6254	2.6254		2.4839	2.4839	0.0000	4,446.9857	4,446.9857	1.0443		4,473.0928
Total	**5.2166**	**44.5481**	**26.1739**	**0.0455**		**2.6254**	**2.6254**		**2.4839**	**2.4839**	**0.0000**	**4,446.9857**	**4,446.9857**	**1.0443**		**4,473.0928**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.5623	42.2130	10.9608	0.0863	2.0753	0.3547	2.4300	0.5976	0.3393	0.9369		9,087.2219	9,087.2219	0.7432		9,105.8013
Worker	6.0457	4.5122	44.1274	0.0931	9.2774	0.0669	9.3443	2.4604	0.0617	2.5221		9,249.4610	9,249.4610	0.3713		9,258.7423
Total	**7.6080**	**46.7251**	**55.0882**	**0.1794**	**11.3527**	**0.4216**	**11.7743**	**3.0580**	**0.4011**	**3.4590**		**18,336.6829**	**18,336.6829**	**1.1144**		**18,364.5435**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.4943	38.8560	24.8845	0.0455		2.2053	2.2053		2.0889	2.0889		4,403.8975	4,403.8975	1.0234		4,429.4820
Total	**4.4943**	**38.8560**	**24.8845**	**0.0455**		**2.2053**	**2.2053**		**2.0889**	**2.0889**		**4,403.8975**	**4,403.8975**	**1.0234**		**4,429.4820**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3670	39.5416	9.7050	0.0861	2.0752	0.2793	2.3545	0.5975	0.2672	0.8647		9,066.4608	9,066.4608	0.7109		9,084.2334
Worker	5.3989	3.9229	38.5079	0.0904	9.2774	0.0644	9.3419	2.4604	0.0594	2.5198		8,990.8083	8,990.8083	0.3248		8,998.9270
Total	**6.7658**	**43.4645**	**48.2128**	**0.1765**	**11.3527**	**0.3437**	**11.6964**	**3.0580**	**0.3266**	**3.3845**		**18,057.2690**	**18,057.2690**	**1.0357**		**18,083.1603**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.4943	38.8560	24.8845	0.0455		2.2053	2.2053		2.0889	2.0889	0.0000	4,403.8975	4,403.8975	1.0234		4,429.4820
Total	**4.4943**	**38.8560**	**24.8845**	**0.0455**		**2.2053**	**2.2053**		**2.0889**	**2.0889**	**0.0000**	**4,403.8975**	**4,403.8975**	**1.0234**		**4,429.4820**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3670	39.5416	9.7050	0.0861	2.0752	0.2793	2.3545	0.5975	0.2672	0.8647		9,066.4608	9,066.4608	0.7109		9,084.2334
Worker	5.3989	3.9229	38.5079	0.0904	9.2774	0.0644	9.3419	2.4604	0.0594	2.5198		8,990.8083	8,990.8083	0.3248		8,998.9270
Total	**6.7658**	**43.4645**	**48.2128**	**0.1765**	**11.3527**	**0.3437**	**11.6964**	**3.0580**	**0.3266**	**3.3845**		**18,057.2690**	**18,057.2690**	**1.0357**		**18,083.1603**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.4701					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7964	5.3487	4.9445	7.9200e-003		0.4015	0.4015		0.4015	0.4015		750.5295	750.5295	0.0713		752.3123
Total	**34.2664**	**5.3487**	**4.9445**	**7.9200e-003**		**0.4015**	**0.4015**		**0.4015**	**0.4015**		**750.5295**	**750.5295**	**0.0713**		**752.3123**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.0798	0.7846	7.7016	0.0181	1.8555	0.0129	1.8684	0.4921	0.0119	0.5040		1,798.1617	1,798.1617	0.0650		1,799.7854
Total	**1.0798**	**0.7846**	**7.7016**	**0.0181**	**1.8555**	**0.0129**	**1.8684**	**0.4921**	**0.0119**	**0.5040**		**1,798.1617**	**1,798.1617**	**0.0650**		**1,799.7854**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.4701					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7964	5.3487	4.9445	7.9200e-003		0.4015	0.4015		0.4015	0.4015	0.0000	750.5295	750.5295	0.0713		752.3123
Total	**34.2664**	**5.3487**	**4.9445**	**7.9200e-003**		**0.4015**	**0.4015**		**0.4015**	**0.4015**	**0.0000**	**750.5295**	**750.5295**	**0.0713**		**752.3123**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.0798	0.7846	7.7016	0.0181	1.8555	0.0129	1.8684	0.4921	0.0119	0.5040		1,798.1617	1,798.1617	0.0650		1,799.7854
Total	**1.0798**	**0.7846**	**7.7016**	**0.0181**	**1.8555**	**0.0129**	**1.8684**	**0.4921**	**0.0119**	**0.5040**		**1,798.1617**	**1,798.1617**	**0.0650**		**1,799.7854**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2115	23.2722	17.3686	0.0309		1.1916	1.1916		1.0963	1.0963		3,106.8279	3,106.8279	0.9672		3,131.0078
Paving	2.6842					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.8957**	**23.2722**	**17.3686**	**0.0309**		**1.1916**	**1.1916**		**1.0963**	**1.0963**		**3,106.8279**	**3,106.8279**	**0.9672**		**3,131.0078**

3.7 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1171	0.0851	0.8351	1.9600e-003	0.2012	1.4000e-003	0.2026	0.0534	1.2900e-003	0.0547		194.9814	194.9814	7.0400e-003		195.1575
Total	**0.1171**	**0.0851**	**0.8351**	**1.9600e-003**	**0.2012**	**1.4000e-003**	**0.2026**	**0.0534**	**1.2900e-003**	**0.0547**		**194.9814**	**194.9814**	**7.0400e-003**		**195.1575**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2115	23.2722	17.3686	0.0309		1.1916	1.1916		1.0963	1.0963	0.0000	3,106.8278	3,106.8278	0.9672		3,131.0078
Paving	2.6842					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.8957**	**23.2722**	**17.3686**	**0.0309**		**1.1916**	**1.1916**		**1.0963**	**1.0963**	**0.0000**	**3,106.8278**	**3,106.8278**	**0.9672**		**3,131.0078**

3.7 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1171	0.0851	0.8351	1.9600e-003	0.2012	1.4000e-003	0.2026	0.0534	1.2900e-003	0.0547		194.9814	194.9814	7.0400e-003		195.1575
Total	**0.1171**	**0.0851**	**0.8351**	**1.9600e-003**	**0.2012**	**1.4000e-003**	**0.2026**	**0.0534**	**1.2900e-003**	**0.0547**		**194.9814**	**194.9814**	**7.0400e-003**		**195.1575**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Unmitigated	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Building 4 Construction- Unmitigated

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Summer

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space required significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 parking spaces

Construction Phase - Based on 2018 opening year and past project experience

Off-road Equipment - Based on information provided by the project engineer

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water truckd

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water trucks

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Trips and VMT -

Demolition -

Grading -

Architectural Coating - Based on Rule 1113 and information provided by the Project engineer

Vehicle Trips - Construction only

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Construction Off-road Equipment Mitigation -

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	532,440.00	202,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,597,320.00	207,820.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	NumDays	75.00	50.00
tblConstructionPhase	NumDays	1,110.00	210.00
tblConstructionPhase	NumDays	70.00	30.00
tblConstructionPhase	NumDays	110.00	55.00
tblConstructionPhase	NumDays	75.00	20.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-10
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	1.20	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.39	0.00
tblEnergyUse	T24NG	2.02	0.00
tblLandscapeEquipment	NumberSummerDays	250	0.1
tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Summer

tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64
tblRoadDust	RoadPercentPave	100	0
tblSolidWaste	SolidWasteGenerationRate	1,000.99	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	246,253,500.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	15.8654	187.7634	107.2262	0.2389	21.4832	7.9680	29.4511	7.7064	7.3305	15.0370	0.0000	24,193.0894	24,193.0894	5.2600	0.0000	24,246.6954
2018	35.3494	82.2911	80.0806	0.2358	11.3527	2.5455	13.8982	3.0580	2.4121	5.4701	0.0000	23,851.5557	23,851.5557	2.0388	0.0000	23,902.5264
Maximum	**35.3494**	**187.7634**	**107.2262**	**0.2389**	**21.4832**	**7.9680**	**29.4511**	**7.7064**	**7.3305**	**15.0370**	**0.0000**	**24,193.0894**	**24,193.0894**	**5.2600**	**0.0000**	**24,246.6954**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	15.8654	187.7634	107.2262	0.2389	11.3527	7.9680	16.6055	3.0742	7.3305	10.4048	0.0000	24,193.0894	24,193.0894	5.2600	0.0000	24,246.6954
2018	35.3494	82.2911	80.0806	0.2358	11.3527	2.5455	13.8982	3.0580	2.4121	5.4701	0.0000	23,851.5557	23,851.5557	2.0388	0.0000	23,902.5264
Maximum	**35.3494**	**187.7634**	**107.2262**	**0.2389**	**11.3527**	**7.9680**	**16.6055**	**3.0742**	**7.3305**	**10.4048**	**0.0000**	**24,193.0894**	**24,193.0894**	**5.2600**	**0.0000**	**24,246.6954**

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	30.85	0.00	29.63	43.03	0.00	22.59	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**	**0.0000**	**0.7816**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**	**0.0000**	**0.7816**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2017	7/12/2017	5	30	
2	Site Preparation	Site Preparation	7/13/2017	9/6/2017	5	40	
3	Grading	Grading	9/7/2017	11/22/2017	5	55	
4	Building Construction	Building Construction	11/23/2017	9/12/2018	5	210	
5	Architectural Coating	Architectural Coating	9/13/2018	11/21/2018	5	50	
6	Paving	Paving	11/22/2018	12/19/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 467.5

Acres of Paving: 20.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 207,820; Non-Residential Outdoor: 202,500; Striped Parking Area: 54,648 (Architectural Coating – sqft)

OffRoad Equipment

Building 4 Construction- Unmitigated - San Bernardino-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Off-Highway Trucks	1	8.00	189	0.50
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Off-Highway Trucks	2	8.00	189	0.50
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	2	8.00	189	0.50
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	8	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	5	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	189	0.50
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	2	8.00	78	0.48
Paving	Off-Highway Trucks	1	8.00	189	0.50
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	15	38.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	830.00	324.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	166.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5767	0.0000	0.5767	0.0873	0.0000	0.0873			0.0000			0.0000
Off-Road	2.8607	28.8254	14.6338	0.0280		1.4682	1.4682		1.3753	1.3753		2,819.1951	2,819.1951	0.7344		2,837.5538
Total	**2.8607**	**28.8254**	**14.6338**	**0.0280**	**0.5767**	**1.4682**	**2.0449**	**0.0873**	**1.3753**	**1.4626**		**2,819.1951**	**2,819.1951**	**0.7344**		**2,837.5538**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0219	0.8138	0.1186	2.1600e-003	0.0467	4.0400e-003	0.0507	0.0128	3.8600e-003	0.0167		228.5557	228.5557	0.0129		228.8776
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0731	0.0515	0.6423	1.2500e-003	0.1118	8.1000e-004	0.1126	0.0296	7.4000e-004	0.0304		124.1880	124.1880	5.0700e-003		124.3147
Total	**0.0949**	**0.8653**	**0.7609**	**3.4100e-003**	**0.1585**	**4.8500e-003**	**0.1633**	**0.0424**	**4.6000e-003**	**0.0471**		**352.7437**	**352.7437**	**0.0180**		**353.1923**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2249	0.0000	0.2249	0.0341	0.0000	0.0341			0.0000			0.0000
Off-Road	2.8607	28.8254	14.6338	0.0280		1.4682	1.4682		1.3753	1.3753	0.0000	2,819.1951	2,819.1951	0.7344		2,837.5538
Total	**2.8607**	**28.8254**	**14.6338**	**0.0280**	**0.2249**	**1.4682**	**1.6931**	**0.0341**	**1.3753**	**1.4093**	**0.0000**	**2,819.1951**	**2,819.1951**	**0.7344**		**2,837.5538**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0219	0.8138	0.1186	2.1600e-003	0.0467	4.0400e-003	0.0507	0.0128	3.8600e-003	0.0167		228.5557	228.5557	0.0129		228.8776
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0731	0.0515	0.6423	1.2500e-003	0.1118	8.1000e-004	0.1126	0.0296	7.4000e-004	0.0304		124.1880	124.1880	5.0700e-003		124.3147
Total	**0.0949**	**0.8653**	**0.7609**	**3.4100e-003**	**0.1585**	**4.8500e-003**	**0.1633**	**0.0424**	**4.6000e-003**	**0.0471**		**352.7437**	**352.7437**	**0.0180**		**353.1923**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.5744	0.0000	12.5744	6.6777	0.0000	6.6777			0.0000			0.0000
Off-Road	4.7055	51.8078	19.4494	0.0430		2.4103	2.4103		2.2174	2.2174		4,396.7864	4,396.7864	1.3472		4,430.4656
Total	**4.7055**	**51.8078**	**19.4494**	**0.0430**	**12.5744**	**2.4103**	**14.9847**	**6.6777**	**2.2174**	**8.8951**		**4,396.7864**	**4,396.7864**	**1.3472**		**4,430.4656**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1096	0.0773	0.9634	1.8800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		186.2819	186.2819	7.6000e-003		186.4720
Total	**0.1096**	**0.0773**	**0.9634**	**1.8800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**186.2819**	**186.2819**	**7.6000e-003**		**186.4720**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9040	0.0000	4.9040	2.6043	0.0000	2.6043			0.0000			0.0000
Off-Road	4.7055	51.8078	19.4494	0.0430		2.4103	2.4103		2.2174	2.2174	0.0000	4,396.7864	4,396.7864	1.3472		4,430.4656
Total	**4.7055**	**51.8078**	**19.4494**	**0.0430**	**4.9040**	**2.4103**	**7.3143**	**2.6043**	**2.2174**	**4.8217**	**0.0000**	**4,396.7864**	**4,396.7864**	**1.3472**		**4,430.4656**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1096	0.0773	0.9634	1.8800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		186.2819	186.2819	7.6000e-003		186.4720
Total	**0.1096**	**0.0773**	**0.9634**	**1.8800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**186.2819**	**186.2819**	**7.6000e-003**		**186.4720**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					21.0584	0.0000	21.0584	7.5938	0.0000	7.5938			0.0000			0.0000
Off-Road	15.5878	187.5676	104.7856	0.1672		7.9649	7.9649		7.3277	7.3277		17,104.4245	17,104.4245	5.2408		17,235.4436
Total	**15.5878**	**187.5676**	**104.7856**	**0.1672**	**21.0584**	**7.9649**	**29.0233**	**7.5938**	**7.3277**	**14.9215**		**17,104.4245**	**17,104.4245**	**5.2408**		**17,235.4436**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2777	0.1958	2.4406	4.7500e-003	0.4248	3.0600e-003	0.4278	0.1127	2.8300e-003	0.1155		471.9143	471.9143	0.0193		472.3958
Total	**0.2777**	**0.1958**	**2.4406**	**4.7500e-003**	**0.4248**	**3.0600e-003**	**0.4278**	**0.1127**	**2.8300e-003**	**0.1155**		**471.9143**	**471.9143**	**0.0193**		**472.3958**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.2128	0.0000	8.2128	2.9616	0.0000	2.9616			0.0000			0.0000
Off-Road	15.5878	187.5676	104.7856	0.1672		7.9649	7.9649		7.3277	7.3277	0.0000	17,104.4245	17,104.4245	5.2408		17,235.4436
Total	**15.5878**	**187.5676**	**104.7856**	**0.1672**	**8.2128**	**7.9649**	**16.1777**	**2.9616**	**7.3277**	**10.2893**	**0.0000**	**17,104.4245**	**17,104.4245**	**5.2408**		**17,235.4436**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2777	0.1958	2.4406	4.7500e-003	0.4248	3.0600e-003	0.4278	0.1127	2.8300e-003	0.1155		471.9143	471.9143	0.0193		472.3958
Total	**0.2777**	**0.1958**	**2.4406**	**4.7500e-003**	**0.4248**	**3.0600e-003**	**0.4278**	**0.1127**	**2.8300e-003**	**0.1155**		**471.9143**	**471.9143**	**0.0193**		**472.3958**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.2166	44.5481	26.1739	0.0455		2.6254	2.6254		2.4839	2.4839		4,446.9857	4,446.9857	1.0443		4,473.0928
Total	**5.2166**	**44.5481**	**26.1739**	**0.0455**		**2.6254**	**2.6254**		**2.4839**	**2.4839**		**4,446.9857**	**4,446.9857**	**1.0443**		**4,473.0928**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4975	42.3169	9.7473	0.0897	2.0753	0.3504	2.4256	0.5976	0.3352	0.9327		9,438.5031	9,438.5031	0.6793		9,455.4849
Worker	6.0644	4.2771	53.3071	0.1038	9.2774	0.0669	9.3443	2.4604	0.0617	2.5221		10,307.6007	10,307.6007	0.4207		10,318.1176
Total	**7.5619**	**46.5940**	**63.0544**	**0.1934**	**11.3527**	**0.4173**	**11.7700**	**3.0580**	**0.3969**	**3.4549**		**19,746.1037**	**19,746.1037**	**1.1000**		**19,773.6026**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.2166	44.5481	26.1739	0.0455		2.6254	2.6254		2.4839	2.4839	0.0000	4,446.9857	4,446.9857	1.0443		4,473.0928
Total	**5.2166**	**44.5481**	**26.1739**	**0.0455**		**2.6254**	**2.6254**		**2.4839**	**2.4839**	**0.0000**	**4,446.9857**	**4,446.9857**	**1.0443**		**4,473.0928**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4975	42.3169	9.7473	0.0897	2.0753	0.3504	2.4256	0.5976	0.3352	0.9327		9,438.5031	9,438.5031	0.6793		9,455.4849
Worker	6.0644	4.2771	53.3071	0.1038	9.2774	0.0669	9.3443	2.4604	0.0617	2.5221		10,307.6007	10,307.6007	0.4207		10,318.1176
Total	**7.5619**	**46.5940**	**63.0544**	**0.1934**	**11.3527**	**0.4173**	**11.7700**	**3.0580**	**0.3969**	**3.4549**		**19,746.1037**	**19,746.1037**	**1.1000**		**19,773.6026**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.4943	38.8560	24.8845	0.0455		2.2053	2.2053		2.0889	2.0889		4,403.8975	4,403.8975	1.0234		4,429.4820
Total	**4.4943**	**38.8560**	**24.8845**	**0.0455**		**2.2053**	**2.2053**		**2.0889**	**2.0889**		**4,403.8975**	**4,403.8975**	**1.0234**		**4,429.4820**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3056	39.7119	8.5257	0.0895	2.0752	0.2758	2.3510	0.5975	0.2638	0.8614		9,426.0005	9,426.0005	0.6462		9,442.1551
Worker	5.4150	3.7233	46.6704	0.1008	9.2774	0.0644	9.3419	2.4604	0.0594	2.5198		10,021.6578	10,021.6578	0.3693		10,030.8893
Total	**6.7206**	**43.4352**	**55.1961**	**0.1903**	**11.3527**	**0.3402**	**11.6929**	**3.0580**	**0.3232**	**3.3812**		**19,447.6583**	**19,447.6583**	**1.0155**		**19,473.0444**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.4943	38.8560	24.8845	0.0455		2.2053	2.2053		2.0889	2.0889	0.0000	4,403.8975	4,403.8975	1.0234		4,429.4820
Total	**4.4943**	**38.8560**	**24.8845**	**0.0455**		**2.2053**	**2.2053**		**2.0889**	**2.0889**	**0.0000**	**4,403.8975**	**4,403.8975**	**1.0234**		**4,429.4820**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3056	39.7119	8.5257	0.0895	2.0752	0.2758	2.3510	0.5975	0.2638	0.8614		9,426.0005	9,426.0005	0.6462		9,442.1551
Worker	5.4150	3.7233	46.6704	0.1008	9.2774	0.0644	9.3419	2.4604	0.0594	2.5198		10,021.6578	10,021.6578	0.3693		10,030.8893
Total	**6.7206**	**43.4352**	**55.1961**	**0.1903**	**11.3527**	**0.3402**	**11.6929**	**3.0580**	**0.3232**	**3.3812**		**19,447.6583**	**19,447.6583**	**1.0155**		**19,473.0444**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.4701					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7964	5.3487	4.9445	7.9200e-003		0.4015	0.4015		0.4015	0.4015		750.5295	750.5295	0.0713		752.3123
Total	**34.2664**	**5.3487**	**4.9445**	**7.9200e-003**		**0.4015**	**0.4015**		**0.4015**	**0.4015**		**750.5295**	**750.5295**	**0.0713**		**752.3123**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.0830	0.7447	9.3341	0.0202	1.8555	0.0129	1.8684	0.4921	0.0119	0.5040		2,004.3316	2,004.3316	0.0739		2,006.1779
Total	**1.0830**	**0.7447**	**9.3341**	**0.0202**	**1.8555**	**0.0129**	**1.8684**	**0.4921**	**0.0119**	**0.5040**		**2,004.3316**	**2,004.3316**	**0.0739**		**2,006.1779**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.4701					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7964	5.3487	4.9445	7.9200e-003		0.4015	0.4015		0.4015	0.4015	0.0000	750.5295	750.5295	0.0713		752.3123
Total	**34.2664**	**5.3487**	**4.9445**	**7.9200e-003**		**0.4015**	**0.4015**		**0.4015**	**0.4015**	**0.0000**	**750.5295**	**750.5295**	**0.0713**		**752.3123**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.0830	0.7447	9.3341	0.0202	1.8555	0.0129	1.8684	0.4921	0.0119	0.5040		2,004.3316	2,004.3316	0.0739		2,006.1779
Total	**1.0830**	**0.7447**	**9.3341**	**0.0202**	**1.8555**	**0.0129**	**1.8684**	**0.4921**	**0.0119**	**0.5040**		**2,004.3316**	**2,004.3316**	**0.0739**		**2,006.1779**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2115	23.2722	17.3686	0.0309		1.1916	1.1916		1.0963	1.0963		3,106.8279	3,106.8279	0.9672		3,131.0078
Paving	2.6842					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.8957**	**23.2722**	**17.3686**	**0.0309**		**1.1916**	**1.1916**		**1.0963**	**1.0963**		**3,106.8279**	**3,106.8279**	**0.9672**		**3,131.0078**

3.7 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1174	0.0808	1.0121	2.1900e-003	0.2012	1.4000e-003	0.2026	0.0534	1.2900e-003	0.0547		217.3372	217.3372	8.0100e-003		217.5374
Total	**0.1174**	**0.0808**	**1.0121**	**2.1900e-003**	**0.2012**	**1.4000e-003**	**0.2026**	**0.0534**	**1.2900e-003**	**0.0547**		**217.3372**	**217.3372**	**8.0100e-003**		**217.5374**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2115	23.2722	17.3686	0.0309		1.1916	1.1916		1.0963	1.0963	0.0000	3,106.8278	3,106.8278	0.9672		3,131.0078
Paving	2.6842					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.8957**	**23.2722**	**17.3686**	**0.0309**		**1.1916**	**1.1916**		**1.0963**	**1.0963**	**0.0000**	**3,106.8278**	**3,106.8278**	**0.9672**		**3,131.0078**

3.7 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1174	0.0808	1.0121	2.1900e-003	0.2012	1.4000e-003	0.2026	0.0534	1.2900e-003	0.0547		217.3372	217.3372	8.0100e-003		217.5374
Total	**0.1174**	**0.0808**	**1.0121**	**2.1900e-003**	**0.2012**	**1.4000e-003**	**0.2026**	**0.0534**	**1.2900e-003**	**0.0547**		**217.3372**	**217.3372**	**8.0100e-003**		**217.5374**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Unmitigated	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Building 4 Construction- Mitigated

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Winter

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space required significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 parking spaces

Construction Phase - Based on 2018 opening year and past project experience

Off-road Equipment - Based on information provided by the project engineer

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water trucks

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water trucks

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Trips and VMT -

Demolition -

Grading -

Architectural Coating - Based on Rule 1113 and information provided by the Project engineer

Vehicle Trips - Construction only

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Construction Off-road Equipment Mitigation - During site preparation and grading activity, all graders, scrapers, and rubber tired dozers shall be CARB certified tier 3 or higher

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	532,440.00	202,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,597,320.00	207,820.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	75.00	50.00
tblConstructionPhase	NumDays	1,110.00	210.00
tblConstructionPhase	NumDays	70.00	30.00
tblConstructionPhase	NumDays	110.00	55.00
tblConstructionPhase	NumDays	75.00	20.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-10
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	1.20	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.39	0.00
tblEnergyUse	T24NG	2.02	0.00
tblLandscapeEquipment	NumberSummerDays	250	0.1

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Winter

tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64

tblRoadDust	RoadPercentPave	100	0
tblSolidWaste	SolidWasteGenerationRate	1,000.99	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	246,253,500.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	15.8645	187.7742	106.8059	0.2249	21.4832	7.9680	29.4511	7.7064	7.3305	15.0370	0.0000	22,783.6686	22,783.6686	5.2578	0.0000	22,837.6363
2018	35.3462	82.3205	73.0973	0.2220	11.3527	2.5490	13.9017	3.0580	2.4155	5.4735	0.0000	22,461.1665	22,461.1665	2.0590	0.0000	22,512.6423
Maximum	**35.3462**	**187.7742**	**106.8059**	**0.2249**	**21.4832**	**7.9680**	**29.4511**	**7.7064**	**7.3305**	**15.0370**	**0.0000**	**22,783.6686**	**22,783.6686**	**5.2578**	**0.0000**	**22,837.6363**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	12.8247	91.2733	89.8519	0.2249	11.3527	3.7030	14.3997	3.0742	3.6158	6.6900	0.0000	22,783.6686	22,783.6686	5.2578	0.0000	22,837.6363
2018	35.3462	82.3205	73.0973	0.2220	11.3527	2.5490	13.9017	3.0580	2.4155	5.4735	0.0000	22,461.1665	22,461.1665	2.0590	0.0000	22,512.6423
Maximum	**35.3462**	**91.2733**	**89.8519**	**0.2249**	**11.3527**	**3.7030**	**14.3997**	**3.0742**	**3.6158**	**6.6900**	**0.0000**	**22,783.6686**	**22,783.6686**	**5.2578**	**0.0000**	**22,837.6363**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**5.94**	**35.73**	**9.42**	**0.00**	**30.85**	**40.55**	**34.72**	**43.03**	**38.12**	**40.70**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**	**0.0000**	**0.7816**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**	**0.0000**	**0.7816**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2017	7/12/2017	5	30	
2	Site Preparation	Site Preparation	7/13/2017	9/6/2017	5	40	
3	Grading	Grading	9/7/2017	11/22/2017	5	55	
4	Building Construction	Building Construction	11/23/2017	9/12/2018	5	210	
5	Architectural Coating	Architectural Coating	9/13/2018	11/21/2018	5	50	
6	Paving	Paving	11/22/2018	12/19/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 467.5

Acres of Paving: 20.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 207,820; Non-Residential Outdoor: 202,500; Striped Parking Area: 54,648 (Architectural Coating – sqft)

OffRoad Equipment

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Off-Highway Trucks	1	8.00	189	0.50
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Off-Highway Trucks	2	8.00	189	0.50
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	2	8.00	189	0.50
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	8	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	5	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	189	0.50
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	2	8.00	78	0.48
Paving	Off-Highway Trucks	1	8.00	189	0.50
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	15	38.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	830.00	324.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	166.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5767	0.0000	0.5767	0.0873	0.0000	0.0873			0.0000			0.0000
Off-Road	2.8607	28.8254	14.6338	0.0280		1.4682	1.4682		1.3753	1.3753		2,819.1951	2,819.1951	0.7344		2,837.5538
Total	**2.8607**	**28.8254**	**14.6338**	**0.0280**	**0.5767**	**1.4682**	**2.0449**	**0.0873**	**1.3753**	**1.4626**		**2,819.1951**	**2,819.1951**	**0.7344**		**2,837.5538**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	0.8214	0.1348	2.1000e-003	0.0467	4.0900e-003	0.0508	0.0128	3.9200e-003	0.0167		222.9007	222.9007	0.0139		223.2483
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0544	0.5317	1.1200e-003	0.1118	8.1000e-004	0.1126	0.0296	7.4000e-004	0.0304		111.4393	111.4393	4.4700e-003		111.5511
Total	**0.0956**	**0.8757**	**0.6665**	**3.2200e-003**	**0.1585**	**4.9000e-003**	**0.1634**	**0.0424**	**4.6600e-003**	**0.0471**		**334.3400**	**334.3400**	**0.0184**		**334.7994**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2249	0.0000	0.2249	0.0341	0.0000	0.0341			0.0000			0.0000
Off-Road	1.8386	19.5014	14.5377	0.0280		0.9673	0.9673		0.9267	0.9267	0.0000	2,819.1951	2,819.1951	0.7344		2,837.5538
Total	**1.8386**	**19.5014**	**14.5377**	**0.0280**	**0.2249**	**0.9673**	**1.1922**	**0.0341**	**0.9267**	**0.9607**	**0.0000**	**2,819.1951**	**2,819.1951**	**0.7344**		**2,837.5538**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0227	0.8214	0.1348	2.1000e-003	0.0467	4.0900e-003	0.0508	0.0128	3.9200e-003	0.0167		222.9007	222.9007	0.0139		223.2483
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0728	0.0544	0.5317	1.1200e-003	0.1118	8.1000e-004	0.1126	0.0296	7.4000e-004	0.0304		111.4393	111.4393	4.4700e-003		111.5511
Total	**0.0956**	**0.8757**	**0.6665**	**3.2200e-003**	**0.1585**	**4.9000e-003**	**0.1634**	**0.0424**	**4.6600e-003**	**0.0471**		**334.3400**	**334.3400**	**0.0184**		**334.7994**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.5744	0.0000	12.5744	6.6777	0.0000	6.6777			0.0000			0.0000
Off-Road	4.7055	51.8078	19.4494	0.0430		2.4103	2.4103		2.2174	2.2174		4,396.7864	4,396.7864	1.3472		4,430.4656
Total	**4.7055**	**51.8078**	**19.4494**	**0.0430**	**12.5744**	**2.4103**	**14.9847**	**6.6777**	**2.2174**	**8.8951**		**4,396.7864**	**4,396.7864**	**1.3472**		**4,430.4656**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1093	0.0815	0.7975	1.6800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		167.1589	167.1589	6.7100e-003		167.3267
Total	**0.1093**	**0.0815**	**0.7975**	**1.6800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**167.1589**	**167.1589**	**6.7100e-003**		**167.3267**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9040	0.0000	4.9040	2.6043	0.0000	2.6043			0.0000			0.0000
Off-Road	2.2879	28.8262	20.8136	0.0430		1.2837	1.2837		1.2151	1.2151	0.0000	4,396.7864	4,396.7864	1.3472		4,430.4656
Total	**2.2879**	**28.8262**	**20.8136**	**0.0430**	**4.9040**	**1.2837**	**6.1877**	**2.6043**	**1.2151**	**3.8194**	**0.0000**	**4,396.7864**	**4,396.7864**	**1.3472**		**4,430.4656**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1093	0.0815	0.7975	1.6800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		167.1589	167.1589	6.7100e-003		167.3267
Total	**0.1093**	**0.0815**	**0.7975**	**1.6800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**167.1589**	**167.1589**	**6.7100e-003**		**167.3267**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					21.0584	0.0000	21.0584	7.5938	0.0000	7.5938			0.0000			0.0000
Off-Road	15.5878	187.5676	104.7856	0.1672		7.9649	7.9649		7.3277	7.3277		17,104.4245	17,104.4245	5.2408		17,235.4436
Total	**15.5878**	**187.5676**	**104.7856**	**0.1672**	**21.0584**	**7.9649**	**29.0233**	**7.5938**	**7.3277**	**14.9215**		**17,104.4245**	**17,104.4245**	**5.2408**		**17,235.4436**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2768	0.2066	2.0203	4.2600e-003	0.4248	3.0600e-003	0.4278	0.1127	2.8300e-003	0.1155		423.4693	423.4693	0.0170		423.8942
Total	**0.2768**	**0.2066**	**2.0203**	**4.2600e-003**	**0.4248**	**3.0600e-003**	**0.4278**	**0.1127**	**2.8300e-003**	**0.1155**		**423.4693**	**423.4693**	**0.0170**		**423.8942**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.2128	0.0000	8.2128	2.9616	0.0000	2.9616			0.0000			0.0000
Off-Road	5.5874	89.5347	87.8316	0.1672		3.6999	3.6999		3.6129	3.6129	0.0000	17,104.4245	17,104.4245	5.2408		17,235.4436
Total	**5.5874**	**89.5347**	**87.8316**	**0.1672**	**8.2128**	**3.6999**	**11.9127**	**2.9616**	**3.6129**	**6.5745**	**0.0000**	**17,104.4245**	**17,104.4245**	**5.2408**		**17,235.4436**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2768	0.2066	2.0203	4.2600e-003	0.4248	3.0600e-003	0.4278	0.1127	2.8300e-003	0.1155		423.4693	423.4693	0.0170		423.8942
Total	**0.2768**	**0.2066**	**2.0203**	**4.2600e-003**	**0.4248**	**3.0600e-003**	**0.4278**	**0.1127**	**2.8300e-003**	**0.1155**		**423.4693**	**423.4693**	**0.0170**		**423.8942**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.2166	44.5481	26.1739	0.0455		2.6254	2.6254		2.4839	2.4839		4,446.9857	4,446.9857	1.0443		4,473.0928
Total	**5.2166**	**44.5481**	**26.1739**	**0.0455**		**2.6254**	**2.6254**		**2.4839**	**2.4839**		**4,446.9857**	**4,446.9857**	**1.0443**		**4,473.0928**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.5623	42.2130	10.9608	0.0863	2.0753	0.3547	2.4300	0.5976	0.3393	0.9369		9,087.2219	9,087.2219	0.7432		9,105.8013
Worker	6.0457	4.5122	44.1274	0.0931	9.2774	0.0669	9.3443	2.4604	0.0617	2.5221		9,249.4610	9,249.4610	0.3713		9,258.7423
Total	**7.6080**	**46.7251**	**55.0882**	**0.1794**	**11.3527**	**0.4216**	**11.7743**	**3.0580**	**0.4011**	**3.4590**		**18,336.6829**	**18,336.6829**	**1.1144**		**18,364.5435**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.2166	44.5481	26.1739	0.0455		2.6254	2.6254		2.4839	2.4839	0.0000	4,446.9857	4,446.9857	1.0443		4,473.0928
Total	**5.2166**	**44.5481**	**26.1739**	**0.0455**		**2.6254**	**2.6254**		**2.4839**	**2.4839**	**0.0000**	**4,446.9857**	**4,446.9857**	**1.0443**		**4,473.0928**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.5623	42.2130	10.9608	0.0863	2.0753	0.3547	2.4300	0.5976	0.3393	0.9369		9,087.2219	9,087.2219	0.7432		9,105.8013
Worker	6.0457	4.5122	44.1274	0.0931	9.2774	0.0669	9.3443	2.4604	0.0617	2.5221		9,249.4610	9,249.4610	0.3713		9,258.7423
Total	**7.6080**	**46.7251**	**55.0882**	**0.1794**	**11.3527**	**0.4216**	**11.7743**	**3.0580**	**0.4011**	**3.4590**		**18,336.6829**	**18,336.6829**	**1.1144**		**18,364.5435**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.4943	38.8560	24.8845	0.0455		2.2053	2.2053		2.0889	2.0889		4,403.8975	4,403.8975	1.0234		4,429.4820
Total	**4.4943**	**38.8560**	**24.8845**	**0.0455**		**2.2053**	**2.2053**		**2.0889**	**2.0889**		**4,403.8975**	**4,403.8975**	**1.0234**		**4,429.4820**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3670	39.5416	9.7050	0.0861	2.0752	0.2793	2.3545	0.5975	0.2672	0.8647		9,066.4608	9,066.4608	0.7109		9,084.2334
Worker	5.3989	3.9229	38.5079	0.0904	9.2774	0.0644	9.3419	2.4604	0.0594	2.5198		8,990.8083	8,990.8083	0.3248		8,998.9270
Total	**6.7658**	**43.4645**	**48.2128**	**0.1765**	**11.3527**	**0.3437**	**11.6964**	**3.0580**	**0.3266**	**3.3845**		**18,057.2690**	**18,057.2690**	**1.0357**		**18,083.1603**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.4943	38.8560	24.8845	0.0455		2.2053	2.2053		2.0889	2.0889	0.0000	4,403.8975	4,403.8975	1.0234		4,429.4820
Total	**4.4943**	**38.8560**	**24.8845**	**0.0455**		**2.2053**	**2.2053**		**2.0889**	**2.0889**	**0.0000**	**4,403.8975**	**4,403.8975**	**1.0234**		**4,429.4820**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3670	39.5416	9.7050	0.0861	2.0752	0.2793	2.3545	0.5975	0.2672	0.8647		9,066.4608	9,066.4608	0.7109		9,084.2334
Worker	5.3989	3.9229	38.5079	0.0904	9.2774	0.0644	9.3419	2.4604	0.0594	2.5198		8,990.8083	8,990.8083	0.3248		8,998.9270
Total	**6.7658**	**43.4645**	**48.2128**	**0.1765**	**11.3527**	**0.3437**	**11.6964**	**3.0580**	**0.3266**	**3.3845**		**18,057.2690**	**18,057.2690**	**1.0357**		**18,083.1603**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.4701					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7964	5.3487	4.9445	7.9200e-003		0.4015	0.4015		0.4015	0.4015		750.5295	750.5295	0.0713		752.3123
Total	**34.2664**	**5.3487**	**4.9445**	**7.9200e-003**		**0.4015**	**0.4015**		**0.4015**	**0.4015**		**750.5295**	**750.5295**	**0.0713**		**752.3123**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.0798	0.7846	7.7016	0.0181	1.8555	0.0129	1.8684	0.4921	0.0119	0.5040		1,798.1617	1,798.1617	0.0650		1,799.7854
Total	**1.0798**	**0.7846**	**7.7016**	**0.0181**	**1.8555**	**0.0129**	**1.8684**	**0.4921**	**0.0119**	**0.5040**		**1,798.1617**	**1,798.1617**	**0.0650**		**1,799.7854**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.4701					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7964	5.3487	4.9445	7.9200e-003		0.4015	0.4015		0.4015	0.4015	0.0000	750.5295	750.5295	0.0713		752.3123
Total	**34.2664**	**5.3487**	**4.9445**	**7.9200e-003**		**0.4015**	**0.4015**		**0.4015**	**0.4015**	**0.0000**	**750.5295**	**750.5295**	**0.0713**		**752.3123**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.0798	0.7846	7.7016	0.0181	1.8555	0.0129	1.8684	0.4921	0.0119	0.5040		1,798.1617	1,798.1617	0.0650		1,799.7854
Total	**1.0798**	**0.7846**	**7.7016**	**0.0181**	**1.8555**	**0.0129**	**1.8684**	**0.4921**	**0.0119**	**0.5040**		**1,798.1617**	**1,798.1617**	**0.0650**		**1,799.7854**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2115	23.2722	17.3686	0.0309		1.1916	1.1916		1.0963	1.0963		3,106.8279	3,106.8279	0.9672		3,131.0078
Paving	2.6842					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.8957**	**23.2722**	**17.3686**	**0.0309**		**1.1916**	**1.1916**		**1.0963**	**1.0963**		**3,106.8279**	**3,106.8279**	**0.9672**		**3,131.0078**

3.7 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1171	0.0851	0.8351	1.9600e-003	0.2012	1.4000e-003	0.2026	0.0534	1.2900e-003	0.0547		194.9814	194.9814	7.0400e-003		195.1575
Total	**0.1171**	**0.0851**	**0.8351**	**1.9600e-003**	**0.2012**	**1.4000e-003**	**0.2026**	**0.0534**	**1.2900e-003**	**0.0547**		**194.9814**	**194.9814**	**7.0400e-003**		**195.1575**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2115	23.2722	17.3686	0.0309		1.1916	1.1916		1.0963	1.0963	0.0000	3,106.8278	3,106.8278	0.9672		3,131.0078
Paving	2.6842					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.8957**	**23.2722**	**17.3686**	**0.0309**		**1.1916**	**1.1916**		**1.0963**	**1.0963**	**0.0000**	**3,106.8278**	**3,106.8278**	**0.9672**		**3,131.0078**

3.7 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1171	0.0851	0.8351	1.9600e-003	0.2012	1.4000e-003	0.2026	0.0534	1.2900e-003	0.0547		194.9814	194.9814	7.0400e-003		195.1575
Total	**0.1171**	**0.0851**	**0.8351**	**1.9600e-003**	**0.2012**	**1.4000e-003**	**0.2026**	**0.0534**	**1.2900e-003**	**0.0547**		**194.9814**	**194.9814**	**7.0400e-003**		**195.1575**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Unmitigated	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Building 4 Construction- Mitigated

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Summer

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space required significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 parking spaces

Construction Phase - Based on 2018 opening year and past project experience

Off-road Equipment - Based on information provided by the project engineer

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water trucks

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Off-road Equipment - Off-highway trucks= water trucks

Off-road Equipment - Based on information provided by the Project engineer; off-highway truck= water truck

Trips and VMT -

Demolition -

Grading -

Architectural Coating - Based on Rule 1113 and information provided by the Project engineer

Vehicle Trips - Construction only

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Road Dust - Construction only

Consumer Products - Construction only

Area Coating - Construction only

Landscape Equipment - Construction only

Energy Use - Construction only

Water And Wastewater - Construction only

Solid Waste - Construction only

Construction Off-road Equipment Mitigation - During site preparation and grading activity, all graders, scrapers, and rubber tired dozers shall be CARB certified tier 3 or higher

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Nonresidential_Exterior	532,440.00	202,500.00
tblArchitecturalCoating	ConstArea_Nonresidential_Interior	1,597,320.00	207,820.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblAreaCoating	ReapplicationRatePercent	10	0
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	8.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	75.00	50.00
tblConstructionPhase	NumDays	1,110.00	210.00
tblConstructionPhase	NumDays	70.00	30.00
tblConstructionPhase	NumDays	110.00	55.00
tblConstructionPhase	NumDays	75.00	20.00
tblConsumerProducts	ROG_EF	1.98E-05	0
tblConsumerProducts	ROG_EF_Degreaser	3.542E-07	1E-10
tblConsumerProducts	ROG_EF_PesticidesFertilizers	5.152E-08	1E-10
tblEnergyUse	LightingElect	0.88	0.00
tblEnergyUse	LightingElect	1.20	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.39	0.00
tblEnergyUse	T24NG	2.02	0.00
tblLandscapeEquipment	NumberSummerDays	250	0.1

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Summer

tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	HorsePower	402.00	189.00
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	LoadFactor	0.38	0.50
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	8.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64

tblRoadDust	RoadPercentPave	100	0
tblSolidWaste	SolidWasteGenerationRate	1,000.99	0.00
tblVehicleTrips	ST_TR	1.68	0.00
tblVehicleTrips	SU_TR	1.68	0.00
tblVehicleTrips	WD_TR	1.68	0.00
tblWater	IndoorWaterUseRate	246,253,500.00	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	15.8654	187.7634	107.2262	0.2389	21.4832	7.9680	29.4511	7.7064	7.3305	15.0370	0.0000	24,193.0894	24,193.0894	5.2600	0.0000	24,246.6954
2018	35.3494	82.2911	80.0806	0.2358	11.3527	2.5455	13.8982	3.0580	2.4121	5.4701	0.0000	23,851.5557	23,851.5557	2.0388	0.0000	23,902.5264
Maximum	**35.3494**	**187.7634**	**107.2262**	**0.2389**	**21.4832**	**7.9680**	**29.4511**	**7.7064**	**7.3305**	**15.0370**	**0.0000**	**24,193.0894**	**24,193.0894**	**5.2600**	**0.0000**	**24,246.6954**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	12.7786	91.1421	90.2722	0.2389	11.3527	3.7030	14.3954	3.0742	3.6158	6.6900	0.0000	24,193.0894	24,193.0894	5.2600	0.0000	24,246.6954
2018	35.3494	82.2911	80.0806	0.2358	11.3527	2.5455	13.8982	3.0580	2.4121	5.4701	0.0000	23,851.5557	23,851.5557	2.0388	0.0000	23,902.5264
Maximum	**35.3494**	**91.1421**	**90.2722**	**0.2389**	**11.3527**	**3.7030**	**14.3954**	**3.0742**	**3.6158**	**6.6900**	**0.0000**	**24,193.0894**	**24,193.0894**	**5.2600**	**0.0000**	**24,246.6954**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**6.03**	**35.78**	**9.05**	**0.00**	**30.85**	**40.57**	**34.73**	**43.03**	**38.13**	**40.70**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**	**0.0000**	**0.7816**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**	**0.0000**	**1.2500e-003**	**1.2500e-003**	**0.0000**	**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**	**0.0000**	**0.7816**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	6/1/2017	7/12/2017	5	30	
2	Site Preparation	Site Preparation	7/13/2017	9/6/2017	5	40	
3	Grading	Grading	9/7/2017	11/22/2017	5	55	
4	Building Construction	Building Construction	11/23/2017	9/12/2018	5	210	
5	Architectural Coating	Architectural Coating	9/13/2018	11/21/2018	5	50	
6	Paving	Paving	11/22/2018	12/19/2018	5	20	

Acres of Grading (Site Preparation Phase): 20

Acres of Grading (Grading Phase): 467.5

Acres of Paving: 20.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 207,820; Non-Residential Outdoor: 202,500; Striped Parking Area: 54,648 (Architectural Coating – sqft)

OffRoad Equipment

Building 4 Construction- Mitigated - San Bernardino-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	1	8.00	158	0.38
Demolition	Off-Highway Trucks	1	8.00	189	0.50
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Off-Highway Trucks	2	8.00	189	0.50
Site Preparation	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Excavators	0	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Off-Highway Trucks	2	8.00	189	0.50
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	8	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Forklifts	5	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Off-Highway Trucks	1	8.00	189	0.50
Building Construction	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	2	8.00	78	0.48
Paving	Off-Highway Trucks	1	8.00	189	0.50
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	80.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	15	38.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	12	830.00	324.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	2	166.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Water Exposed Area

3.2 Demolition - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5767	0.0000	0.5767	0.0873	0.0000	0.0873			0.0000			0.0000
Off-Road	2.8607	28.8254	14.6338	0.0280		1.4682	1.4682		1.3753	1.3753		2,819.1951	2,819.1951	0.7344		2,837.5538
Total	**2.8607**	**28.8254**	**14.6338**	**0.0280**	**0.5767**	**1.4682**	**2.0449**	**0.0873**	**1.3753**	**1.4626**		**2,819.1951**	**2,819.1951**	**0.7344**		**2,837.5538**

3.2 Demolition - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0219	0.8138	0.1186	2.1600e-003	0.0467	4.0400e-003	0.0507	0.0128	3.8600e-003	0.0167		228.5557	228.5557	0.0129		228.8776
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0731	0.0515	0.6423	1.2500e-003	0.1118	8.1000e-004	0.1126	0.0296	7.4000e-004	0.0304		124.1880	124.1880	5.0700e-003		124.3147
Total	**0.0949**	**0.8653**	**0.7609**	**3.4100e-003**	**0.1585**	**4.8500e-003**	**0.1633**	**0.0424**	**4.6000e-003**	**0.0471**		**352.7437**	**352.7437**	**0.0180**		**353.1923**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2249	0.0000	0.2249	0.0341	0.0000	0.0341			0.0000			0.0000
Off-Road	1.8386	19.5014	14.5377	0.0280		0.9673	0.9673		0.9267	0.9267	0.0000	2,819.1951	2,819.1951	0.7344		2,837.5538
Total	**1.8386**	**19.5014**	**14.5377**	**0.0280**	**0.2249**	**0.9673**	**1.1922**	**0.0341**	**0.9267**	**0.9607**	**0.0000**	**2,819.1951**	**2,819.1951**	**0.7344**		**2,837.5538**

3.2 Demolition - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0219	0.8138	0.1186	2.1600e-003	0.0467	4.0400e-003	0.0507	0.0128	3.8600e-003	0.0167		228.5557	228.5557	0.0129		228.8776
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0731	0.0515	0.6423	1.2500e-003	0.1118	8.1000e-004	0.1126	0.0296	7.4000e-004	0.0304		124.1880	124.1880	5.0700e-003		124.3147
Total	**0.0949**	**0.8653**	**0.7609**	**3.4100e-003**	**0.1585**	**4.8500e-003**	**0.1633**	**0.0424**	**4.6000e-003**	**0.0471**		**352.7437**	**352.7437**	**0.0180**		**353.1923**

3.3 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					12.5744	0.0000	12.5744	6.6777	0.0000	6.6777			0.0000			0.0000
Off-Road	4.7055	51.8078	19.4494	0.0430		2.4103	2.4103		2.2174	2.2174		4,396.7864	4,396.7864	1.3472		4,430.4656
Total	**4.7055**	**51.8078**	**19.4494**	**0.0430**	**12.5744**	**2.4103**	**14.9847**	**6.6777**	**2.2174**	**8.8951**		**4,396.7864**	**4,396.7864**	**1.3472**		**4,430.4656**

3.3 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1096	0.0773	0.9634	1.8800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		186.2819	186.2819	7.6000e-003		186.4720
Total	**0.1096**	**0.0773**	**0.9634**	**1.8800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**186.2819**	**186.2819**	**7.6000e-003**		**186.4720**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					4.9040	0.0000	4.9040	2.6043	0.0000	2.6043			0.0000			0.0000
Off-Road	2.2879	28.8262	20.8136	0.0430		1.2837	1.2837		1.2151	1.2151	0.0000	4,396.7864	4,396.7864	1.3472		4,430.4656
Total	**2.2879**	**28.8262**	**20.8136**	**0.0430**	**4.9040**	**1.2837**	**6.1877**	**2.6043**	**1.2151**	**3.8194**	**0.0000**	**4,396.7864**	**4,396.7864**	**1.3472**		**4,430.4656**

3.3 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1096	0.0773	0.9634	1.8800e-003	0.1677	1.2100e-003	0.1689	0.0445	1.1200e-003	0.0456		186.2819	186.2819	7.6000e-003		186.4720
Total	**0.1096**	**0.0773**	**0.9634**	**1.8800e-003**	**0.1677**	**1.2100e-003**	**0.1689**	**0.0445**	**1.1200e-003**	**0.0456**		**186.2819**	**186.2819**	**7.6000e-003**		**186.4720**

3.4 Grading - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					21.0584	0.0000	21.0584	7.5938	0.0000	7.5938			0.0000			0.0000
Off-Road	15.5878	187.5676	104.7856	0.1672		7.9649	7.9649		7.3277	7.3277		17,104.4245	17,104.4245	5.2408		17,235.4436
Total	**15.5878**	**187.5676**	**104.7856**	**0.1672**	**21.0584**	**7.9649**	**29.0233**	**7.5938**	**7.3277**	**14.9215**		**17,104.4245**	**17,104.4245**	**5.2408**		**17,235.4436**

3.4 Grading - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2777	0.1958	2.4406	4.7500e-003	0.4248	3.0600e-003	0.4278	0.1127	2.8300e-003	0.1155		471.9143	471.9143	0.0193		472.3958
Total	**0.2777**	**0.1958**	**2.4406**	**4.7500e-003**	**0.4248**	**3.0600e-003**	**0.4278**	**0.1127**	**2.8300e-003**	**0.1155**		**471.9143**	**471.9143**	**0.0193**		**472.3958**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.2128	0.0000	8.2128	2.9616	0.0000	2.9616			0.0000			0.0000
Off-Road	5.5874	89.5347	87.8316	0.1672		3.6999	3.6999		3.6129	3.6129	0.0000	17,104.4245	17,104.4245	5.2408		17,235.4436
Total	**5.5874**	**89.5347**	**87.8316**	**0.1672**	**8.2128**	**3.6999**	**11.9127**	**2.9616**	**3.6129**	**6.5745**	**0.0000**	**17,104.4245**	**17,104.4245**	**5.2408**		**17,235.4436**

3.4 Grading - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.2777	0.1958	2.4406	4.7500e-003	0.4248	3.0600e-003	0.4278	0.1127	2.8300e-003	0.1155		471.9143	471.9143	0.0193		472.3958
Total	**0.2777**	**0.1958**	**2.4406**	**4.7500e-003**	**0.4248**	**3.0600e-003**	**0.4278**	**0.1127**	**2.8300e-003**	**0.1155**		**471.9143**	**471.9143**	**0.0193**		**472.3958**

3.5 Building Construction - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.2166	44.5481	26.1739	0.0455		2.6254	2.6254		2.4839	2.4839		4,446.9857	4,446.9857	1.0443		4,473.0928
Total	**5.2166**	**44.5481**	**26.1739**	**0.0455**		**2.6254**	**2.6254**		**2.4839**	**2.4839**		**4,446.9857**	**4,446.9857**	**1.0443**		**4,473.0928**

3.5 Building Construction - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4975	42.3169	9.7473	0.0897	2.0753	0.3504	2.4256	0.5976	0.3352	0.9327		9,438.5031	9,438.5031	0.6793		9,455.4849
Worker	6.0644	4.2771	53.3071	0.1038	9.2774	0.0669	9.3443	2.4604	0.0617	2.5221		10,307.6007	10,307.6007	0.4207		10,318.1176
Total	**7.5619**	**46.5940**	**63.0544**	**0.1934**	**11.3527**	**0.4173**	**11.7700**	**3.0580**	**0.3969**	**3.4549**		**19,746.1037**	**19,746.1037**	**1.1000**		**19,773.6026**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.2166	44.5481	26.1739	0.0455		2.6254	2.6254		2.4839	2.4839	0.0000	4,446.9857	4,446.9857	1.0443		4,473.0928
Total	**5.2166**	**44.5481**	**26.1739**	**0.0455**		**2.6254**	**2.6254**		**2.4839**	**2.4839**	**0.0000**	**4,446.9857**	**4,446.9857**	**1.0443**		**4,473.0928**

3.5 Building Construction - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.4975	42.3169	9.7473	0.0897	2.0753	0.3504	2.4256	0.5976	0.3352	0.9327		9,438.5031	9,438.5031	0.6793		9,455.4849
Worker	6.0644	4.2771	53.3071	0.1038	9.2774	0.0669	9.3443	2.4604	0.0617	2.5221		10,307.6007	10,307.6007	0.4207		10,318.1176
Total	**7.5619**	**46.5940**	**63.0544**	**0.1934**	**11.3527**	**0.4173**	**11.7700**	**3.0580**	**0.3969**	**3.4549**		**19,746.1037**	**19,746.1037**	**1.1000**		**19,773.6026**

3.5 Building Construction - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.4943	38.8560	24.8845	0.0455		2.2053	2.2053		2.0889	2.0889		4,403.8975	4,403.8975	1.0234		4,429.4820
Total	**4.4943**	**38.8560**	**24.8845**	**0.0455**		**2.2053**	**2.2053**		**2.0889**	**2.0889**		**4,403.8975**	**4,403.8975**	**1.0234**		**4,429.4820**

3.5 Building Construction - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3056	39.7119	8.5257	0.0895	2.0752	0.2758	2.3510	0.5975	0.2638	0.8614		9,426.0005	9,426.0005	0.6462		9,442.1551
Worker	5.4150	3.7233	46.6704	0.1008	9.2774	0.0644	9.3419	2.4604	0.0594	2.5198		10,021.6578	10,021.6578	0.3693		10,030.8893
Total	**6.7206**	**43.4352**	**55.1961**	**0.1903**	**11.3527**	**0.3402**	**11.6929**	**3.0580**	**0.3232**	**3.3812**		**19,447.6583**	**19,447.6583**	**1.0155**		**19,473.0444**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.4943	38.8560	24.8845	0.0455		2.2053	2.2053		2.0889	2.0889	0.0000	4,403.8975	4,403.8975	1.0234		4,429.4820
Total	**4.4943**	**38.8560**	**24.8845**	**0.0455**		**2.2053**	**2.2053**		**2.0889**	**2.0889**	**0.0000**	**4,403.8975**	**4,403.8975**	**1.0234**		**4,429.4820**

3.5 Building Construction - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	1.3056	39.7119	8.5257	0.0895	2.0752	0.2758	2.3510	0.5975	0.2638	0.8614		9,426.0005	9,426.0005	0.6462		9,442.1551
Worker	5.4150	3.7233	46.6704	0.1008	9.2774	0.0644	9.3419	2.4604	0.0594	2.5198		10,021.6578	10,021.6578	0.3693		10,030.8893
Total	**6.7206**	**43.4352**	**55.1961**	**0.1903**	**11.3527**	**0.3402**	**11.6929**	**3.0580**	**0.3232**	**3.3812**		**19,447.6583**	**19,447.6583**	**1.0155**		**19,473.0444**

3.6 Architectural Coating - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.4701					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7964	5.3487	4.9445	7.9200e-003		0.4015	0.4015		0.4015	0.4015		750.5295	750.5295	0.0713		752.3123
Total	**34.2664**	**5.3487**	**4.9445**	**7.9200e-003**		**0.4015**	**0.4015**		**0.4015**	**0.4015**		**750.5295**	**750.5295**	**0.0713**		**752.3123**

3.6 Architectural Coating - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.0830	0.7447	9.3341	0.0202	1.8555	0.0129	1.8684	0.4921	0.0119	0.5040		2,004.3316	2,004.3316	0.0739		2,006.1779
Total	**1.0830**	**0.7447**	**9.3341**	**0.0202**	**1.8555**	**0.0129**	**1.8684**	**0.4921**	**0.0119**	**0.5040**		**2,004.3316**	**2,004.3316**	**0.0739**		**2,006.1779**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	33.4701					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.7964	5.3487	4.9445	7.9200e-003		0.4015	0.4015		0.4015	0.4015	0.0000	750.5295	750.5295	0.0713		752.3123
Total	**34.2664**	**5.3487**	**4.9445**	**7.9200e-003**		**0.4015**	**0.4015**		**0.4015**	**0.4015**	**0.0000**	**750.5295**	**750.5295**	**0.0713**		**752.3123**

3.6 Architectural Coating - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	1.0830	0.7447	9.3341	0.0202	1.8555	0.0129	1.8684	0.4921	0.0119	0.5040		2,004.3316	2,004.3316	0.0739		2,006.1779
Total	**1.0830**	**0.7447**	**9.3341**	**0.0202**	**1.8555**	**0.0129**	**1.8684**	**0.4921**	**0.0119**	**0.5040**		**2,004.3316**	**2,004.3316**	**0.0739**		**2,006.1779**

3.7 Paving - 2018

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2115	23.2722	17.3686	0.0309		1.1916	1.1916		1.0963	1.0963		3,106.8279	3,106.8279	0.9672		3,131.0078
Paving	2.6842					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.8957**	**23.2722**	**17.3686**	**0.0309**		**1.1916**	**1.1916**		**1.0963**	**1.0963**		**3,106.8279**	**3,106.8279**	**0.9672**		**3,131.0078**

3.7 Paving - 2018

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1174	0.0808	1.0121	2.1900e-003	0.2012	1.4000e-003	0.2026	0.0534	1.2900e-003	0.0547		217.3372	217.3372	8.0100e-003		217.5374
Total	**0.1174**	**0.0808**	**1.0121**	**2.1900e-003**	**0.2012**	**1.4000e-003**	**0.2026**	**0.0534**	**1.2900e-003**	**0.0547**		**217.3372**	**217.3372**	**8.0100e-003**		**217.5374**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2115	23.2722	17.3686	0.0309		1.1916	1.1916		1.0963	1.0963	0.0000	3,106.8278	3,106.8278	0.9672		3,131.0078
Paving	2.6842					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**4.8957**	**23.2722**	**17.3686**	**0.0309**		**1.1916**	**1.1916**		**1.0963**	**1.0963**	**0.0000**	**3,106.8278**	**3,106.8278**	**0.9672**		**3,131.0078**

3.7 Paving - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1174	0.0808	1.0121	2.1900e-003	0.2012	1.4000e-003	0.2026	0.0534	1.2900e-003	0.0547		217.3372	217.3372	8.0100e-003		217.5374
Total	**0.1174**	**0.0808**	**1.0121**	**2.1900e-003**	**0.2012**	**1.4000e-003**	**0.2026**	**0.0534**	**1.2900e-003**	**0.0547**		**217.3372**	**217.3372**	**8.0100e-003**		**217.5374**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Unmitigated	0.0332	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.0000e-005					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**0.0332**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Building 4 Operations Passenger Cars

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Operations Passenger Cars - San Bernardino-South Coast County, Winter

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space requires significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 spaces

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment - Operation only

On-road Fugitive Dust - Operation only

Vehicle Trips - Based on traffic study and ITE Trip Generation Manual, 9th Edition

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on information provided by the Project engineer

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 5% (nonresidential) to reflect 2016 Title 24 requirements. Source: 2016 Building Energy Efficiency Standards Adoption Hearing (CEC 2015)

Fleet Mix - Passenger Cars only

Operational Off-Road Equipment - All yard trucks are non-diesel

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	532440	202500
tblAreaCoating	Area_Nonresidential_Interior	1597320	207820
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstructionPhase	NumDays	40.00	1.00
tblEnergyUse	T24E	0.39	0.37
tblEnergyUse	T24NG	2.02	1.92
tblFleetMix	FleetMixLandUseSubType	Unrefrigerated Warehouse-No Rail	Parking Lot
tblFleetMix	FleetMixLandUseSubType	Parking Lot	Unrefrigerated Warehouse-No Rail
tblFleetMix	HHD	0.06	0.00
tblFleetMix	LDA	0.54	1.00

Building 4 Operations Passenger Cars - San Bernardino-South Coast County, Winter

tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.9060e-003	0.00
tblFleetMix	MCY	6.3790e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.2510e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3150e-003	0.00
tblFleetMix	SBUS	8.2900e-004	0.00
tblFleetMix	UBUS	1.7780e-003	0.00
tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	VendorPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.37	0.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00

tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.04
tblVehicleTrips	SU_TR	1.68	1.04
tblVehicleTrips	WD_TR	1.68	1.04

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Mobile	1.8378	3.3011	35.5688	0.1184	13.9666	0.0771	14.0438	3.7024	0.0712	3.7736		11,800.3383	11,800.3383	0.2860		11,807.4887
Offroad	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**24.6029**	**12.8561**	**39.6119**	**0.1344**	**13.9666**	**0.4110**	**14.3776**	**3.7024**	**0.3818**	**4.0842**		**13,742.8086**	**13,742.8086**	**0.6970**	**0.0123**	**13,763.8896**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Mobile	1.8378	3.3011	35.5688	0.1184	13.9666	0.0771	14.0438	3.7024	0.0712	3.7736		11,800.3383	11,800.3383	0.2860		11,807.4887
Offroad	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**24.6029**	**12.8561**	**39.6119**	**0.1344**	**13.9666**	**0.4110**	**14.3776**	**3.7024**	**0.3818**	**4.0842**		**13,742.8086**	**13,742.8086**	**0.6970**	**0.0123**	**13,763.8896**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/16/2017	3/16/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 20.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8378	3.3011	35.5688	0.1184	13.9666	0.0771	14.0438	3.7024	0.0712	3.7736		11,800.3383	11,800.3383	0.2860		11,807.4887
Unmitigated	1.8378	3.3011	35.5688	0.1184	13.9666	0.0771	14.0438	3.7024	0.0712	3.7736		11,800.3383	11,800.3383	0.2860		11,807.4887

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,107.48	1,107.48	1107.48	6,691,808	6,691,808
Total	1,107.48	1,107.48	1,107.48	6,691,808	6,691,808

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251
Unrefrigerated Warehouse-No Rail	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
NaturalGas Unmitigated	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	5689.08	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Total		**0.0614**	**0.5578**	**0.4685**	**3.3500e-003**		**0.0424**	**0.0424**		**0.0424**	**0.0424**		**669.3041**	**669.3041**	**0.0128**	**0.0123**	**673.2815**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	5.68908	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Total		**0.0614**	**0.5578**	**0.4685**	**3.3500e-003**		**0.0424**	**0.0424**		**0.0424**	**0.0424**		**669.3041**	**669.3041**	**0.0128**	**0.0123**	**673.2815**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Unmitigated	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.4072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**22.0307**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.4072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**22.0307**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	4	4.00	365	200	0.37	CNG

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/ Backhoes	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**0.6730**	**8.9940**	**3.2287**	**0.0127**		**0.2902**	**0.2902**		**0.2670**	**0.2670**		**1,272.4348**	**1,272.4348**	**0.3961**		**1,282.3379**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Building 4 Operations Passenger Cars

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Operations Passenger Cars - San Bernardino-South Coast County, Summer

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space requires significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 spaces

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment - Operation only

On-road Fugitive Dust - Operation only

Vehicle Trips - Based on traffic study and ITE Trip Generation Manual, 9th Edition

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on information provided by the Project engineer

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 5% (nonresidential) to reflect 2016 Title 24 requirements. Source: 2016 Building Energy Efficiency Standards Adoption Hearing (CEC 2015)

Fleet Mix - Passenger Cars only

Operational Off-Road Equipment - All yard trucks are non-diesel

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	532440	202500
tblAreaCoating	Area_Nonresidential_Interior	1597320	207820
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstructionPhase	NumDays	40.00	1.00
tblEnergyUse	T24E	0.39	0.37
tblEnergyUse	T24NG	2.02	1.92
tblFleetMix	FleetMixLandUseSubType	Unrefrigerated Warehouse-No Rail	Parking Lot
tblFleetMix	FleetMixLandUseSubType	Parking Lot	Unrefrigerated Warehouse-No Rail
tblFleetMix	HHD	0.06	0.00
tblFleetMix	LDA	0.54	1.00

tblFleetMix	LDT1	0.04	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.9060e-003	0.00
tblFleetMix	MCY	6.3790e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.2510e-003	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	1.3150e-003	0.00
tblFleetMix	SBUS	8.2900e-004	0.00
tblFleetMix	UBUS	1.7780e-003	0.00
tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	VendorPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.37	0.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00

tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.04
tblVehicleTrips	SU_TR	1.68	1.04
tblVehicleTrips	WD_TR	1.68	1.04

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Mobile	2.2319	3.1597	44.0136	0.1324	13.9666	0.0771	14.0438	3.7024	0.0712	3.7736		13,191.2973	13,191.2973	0.3274		13,199.4811
Offroad	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**24.9969**	**12.7147**	**48.0568**	**0.1484**	**13.9666**	**0.4110**	**14.3776**	**3.7024**	**0.3818**	**4.0842**		**15,133.7676**	**15,133.7676**	**0.7383**	**0.0123**	**15,155.8820**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Mobile	2.2319	3.1597	44.0136	0.1324	13.9666	0.0771	14.0438	3.7024	0.0712	3.7736		13,191.2973	13,191.2973	0.3274		13,199.4811
Offroad	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**24.9969**	**12.7147**	**48.0568**	**0.1484**	**13.9666**	**0.4110**	**14.3776**	**3.7024**	**0.3818**	**4.0842**		**15,133.7676**	**15,133.7676**	**0.7383**	**0.0123**	**15,155.8820**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/16/2017	3/16/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 20.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.2319	3.1597	44.0136	0.1324	13.9666	0.0771	14.0438	3.7024	0.0712	3.7736		13,191.2973	13,191.2973	0.3274		13,199.4811
Unmitigated	2.2319	3.1597	44.0136	0.1324	13.9666	0.0771	14.0438	3.7024	0.0712	3.7736		13,191.2973	13,191.2973	0.3274		13,199.4811

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,107.48	1,107.48	1107.48	6,691,808	6,691,808
Total	1,107.48	1,107.48	1,107.48	6,691,808	6,691,808

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	16.60	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251
Unrefrigerated Warehouse-No Rail	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
NaturalGas Unmitigated	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	5689.08	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Total		**0.0614**	**0.5578**	**0.4685**	**3.3500e-003**		**0.0424**	**0.0424**		**0.0424**	**0.0424**		**669.3041**	**669.3041**	**0.0128**	**0.0123**	**673.2815**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	5.68908	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Total		**0.0614**	**0.5578**	**0.4685**	**3.3500e-003**		**0.0424**	**0.0424**		**0.0424**	**0.0424**		**669.3041**	**669.3041**	**0.0128**	**0.0123**	**673.2815**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Unmitigated	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.4072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**22.0307**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.4072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**22.0307**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	4	4.00	365	200	0.37	CNG

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/ Backhoes	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**0.6730**	**8.9940**	**3.2287**	**0.0127**		**0.2902**	**0.2902**		**0.2670**	**0.2670**		**1,272.4348**	**1,272.4348**	**0.3961**		**1,282.3379**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Building 4 Operations Trucks

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Operations Trucks - San Bernardino-South Coast County, Winter

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space requires significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 spaces

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment - Operation only

On-road Fugitive Dust - Operation only

Vehicle Trips - Based on traffic study and ITE Trip Generation Manual, 9th Edition

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on information provided by the Project engineer

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 5% (nonresidential) to reflect 2016 Title 24 requirements. Source: 2016 Building Energy Efficiency Standards Adoption Hearing (CEC 2015)

Fleet Mix - Trucks only

Operational Off-Road Equipment - All yard trucks are non-diesel

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	532440	202500
tblAreaCoating	Area_Nonresidential_Interior	1597320	207820
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstructionPhase	NumDays	40.00	1.00
tblEnergyUse	T24E	0.39	0.37
tblEnergyUse	T24NG	2.02	1.92
tblFleetMix	HHD	0.06	0.60
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.22

Building 4 Operations Trucks - San Bernardino-South Coast County, Winter

tblFleetMix	LHD2	5.9060e-003	0.00
tblFleetMix	MCY	6.3790e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.2510e-003	0.00
tblFleetMix	MHD	0.02	0.18
tblFleetMix	OBUS	1.3150e-003	0.00
tblFleetMix	SBUS	8.2900e-004	0.00
tblFleetMix	UBUS	1.7780e-003	0.00
tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	VendorPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.37	0.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00

tblVehicleTrips	ST_TR	1.68	0.64
tblVehicleTrips	SU_TR	1.68	0.64
tblVehicleTrips	WD_TR	1.68	0.64

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Mobile	8.5379	253.7305	67.6421	0.7896	24.2858	1.9147	26.2005	6.8284	1.8311	8.6595		83,118.9261	83,118.9261	3.1710		83,198.2022
Offroad	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**31.3030**	**263.2855**	**71.6853**	**0.8056**	**24.2858**	**2.2485**	**26.5343**	**6.8284**	**2.1417**	**8.9701**		**85,061.3964**	**85,061.3964**	**3.5820**	**0.0123**	**85,154.6032**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Mobile	8.5379	253.7305	67.6421	0.7896	24.2858	1.9147	26.2005	6.8284	1.8311	8.6595		83,118.9261	83,118.9261	3.1710		83,198.2022
Offroad	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**31.3030**	**263.2855**	**71.6853**	**0.8056**	**24.2858**	**2.2485**	**26.5343**	**6.8284**	**2.1417**	**8.9701**		**85,061.3964**	**85,061.3964**	**3.5820**	**0.0123**	**85,154.6032**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/16/2017	3/16/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 20.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.5379	253.7305	67.6421	0.7896	24.2858	1.9147	26.2005	6.8284	1.8311	8.6595		83,118.9261	83,118.9261	3.1710		83,198.2022
Unmitigated	8.5379	253.7305	67.6421	0.7896	24.2858	1.9147	26.2005	6.8284	1.8311	8.6595		83,118.9261	83,118.9261	3.1710		83,198.2022

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	681.52	681.52	681.52	9,922,978	9,922,978
Total	681.52	681.52	681.52	9,922,978	9,922,978

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.000000	0.040171	0.000000	0.000000	0.220300	0.000000	0.176600	0.603100	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
NaturalGas Unmitigated	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	5689.08	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Total		**0.0614**	**0.5578**	**0.4685**	**3.3500e-003**		**0.0424**	**0.0424**		**0.0424**	**0.0424**		**669.3041**	**669.3041**	**0.0128**	**0.0123**	**673.2815**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	5.68908	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Total		**0.0614**	**0.5578**	**0.4685**	**3.3500e-003**		**0.0424**	**0.0424**		**0.0424**	**0.0424**		**669.3041**	**669.3041**	**0.0128**	**0.0123**	**673.2815**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Unmitigated	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.4072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**22.0307**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.4072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**22.0307**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	4	4.00	365	200	0.37	CNG

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/ Backhoes	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**0.6730**	**8.9940**	**3.2287**	**0.0127**		**0.2902**	**0.2902**		**0.2670**	**0.2670**		**1,272.4348**	**1,272.4348**	**0.3961**		**1,282.3379**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Building 4 Operations Trucks

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	1,064.88	1000sqft	41.55	1,064,880.00	0
Parking Lot	2,277.00	Space	20.49	910,800.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	497.64	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Building 4 Operations Trucks - San Bernardino-South Coast County, Summer

Project Characteristics - CPUC GHG Calculator version 3c, worksheet tab "CO2 Allocations," cells AH/AQ 35-44.

Land Use - Total lot acreage: 62.04; A trailer parking space requires significantly more space than one regular parking space. Therefore, for analysis purposes, 1 trailer parking=3.27 spaces

Construction Phase - Operation only

Off-road Equipment -

Off-road Equipment - Operation only

On-road Fugitive Dust - Operation only

Vehicle Trips - Based on traffic study and ITE Trip Generation Manual, 9th Edition

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Area Coating - Based on information provided by the Project engineer

Energy Use - Title-24 Electricity Energy Intensity and Title-24 Natural Gas Energy Intensity were adjusted by 5% (nonresidential) to reflect 2016 Title 24 requirements. Source: 2016 Building Energy Efficiency Standards Adoption Hearing (CEC 2015)

Fleet Mix - Trucks only

Operational Off-Road Equipment - All yard trucks are non-diesel

Table Name	Column Name	Default Value	New Value
tblAreaCoating	Area_Nonresidential_Exterior	532440	202500
tblAreaCoating	Area_Nonresidential_Interior	1597320	207820
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	0.5
tblConstructionPhase	NumDays	40.00	1.00
tblEnergyUse	T24E	0.39	0.37
tblEnergyUse	T24NG	2.02	1.92
tblFleetMix	HHD	0.06	0.60
tblFleetMix	LDA	0.54	0.00
tblFleetMix	LDT2	0.18	0.00
tblFleetMix	LHD1	0.02	0.22

Building 4 Operations Trucks - San Bernardino-South Coast County, Summer

tblFleetMix	LHD2	5.9060e-003	0.00
tblFleetMix	MCY	6.3790e-003	0.00
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	1.2510e-003	0.00
tblFleetMix	MHD	0.02	0.18
tblFleetMix	OBUS	1.3150e-003	0.00
tblFleetMix	SBUS	8.2900e-004	0.00
tblFleetMix	UBUS	1.7780e-003	0.00
tblLandUse	LotAcreage	24.45	41.55
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOnRoadDust	HaulingPercentPave	100.00	0.00
tblOnRoadDust	VendorPercentPave	100.00	0.00
tblOnRoadDust	WorkerPercentPave	100.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperLoadFactor	0.37	0.37
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	4.00
tblProjectCharacteristics	CO2IntensityFactor	702.44	497.64
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	59.00	100.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00

tblVehicleTrips	ST_TR	1.68	0.64
tblVehicleTrips	SU_TR	1.68	0.64
tblVehicleTrips	WD_TR	1.68	0.64

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Mobile	8.4554	246.8245	66.9635	0.7991	24.2858	1.9071	26.1929	6.8284	1.8238	8.6522		84,109.5121	84,109.5121	3.0255		84,185.1503
Offroad	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**31.2204**	**256.3795**	**71.0066**	**0.8151**	**24.2858**	**2.2410**	**26.5267**	**6.8284**	**2.1345**	**8.9629**		**86,051.9823**	**86,051.9823**	**3.4365**	**0.0123**	**86,141.5513**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Energy	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Mobile	8.4554	246.8245	66.9635	0.7991	24.2858	1.9071	26.1929	6.8284	1.8238	8.6522		84,109.5121	84,109.5121	3.0255		84,185.1503
Offroad	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**31.2204**	**256.3795**	**71.0066**	**0.8151**	**24.2858**	**2.2410**	**26.5267**	**6.8284**	**2.1345**	**8.9629**		**86,051.9823**	**86,051.9823**	**3.4365**	**0.0123**	**86,141.5513**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	3/16/2017	3/16/2017	5	1	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 20.49

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Site Preparation - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**

3.2 Site Preparation - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**		**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	8.4554	246.8245	66.9635	0.7991	24.2858	1.9071	26.1929	6.8284	1.8238	8.6522		84,109.5121	84,109.5121	3.0255		84,185.1503
Unmitigated	8.4554	246.8245	66.9635	0.7991	24.2858	1.9071	26.1929	6.8284	1.8238	8.6522		84,109.5121	84,109.5121	3.0255		84,185.1503

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	681.52	681.52	681.52	9,922,978	9,922,978
Total	681.52	681.52	681.52	9,922,978	9,922,978

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.000000	0.040171	0.000000	0.000000	0.220300	0.000000	0.176600	0.603100	0.000000	0.000000	0.000000	0.000000	0.000000
Parking Lot	0.536558	0.040171	0.178324	0.131133	0.021173	0.005906	0.016602	0.058581	0.001315	0.001778	0.006379	0.000829	0.001251

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
NaturalGas Unmitigated	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	5689.08	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Total		**0.0614**	**0.5578**	**0.4685**	**3.3500e-003**		**0.0424**	**0.0424**		**0.0424**	**0.0424**		**669.3041**	**669.3041**	**0.0128**	**0.0123**	**673.2815**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	5.68908	0.0614	0.5578	0.4685	3.3500e-003		0.0424	0.0424		0.0424	0.0424		669.3041	669.3041	0.0128	0.0123	673.2815
Total		**0.0614**	**0.5578**	**0.4685**	**3.3500e-003**		**0.0424**	**0.0424**		**0.0424**	**0.0424**		**669.3041**	**669.3041**	**0.0128**	**0.0123**	**673.2815**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Unmitigated	22.0307	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.4072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**22.0307**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.5905					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	21.4072					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0331	3.2400e-003	0.3459	3.0000e-005		1.2500e-003	1.2500e-003		1.2500e-003	1.2500e-003		0.7314	0.7314	2.0100e-003		0.7816
Total	**22.0307**	**3.2400e-003**	**0.3459**	**3.0000e-005**		**1.2500e-003**	**1.2500e-003**		**1.2500e-003**	**1.2500e-003**		**0.7314**	**0.7314**	**2.0100e-003**		**0.7816**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	4	4.00	365	200	0.37	CNG

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/ Backhoes	0.6730	8.9940	3.2287	0.0127		0.2902	0.2902		0.2670	0.2670		1,272.4348	1,272.4348	0.3961		1,282.3379
Total	**0.6730**	**8.9940**	**3.2287**	**0.0127**		**0.2902**	**0.2902**		**0.2670**	**0.2670**		**1,272.4348**	**1,272.4348**	**0.3961**		**1,282.3379**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

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APPENDIX 3.2:

STATE/FEDERAL ATTAINMENT STATUS OF CRITERIA POLLUTANTS

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Area Designations
for
National Ambient Air Quality Standards

CARBON MONOXIDE

Last Reviewed: December 2015
Air Quality Planning Branch, AQPSD, CARB

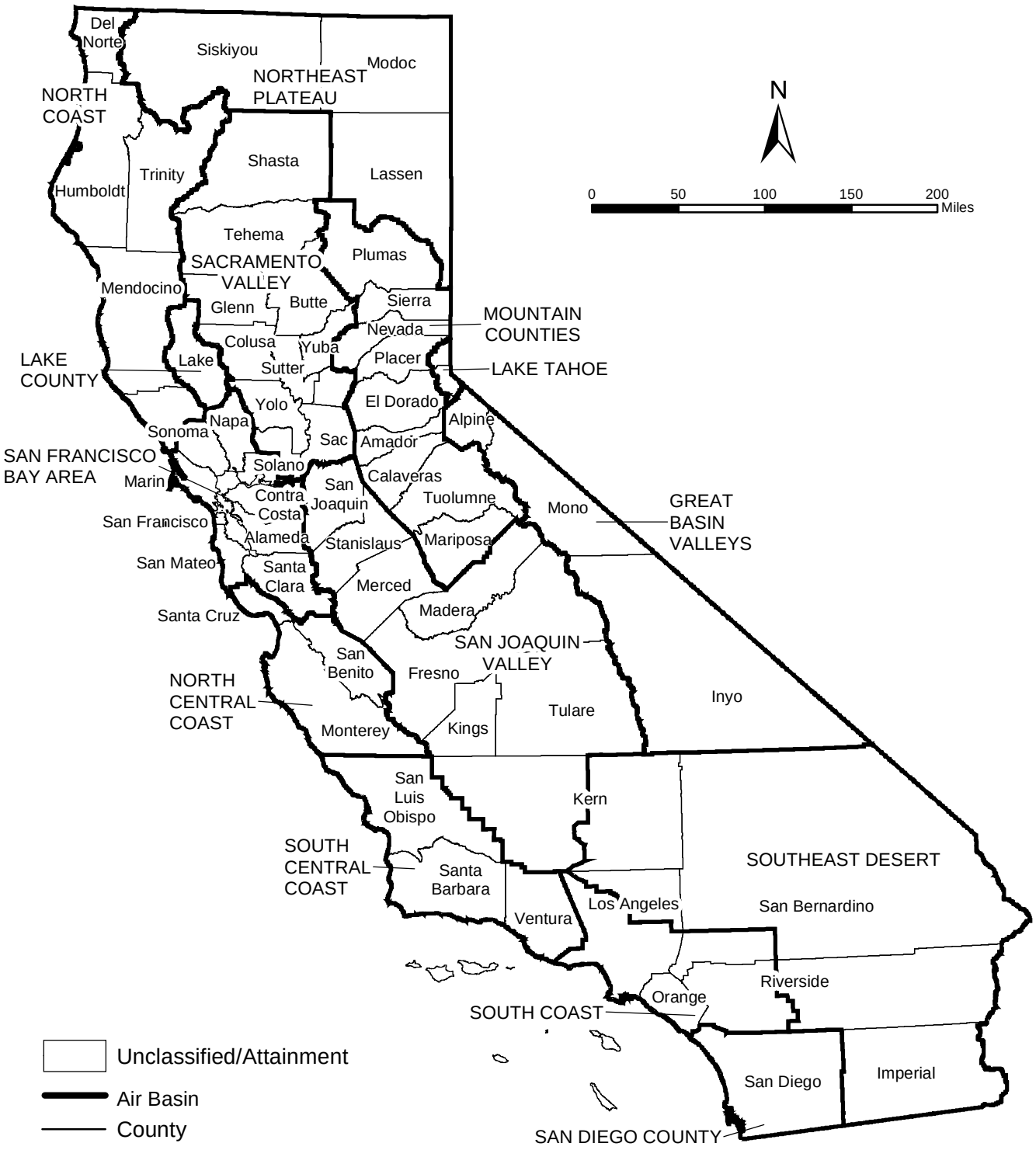
Area Designations
for
National Ambient Air Quality Standards

LEAD

Last Reviewed: December 2015
Air Quality Planning Branch, AQPSD, CARB

Area Designations
for
National Ambient Air Quality Standards

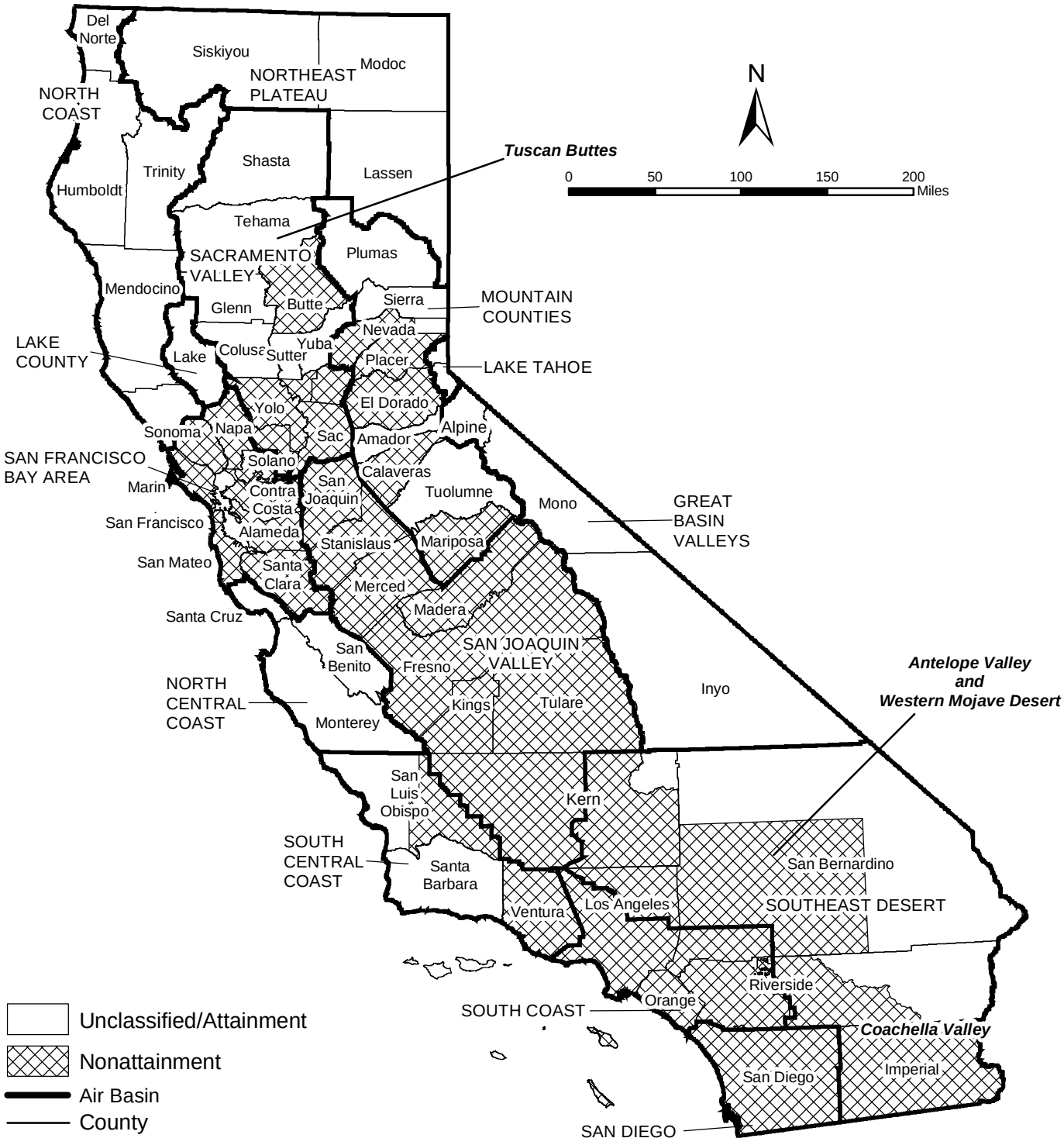
NITROGEN DIOXIDE



Last Reviewed: December 2015
Air Quality Planning Branch, AQPSD, CARB

Area Designations
for
National Ambient Air Quality Standards

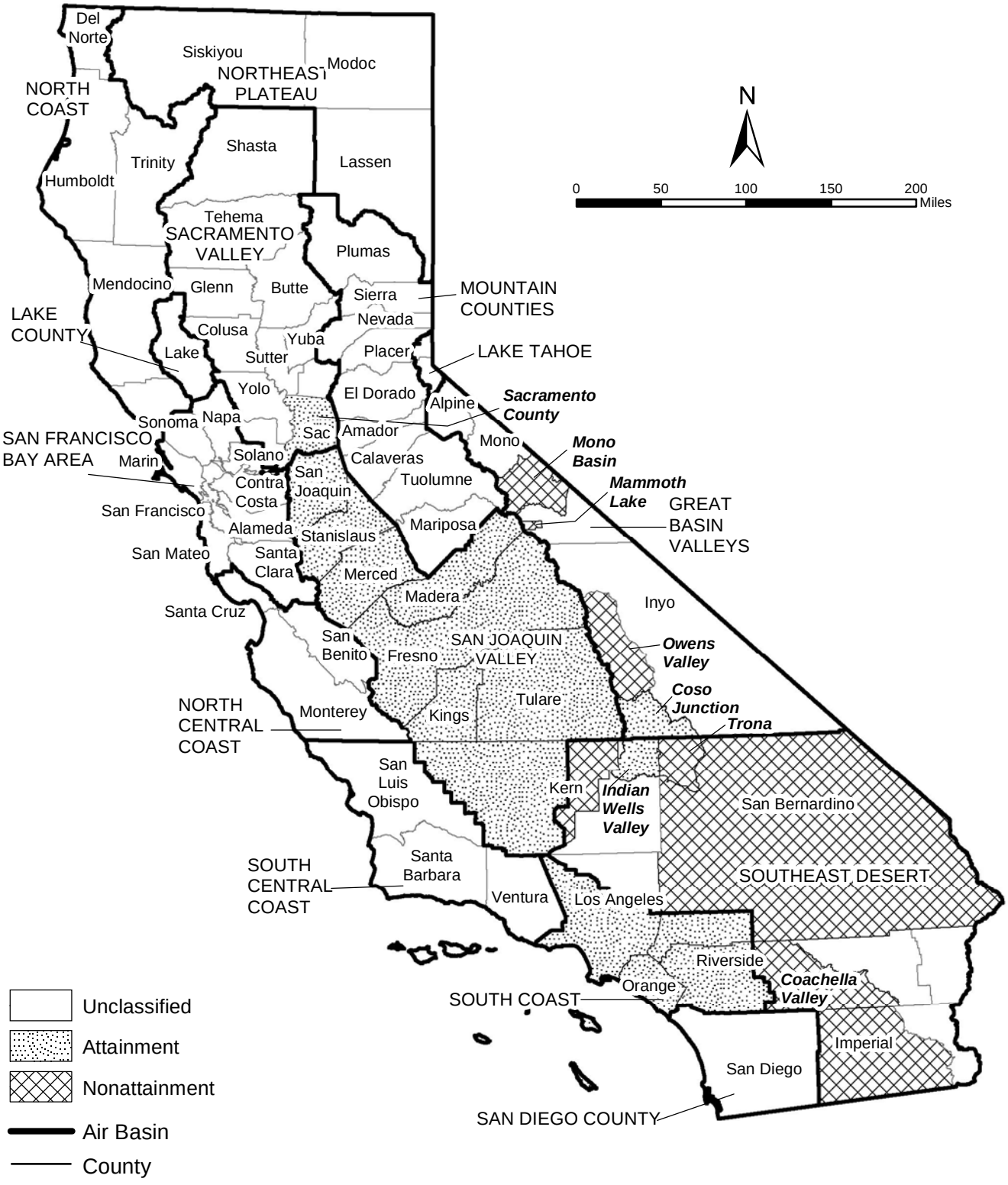
8-HOUR OZONE



Last Reviewed: December 2015
Air Quality Planning Branch, AQPSD, CARB

Area Designations
for
National Ambient Air Quality Standards

PM10



Last Reviewed: December 2015
Air Quality Planning Branch, AQPSD, CARB

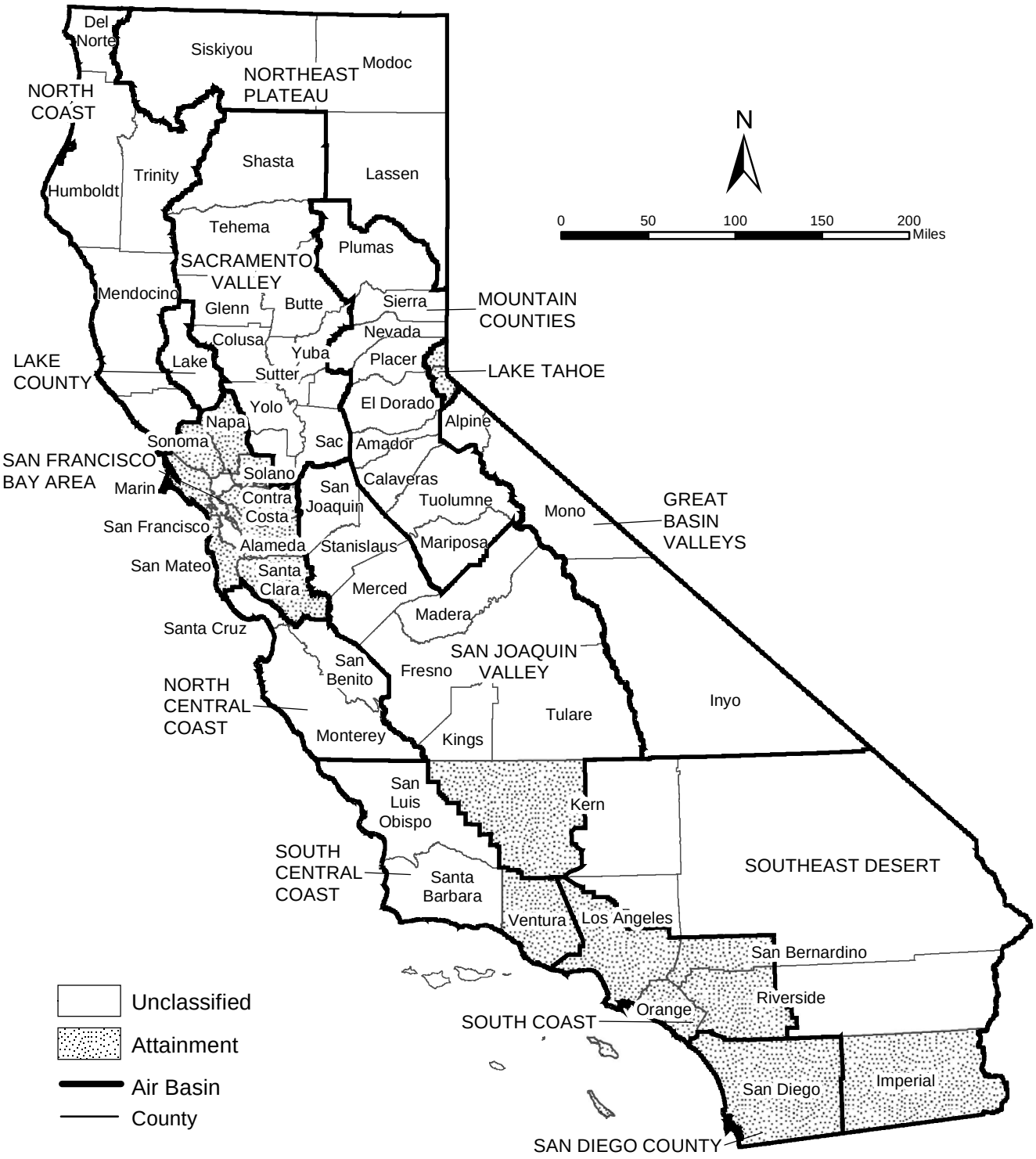
Area Designations
for
National Ambient Air Quality Standards

PM2.5

Last Reviewed: December 2015
Air Quality Planning Branch, AQPSD, CARB

Area Designations
for
National Ambient Air Quality Standards

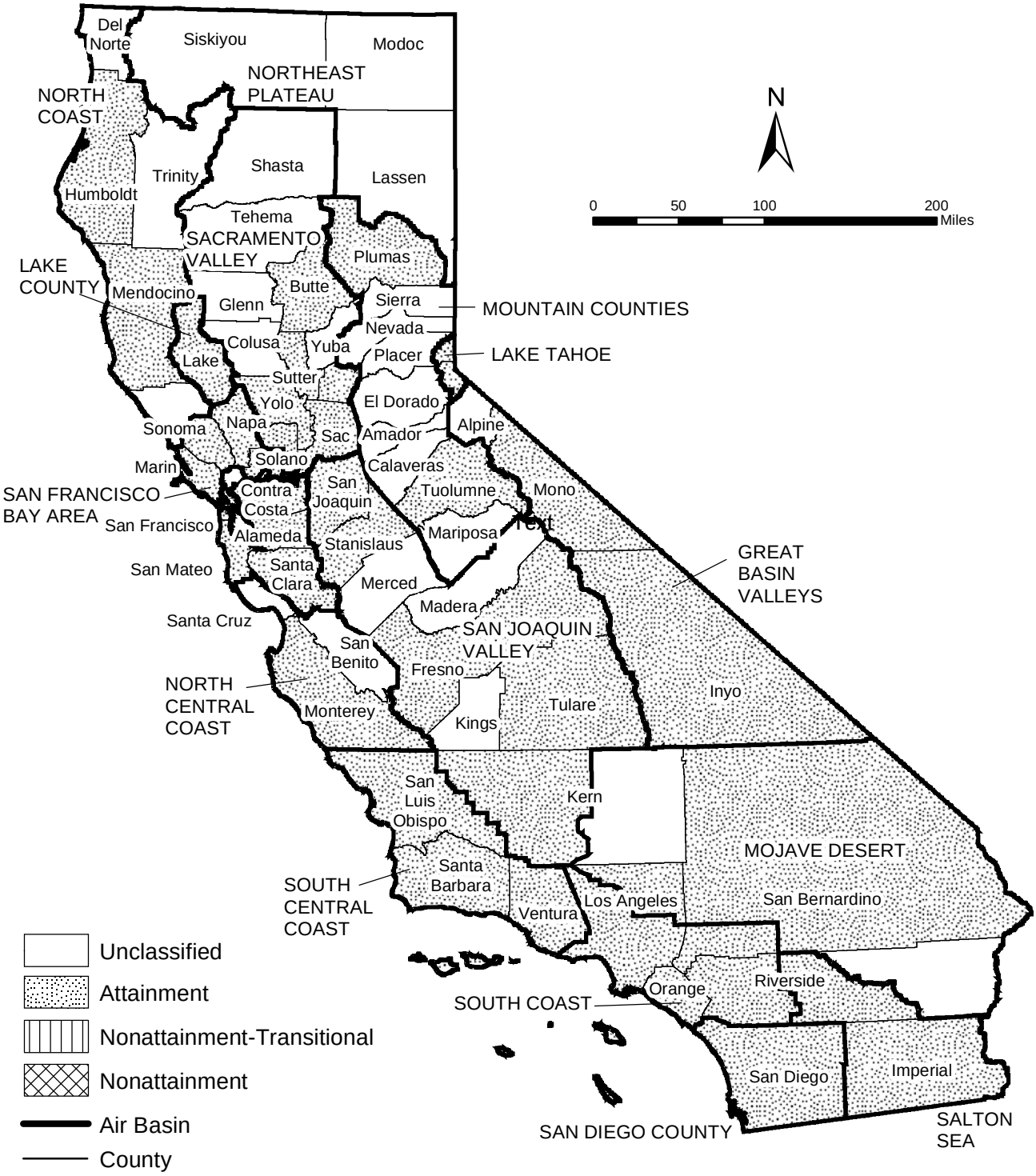
SULFUR DIOXIDE



Last Reviewed: December 2015
Air Quality Planning Branch, AQPSD, CARB

Area Designations
for
State Ambient Air Quality Standards

CARBON MONOXIDE



Source Date:
December 2015
Air Quality Planning Branch, AQPSD

Area Designations
for
State Ambient Air Quality Standards

LEAD

Source Date:
December 2015
Air Quality Planning Branch, AQPSD

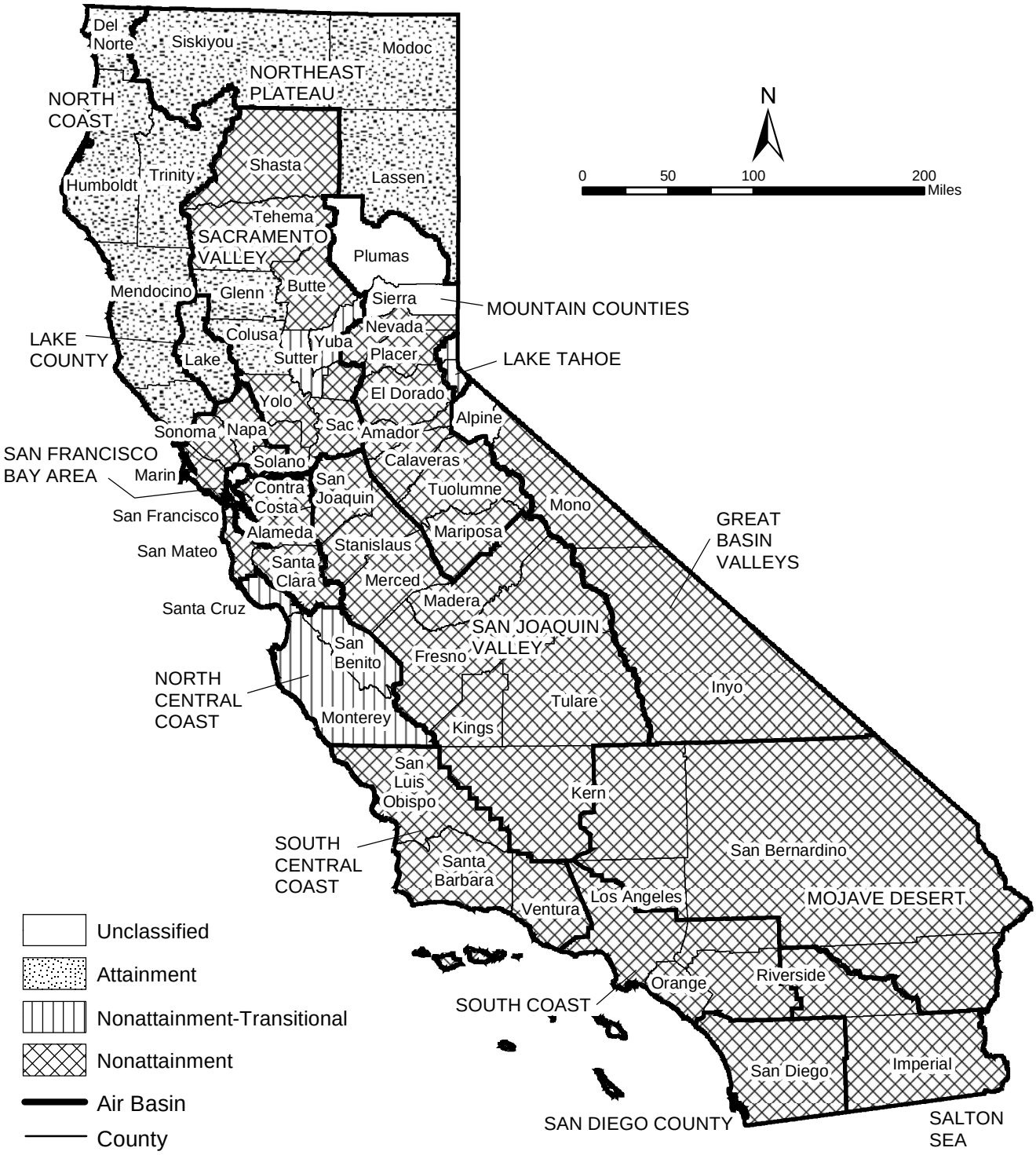
Area Designations
for
State Ambient Air Quality Standards

NITROGEN DIOXIDE

Source Date:
December 2015
Air Quality Planning Branch, AQPSD

Area Designations
for
State Ambient Air Quality Standards

OZONE



Source Date:
December 2015
Air Quality Planning Branch, AQPSD

Area Designations
for
State Ambient Air Quality Standards

PM10

Source Date:
December 2015
Air Quality Planning Branch, AQPSD

Area Designations
for
State Ambient Air Quality Standards

PM2.5

Source Date:
December 2015
Air Quality Planning Branch, AQPSD

Area Designations
for
State Ambient Air Quality Standards

SULFUR DIOXIDE

Source Date:
December 2015
Air Quality Planning Branch, AQPSD

APPENDIX 3.3:

LST OUTPUT

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** AERMOD View Ver. 9.3.0
** Lakes Environmental Software Inc.
** Date: 3/23/2017
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** AERMOD Control Pathway
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   AVERTIME 1 8
   URBANOPT 2015355
   POLLUTID CO
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL CO.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
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** Source ID - Type - X Coord. - Y Coord. **
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** DESCRSRC Unmitigated
   LOCATION VOL4         VOLUME     473814.960  3770596.075      305.000
** DESCRSRC Unmitigated
   LOCATION VOL5         VOLUME     473855.056  3770595.961      305.000
** DESCRSRC Unmitigated
   LOCATION VOL6         VOLUME     473693.806  3770556.318      302.000
** DESCRSRC Unmitigated
   LOCATION VOL7         VOLUME     473736.340  3770555.672      302.000
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   LOCATION VOL22        VOLUME     473737.632  3770436.231      302.310
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** DESCRSRC Unmitigated
   LOCATION VOL24        VOLUME     473820.504  3770437.975      304.690
** DESCRSRC Unmitigated
   LOCATION VOL25        VOLUME     473858.796  3770437.344      305.000
** DESCRSRC Unmitigated
   LOCATION VOL1         VOLUME     473694.024  3770596.594      302.000
** DESCRSRC Unmitigated
   LOCATION VOL2         VOLUME     473736.374  3770596.857      302.890
** DESCRSRC Unmitigated
   LOCATION VOL26        VOLUME     473776.175  3770597.229      304.210
** DESCRSRC Mitigated
   LOCATION VOL27        VOLUME     473814.961  3770596.079      305.000
** DESCRSRC Mitigated
   LOCATION VOL28        VOLUME     473855.058  3770595.959      305.000
** DESCRSRC Mitigated
   LOCATION VOL29        VOLUME     473693.806  3770556.322      302.000
** DESCRSRC Mitigated
   LOCATION VOL30        VOLUME     473736.339  3770555.672      302.000
** DESCRSRC Mitigated
   LOCATION VOL31        VOLUME     473778.763  3770555.392      303.300
** DESCRSRC Mitigated
   LOCATION VOL32        VOLUME     473819.861  3770556.127      304.670
** DESCRSRC Mitigated
   LOCATION VOL33        VOLUME     473858.799  3770557.112      305.000
** DESCRSRC Mitigated
   LOCATION VOL34        VOLUME     473693.180  3770515.034      302.000
** DESCRSRC Mitigated
   LOCATION VOL35        VOLUME     473736.744  3770514.974      302.000
** DESCRSRC Mitigated
   LOCATION VOL36        VOLUME     473779.327  3770515.984      303.320
** DESCRSRC Mitigated
   LOCATION VOL37        VOLUME     473820.355  3770516.659      304.690
** DESCRSRC Mitigated
   LOCATION VOL38        VOLUME     473857.853  3770517.085      305.000
** DESCRSRC Mitigated
   LOCATION VOL39        VOLUME     473695.426  3770474.757      302.000
** DESCRSRC Mitigated
   LOCATION VOL40        VOLUME     473738.929  3770475.407      302.000
** DESCRSRC Mitigated
   LOCATION VOL41        VOLUME     473781.023  3770475.767      303.380
** DESCRSRC Mitigated
   LOCATION VOL42        VOLUME     473820.185  3770476.607      304.680
** DESCRSRC Mitigated
   LOCATION VOL43        VOLUME     473858.799  3770477.488      305.000
** DESCRSRC Mitigated
   LOCATION VOL44        VOLUME     473694.776  3770434.941      302.000
** DESCRSRC Mitigated
   LOCATION VOL45        VOLUME     473737.629  3770436.231      302.310
** DESCRSRC Mitigated
   LOCATION VOL46        VOLUME     473779.733  3770437.571      303.330
** DESCRSRC Mitigated
   LOCATION VOL47        VOLUME     473820.501  3770437.976      304.690
** DESCRSRC Mitigated
   LOCATION VOL48        VOLUME     473858.799  3770437.341      305.000
** DESCRSRC Mitigated
   LOCATION VOL49        VOLUME     473694.021  3770596.599      302.000
** DESCRSRC Mitigated
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                                                    CO
   LOCATION VOL50        VOLUME     473736.372  3770596.859      302.890
** DESCRSRC Mitigated
** Source Parameters **
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   SRCPARAM VOL4           0.06601     5.000     9.302     2.330
   SRCPARAM VOL5           0.06601     5.000     9.302     2.330
   SRCPARAM VOL6           0.06601     5.000     9.302     2.330
   SRCPARAM VOL7           0.06601     5.000     9.302     2.330
   SRCPARAM VOL8           0.06601     5.000     9.302     2.330
   SRCPARAM VOL9           0.06601     5.000     9.302     2.330
   SRCPARAM VOL10          0.06601     5.000     9.302     2.330
   SRCPARAM VOL11          0.06601     5.000     9.302     2.330
   SRCPARAM VOL12          0.06601     5.000     9.302     2.330
   SRCPARAM VOL13          0.06601     5.000     9.302     2.330
   SRCPARAM VOL14          0.06601     5.000     9.302     2.330
   SRCPARAM VOL15          0.06601     5.000     9.302     2.330
   SRCPARAM VOL16          0.06601     5.000     9.302     2.330
   SRCPARAM VOL17          0.06601     5.000     9.302     2.330
   SRCPARAM VOL18          0.06601     5.000     9.302     2.330
   SRCPARAM VOL19          0.06601     5.000     9.302     2.330
   SRCPARAM VOL20          0.06601     5.000     9.302     2.330
   SRCPARAM VOL21          0.06601     5.000     9.302     2.330
   SRCPARAM VOL22          0.06601     5.000     9.302     2.330
   SRCPARAM VOL23          0.06601     5.000     9.302     2.330
   SRCPARAM VOL24          0.06601     5.000     9.302     2.330
   SRCPARAM VOL25          0.06601     5.000     9.302     2.330
   SRCPARAM VOL1           0.06601     5.000     9.302     2.326
   SRCPARAM VOL2           0.06601     5.000     9.302     2.326
   SRCPARAM VOL26        0.0553329772     5.000     9.302     2.330
   SRCPARAM VOL27          0.05533     5.000     9.302     2.330
   SRCPARAM VOL28          0.05533     5.000     9.302     2.330
   SRCPARAM VOL29          0.05533     5.000     9.302     2.330
   SRCPARAM VOL30          0.05533     5.000     9.302     2.330
   SRCPARAM VOL31          0.05533     5.000     9.302     2.330
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   SRCPARAM VOL33          0.05533     5.000     9.302     2.330
   SRCPARAM VOL34          0.05533     5.000     9.302     2.330
   SRCPARAM VOL35          0.05533     5.000     9.302     2.330
   SRCPARAM VOL36          0.05533     5.000     9.302     2.330
   SRCPARAM VOL37          0.05533     5.000     9.302     2.330
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   SRCPARAM VOL40          0.05533     5.000     9.302     2.330
   SRCPARAM VOL41          0.05533     5.000     9.302     2.330
   SRCPARAM VOL42          0.05533     5.000     9.302     2.330
   SRCPARAM VOL43          0.05533     5.000     9.302     2.330
   SRCPARAM VOL44          0.05533     5.000     9.302     2.330
   SRCPARAM VOL45          0.05533     5.000     9.302     2.330
   SRCPARAM VOL46          0.05533     5.000     9.302     2.330
   SRCPARAM VOL47          0.05533     5.000     9.302     2.330
   SRCPARAM VOL48          0.05533     5.000     9.302     2.330
   SRCPARAM VOL49          0.05533     5.000     9.302     2.330
   SRCPARAM VOL50          0.05533     5.000     9.302     2.330
   URBANSRC ALL

** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "Construction"
   EMISFACT VOL3         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL4         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL4         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL47        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL47        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL48        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL49        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL50        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   CONCUNIT 873.2 G/S PPM
   SRCGROUP Unmitiga VOL3 VOL4 VOL5 VOL6 VOL7 VOL8 VOL9 VOL10 VOL11 VOL12
   SRCGROUP Unmitiga VOL13 VOL14 VOL15 VOL16 VOL17 VOL18 VOL19 VOL20 VOL21
   SRCGROUP Unmitiga VOL22 VOL23 VOL24 VOL25 VOL1 VOL2
   SRCGROUP Mitigate VOL26 VOL27 VOL28 VOL29 VOL30 VOL31 VOL32 VOL33 VOL34
   SRCGROUP Mitigate VOL35 VOL36 VOL37 VOL38 VOL39 VOL40 VOL41 VOL42 VOL43
   SRCGROUP Mitigate VOL44 VOL45 VOL46 VOL47 VOL48 VOL49 VOL50
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
```

```
**************************************
**
**
RE STARTING
   INCLUDED CO.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\..\snbo8.sfc
   PROFFILE ..\..\snbo8.PFL
   SURFDATA 0 2007
   UAIRDATA 3190 2007
   SITEDATA 99999 2007
   PROFBASE 305.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 Unmitiga 1ST CO.AD\01H1G001.PLT 31
   PLOTFILE 8 Unmitiga 1ST CO.AD\08H1G001.PLT 32
   PLOTFILE 1 Mitigate 1ST CO.AD\01H1G002.PLT 33
   PLOTFILE 8 Mitigate 1ST CO.AD\08H1G002.PLT 34
   SUMMFILE CO.sum
OU FINISHED

 **********************************
 *** SETUP Finishes Successfully ***
 **********************************

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc                     ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                   ***
   16:50:16

   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                                          ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses URBAN Dispersion Algorithm for the SBL for    50 Source(s),
   for Total of    1 Urban Area(s):
   Urban Population =   2015355.0 ;  Urban Roughness Length =  1.000 m

 **Model Uses Regulatory DEFAULT Options:
```

1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: CO

**Model Calculates 2 Short Term Average(s) of: 1-HR 8-HR

**This Run Includes: 50 Source(s); 2 Source Group(s); and 5 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 50 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 305.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = G/S ; Emission Rate Unit Factor = 873.20
Output Units = PPM

**Approximate Storage Requirements of Model = 3.5 MB of RAM.

**Detailed Error/Message File: CO.err

**File for Summary of Results: CO.sum

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc *** 03/23/17
*** AERMET - VERSION 14134 *** *** *** 16:50:16

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
VOL3	0	0.66014E-01	473776.2	3770597.2	304.2	5.00	9.30	2.33	YES	HROFDY
VOL4	0	0.66010E-01	473815.0	3770596.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL5	0	0.66010E-01	473855.1	3770596.0	305.0	5.00	9.30	2.33	YES	HROFDY
VOL6	0	0.66010E-01	473693.8	3770556.3	302.0	5.00	9.30	2.33	YES	HROFDY
VOL7	0	0.66010E-01	473736.3	3770555.7	302.0	5.00	9.30	2.33	YES	HROFDY
VOL8	0	0.66010E-01	473778.8	3770555.4	303.3	5.00	9.30	2.33	YES	HROFDY
VOL9	0	0.66010E-01	473819.9	3770556.1	304.7	5.00	9.30	2.33	YES	HROFDY
VOL10	0	0.66010E-01	473858.8	3770557.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL11	0	0.66010E-01	473693.2	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL12	0	0.66010E-01	473736.7	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL13	0	0.66010E-01	473779.3	3770516.0	303.3	5.00	9.30	2.33	YES	HROFDY
VOL14	0	0.66010E-01	473820.4	3770516.7	304.7	5.00	9.30	2.33	YES	HROFDY
VOL15	0	0.66010E-01	473857.9	3770517.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL16	0	0.66010E-01	473695.4	3770474.8	302.0	5.00	9.30	2.33	YES	HROFDY
VOL17	0	0.66010E-01	473738.9	3770475.4	302.0	5.00	9.30	2.33	YES	HROFDY
VOL18	0	0.66010E-01	473781.0	3770475.8	303.4	5.00	9.30	2.33	YES	HROFDY
VOL19	0	0.66010E-01	473820.2	3770476.6	304.7	5.00	9.30	2.33	YES	HROFDY
VOL20	0	0.66010E-01	473858.8	3770477.5	305.0	5.00	9.30	2.33	YES	HROFDY
VOL21	0	0.66010E-01	473694.8	3770434.9	302.0	5.00	9.30	2.33	YES	HROFDY
VOL22	0	0.66010E-01	473737.6	3770436.2	302.3	5.00	9.30	2.33	YES	HROFDY
VOL23	0	0.66010E-01	473779.7	3770437.6	303.3	5.00	9.30	2.33	YES	HROFDY
VOL24	0	0.66010E-01	473820.5	3770438.0	304.7	5.00	9.30	2.33	YES	HROFDY
VOL25	0	0.66010E-01	473858.8	3770437.3	305.0	5.00	9.30	2.33	YES	HROFDY
VOL1	0	0.66010E-01	473694.0	3770596.6	302.0	5.00	9.30	2.33	YES	HROFDY
VOL2	0	0.66010E-01	473736.4	3770596.9	302.9	5.00	9.30	2.33	YES	HROFDY
VOL26	0	0.55333E-01	473776.2	3770597.2	304.2	5.00	9.30	2.33	YES	HROFDY
VOL27	0	0.55330E-01	473815.0	3770596.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL28	0	0.55330E-01	473855.1	3770596.0	305.0	5.00	9.30	2.33	YES	HROFDY
VOL29	0	0.55330E-01	473693.8	3770556.3	302.0	5.00	9.30	2.33	YES	HROFDY
VOL30	0	0.55330E-01	473736.3	3770555.7	302.0	5.00	9.30	2.33	YES	HROFDY
VOL31	0	0.55330E-01	473778.8	3770555.4	303.3	5.00	9.30	2.33	YES	HROFDY
VOL32	0	0.55330E-01	473819.9	3770556.1	304.7	5.00	9.30	2.33	YES	HROFDY
VOL33	0	0.55330E-01	473858.8	3770557.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL34	0	0.55330E-01	473693.2	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL35	0	0.55330E-01	473736.7	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL36	0	0.55330E-01	473779.3	3770516.0	303.3	5.00	9.30	2.33	YES	HROFDY
VOL37	0	0.55330E-01	473820.4	3770516.7	304.7	5.00	9.30	2.33	YES	HROFDY
VOL38	0	0.55330E-01	473857.9	3770517.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL39	0	0.55330E-01	473695.4	3770474.8	302.0	5.00	9.30	2.33	YES	HROFDY
VOL40	0	0.55330E-01	473738.9	3770475.4	302.0	5.00	9.30	2.33	YES	HROFDY

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
VOL41	0	0.55330E-01	473781.0	3770475.8	303.4	5.00	9.30	2.33	YES	HROFDY
VOL42	0	0.55330E-01	473820.2	3770476.6	304.7	5.00	9.30	2.33	YES	HROFDY
VOL43	0	0.55330E-01	473858.8	3770477.5	305.0	5.00	9.30	2.33	YES	HROFDY
VOL44	0	0.55330E-01	473694.8	3770434.9	302.0	5.00	9.30	2.33	YES	HROFDY
VOL45	0	0.55330E-01	473737.6	3770436.2	302.3	5.00	9.30	2.33	YES	HROFDY
VOL46	0	0.55330E-01	473779.7	3770437.6	303.3	5.00	9.30	2.33	YES	HROFDY
VOL47	0	0.55330E-01	473820.5	3770438.0	304.7	5.00	9.30	2.33	YES	HROFDY
VOL48	0	0.55330E-01	473858.8	3770437.3	305.0	5.00	9.30	2.33	YES	HROFDY

 VOL49   0   0.55330E-01 473694.0 3770596.6   302.0   5.00   9.30   2.33   YES   HROFDY
 VOL50   0   0.55330E-01 473736.4 3770596.9   302.9   5.00   9.30   2.33   YES   HROFDY

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                                        *** SOURCE IDs DEFINING SOURCE GROUPS ***

 SRCGROUP ID   SOURCE IDs
 -----------   ----------

  UNMITIGA   VOL3   , VOL4   , VOL5   , VOL6   , VOL7   , VOL8   , VOL9   ,
VOL10   ,

             VOL11   , VOL12   , VOL13   , VOL14   , VOL15   , VOL16   , VOL17   ,
VOL18   ,

             VOL19   , VOL20   , VOL21   , VOL22   , VOL23   , VOL24   , VOL25   , VOL1
      ,

             VOL2   ,

  MITIGATE   VOL26   , VOL27   , VOL28   , VOL29   , VOL30   , VOL31   , VOL32   ,
VOL33   ,

             VOL34   , VOL35   , VOL36   , VOL37   , VOL38   , VOL39   , VOL40   ,
VOL41   ,

             VOL42   , VOL43   , VOL44   , VOL45   , VOL46   , VOL47   , VOL48   ,
VOL49   ,

             VOL50   ,

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                                        *** SOURCE IDs DEFINED AS URBAN SOURCES ***

  URBAN ID   URBAN POP   SOURCE IDs
  --------   ---------   ----------

              2015355.   VOL3   , VOL4   , VOL5   , VOL6   , VOL7   , VOL8   , VOL9
    ,
 VOL10   ,

             VOL11   , VOL12   , VOL13   , VOL14   , VOL15   , VOL16   , VOL17   ,
VOL18   ,

             VOL19   , VOL20   , VOL21   , VOL22   , VOL23   , VOL24   , VOL25   , VOL1
      ,

             VOL2   , VOL26   , VOL27   , VOL28   , VOL29   , VOL30   , VOL31   ,
VOL32   ,

             VOL33   , VOL34   , VOL35   , VOL36   , VOL37   , VOL38   , VOL39   ,

CO
VOL40 ,

VOL41 , VOL42 , VOL43 , VOL44 , VOL45 , VOL46 , VOL47 ,
VOL48 ,

VOL49 , VOL50 ,

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

SOURCE ID = VOL3 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL4 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL5 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL6 ; SOURCE TYPE = VOLUME :

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL7 ; SOURCE TYPE = VOLUME :

```
                                                                  CO
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc                      ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                        ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                            * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL8        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL9        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL10       ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL11       ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```

 SOURCE ID = VOL12   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL13   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL14   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL15   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL16   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18

.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL17   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc   ***
    03/23/17
 *** AERMET - VERSION 14134 ***   ***   ***
   16:50:16

   PAGE   9
 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL18   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL19   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL20   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL21   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00

```
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc                      ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                     ***
   16:50:16

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```

SOURCE ID = VOL1 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL2 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = VOL26 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL27 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL28 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

.00000E+00

 SOURCE ID = VOL29   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL30   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL31   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL32   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL33   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01

```
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc                     ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                    ***
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   PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL38        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
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```
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL40        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc                      ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                       ***
   16:50:16

   PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                            * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```

 SOURCE ID = VOL43   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL44   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL45   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc   ***
    03/23/17
 *** AERMET - VERSION 14134 ***   ***   ***
   16:50:16

   PAGE 15
 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL46   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL47   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00

```
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL48        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL49        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL50        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc                      ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                     ***
   16:50:16

   PAGE  16
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                                       *** DISCRETE CARTESIAN RECEPTORS ***
                                     (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                 (METERS)

     ( 473813.1, 3770772.6,     305.4,     305.4,       2.0);         ( 473890.8, 3770715.2,     306.0,     306.0,
     2.0);
     ( 474193.3, 3770710.4,     307.0,     307.0,       2.0);         ( 474201.6, 3769929.2,     305.0,     305.0,
     2.0);
     ( 473829.0, 3770011.1,     302.0,     302.0,       2.0);

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc                      ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                     ***
   16:50:16

   PAGE  17
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                                     *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                 (1=YES; 0=NO)

          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1
1 1
```

CO

```
         1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
         1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
         1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
         1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
         1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
         1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
         1 1 1 1 1 1 1 1 1 1  1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\..\snbo8.sfc Met Version: 14134
Profile file: ..\..\snbo8.PFL
Surface format: FREE

Profile format: FREE

Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2007 Year: 2007

First 24 hours of scalar data

YR MO DY JDY HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
07 01 01 1 01	-0.5	0.030	-9.000	-9.000	-999.	12.	4.4	0.32	1.00	1.00	0.50	27.	9.1	279.9	5.5
07 01 01 1 02	-0.5	0.030	-9.000	-9.000	-999.	12.	4.3	0.32	1.00	1.00	0.50	7.	9.1	279.2	5.5
07 01 01 1 03	-0.5	0.030	-9.000	-9.000	-999.	12.	4.3	0.32	1.00	1.00	0.50	97.	9.1	278.8	5.5
07 01 01 1 04	-0.7	0.030	-9.000	-9.000	-999.	12.	3.1	0.32	1.00	1.00	0.50	148.	9.1	278.1	5.5
07 01 01 1 05	-2.4	0.054	-9.000	-9.000	-999.	30.	5.5	0.32	1.00	1.00	0.90	87.	9.1	278.1	5.5
07 01 01 1 06	-1.7	0.054	-9.000	-9.000	-999.	30.	7.8	0.32	1.00	1.00	0.90	208.	9.1	277.0	5.5
07 01 01 1 07	-1.7	0.054	-9.000	-9.000	-999.	30.	7.8	0.32	1.00	1.00	0.90	156.	9.1	277.5	5.5
07 01 01 1 08	-1.7	0.054	-9.000	-9.000	-999.	30.	7.8	0.32	1.00	0.52	0.90	60.	9.1	277.5	5.5
07 01 01 1 09	34.6	0.390	0.621	0.005	241.	585.	-149.6	0.32	1.00	0.31	3.10	264.	9.1	282.5	5.5

```
 07 01 01   1 10   78.0  0.267  1.066  0.005  541.  341.    -21.3  0.32   1.00   0.24    1.80  242.    9.1  289.2
5.5
 07 01 01   1 11  112.9  0.612  1.395  0.019  839. 1149.   -176.9  0.32   1.00   0.21    4.90   82.    9.1  290.4
5.5
 07 01 01   1 12  130.3  0.615  1.611  0.020 1120. 1158.   -155.8  0.32   1.00   0.20    4.90   74.    9.1  290.9
5.5
 07 01 01   1 13  128.2  0.671  1.662  0.015 1250. 1315.   -204.9  0.32   1.00   0.20    5.40   59.    9.1  290.9
5.5
 07 01 01   1 14  107.5  0.712  1.575  0.007 1267. 1439.   -292.1  0.32   1.00   0.22    5.80   58.    9.1  291.4
5.5
 07 01 01   1 15   68.1  0.602  1.356  0.021 1277. 1137.   -279.3  0.32   1.00   0.25    4.90   40.    9.1  291.4
5.5
 07 01 01   1 16   18.1  0.438  0.872  0.021 1278.  724.   -405.7  0.32   1.00   0.34    3.60  312.    9.1  292.0
5.5
 07 01 01   1 17  -25.8  0.263 -9.000 -9.000 -999.  353.     61.6  0.32   1.00   0.63    2.70  342.    9.1  290.9
5.5
 07 01 01   1 18   -4.9  0.077 -9.000 -9.000 -999.  114.      8.1  0.32   1.00   1.00    1.30  256.    9.1  289.2
5.5
 07 01 01   1 19   -4.9  0.077 -9.000 -9.000 -999.   52.      8.1  0.32   1.00   1.00    1.30  191.    9.1  289.9
5.5
 07 01 01   1 20   -4.9  0.077 -9.000 -9.000 -999.   52.      8.1  0.32   1.00   1.00    1.30  197.    9.1  289.9
5.5
 07 01 01   1 21   -4.9  0.077 -9.000 -9.000 -999.   52.      8.1  0.32   1.00   1.00    1.30  190.    9.1  289.9
5.5
 07 01 01   1 22   -2.4  0.054 -9.000 -9.000 -999.   30.      5.6  0.32   1.00   1.00    0.90  188.    9.1  289.2
5.5
 07 01 01   1 23   -9.5  0.107 -9.000 -9.000 -999.   84.     11.3  0.32   1.00   1.00    1.80  162.    9.1  289.9
5.5
 07 01 01   1 24   -9.5  0.107 -9.000 -9.000 -999.   84.     11.3  0.32   1.00   1.00    1.80   42.    9.1  289.2
5.5


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 07 01 01 01    5.5 0 -999.  -99.00   279.9   99.0  -99.00  -99.00
 07 01 01 01    9.1 1   27.    0.50  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc                      ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                    ***
   16:50:16

   PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                            *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP:
UNMITIGA ***
                                INCLUDING SOURCE(S):     VOL3        , VOL4        , VOL5        , VOL6        ,
VOL7        ,
                VOL8        , VOL9        , VOL10       , VOL11       , VOL12       , VOL13       , VOL14       ,
VOL15       ,
                VOL16       , VOL17       , VOL18       , VOL19       , VOL20       , VOL21       , VOL22       ,
VOL23       ,
                VOL24       , VOL25       , VOL1        , VOL2        ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                   ** CONC OF CO       IN PPM                                    **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD (M)        CONC
(YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - -
        473813.12   3770772.61        0.08138  (10011408)               473890.79   3770715.17        0.09555
(10121608)
        474193.26   3770710.36        0.04459  (11020108)               474201.58   3769929.23        0.01238
```

(07010208)
       473829.05   3770011.13   0.04512 (07122015)

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc   ***
    03/23/17
 *** AERMET - VERSION 14134 ***   ***   ***
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   PAGE 20
 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                            *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP:
MITIGATE ***
                                INCLUDING SOURCE(S):   VOL26   , VOL27   , VOL28   , VOL29   ,
VOL30   ,
                VOL31   , VOL32   , VOL33   , VOL34   , VOL35   , VOL36   , VOL37   ,
VOL38   ,
                VOL39   , VOL40   , VOL41   , VOL42   , VOL43   , VOL44   , VOL45   ,
VOL46   ,
                VOL47   , VOL48   , VOL49   , VOL50   ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                   ** CONC OF CO   IN PPM   **

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC
(YYMMDDHH)
 -
- - - - - - - - -
       473813.12   3770772.61   0.06821 (10011408)   473890.79   3770715.17   0.08009
(10121608)
       474193.26   3770710.36   0.03738 (11020108)   474201.58   3769929.23   0.01038
(07010208)
       473829.05   3770011.13   0.03782 (07122015)

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc   ***
    03/23/17
 *** AERMET - VERSION 14134 ***   ***   ***
   16:50:16

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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                            *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP:
UNMITIGA ***
                                INCLUDING SOURCE(S):   VOL3   , VOL4   , VOL5   , VOL6   ,
VOL7   ,
                VOL8   , VOL9   , VOL10   , VOL11   , VOL12   , VOL13   , VOL14   ,
VOL15   ,
                VOL16   , VOL17   , VOL18   , VOL19   , VOL20   , VOL21   , VOL22   ,
VOL23   ,
                VOL24   , VOL25   , VOL1   , VOL2   ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                   ** CONC OF CO   IN PPM   **

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC
(YYMMDDHH)
 -
- - - - - - - - -
       473813.12   3770772.61   0.02177 (07120716)   473890.79   3770715.17   0.03300
(07022216)
       474193.26   3770710.36   0.00969 (10100316)   474201.58   3769929.23   0.00327
(09113016)
       473829.05   3770011.13   0.00681 (07122016)

*** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP:
MITIGATE ***
INCLUDING SOURCE(S):   VOL26   , VOL27   , VOL28   , VOL29   ,
VOL30   ,
VOL31   , VOL32   , VOL33   , VOL34   , VOL35   , VOL36   , VOL37   ,
VOL38   ,
VOL39   , VOL40   , VOL41   , VOL42   , VOL43   , VOL44   , VOL45   ,
VOL46   ,
VOL47   , VOL48   , VOL49   , VOL50   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF CO   IN PPM   **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
473813.12	3770772.61	0.01825	(07120716)	473890.79	3770715.17	0.02766	(07022216)
474193.26	3770710.36	0.00812	(10100316)	474201.58	3769929.23	0.00275	(09113016)
473829.05	3770011.13	0.00571	(07122016)				

*** THE SUMMARY OF HIGHEST 1-HR RESULTS ***

** CONC OF CO   IN PPM   **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	OF NETWORK TYPE	GRID-ID
UNMITIGA HIGH 1ST HIGH VALUE IS	0.09555	ON 10121608:	AT (473890.79, 3770715.17, 306.00, 306.00, 2.00)	DC	
MITIGATE HIGH 1ST HIGH VALUE IS	0.08009	ON 10121608:	AT (473890.79, 3770715.17, 306.00, 306.00, 2.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

** CONC OF CO IN PPM **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE	GRID-ID
UNMITIGA HIGH 1ST HIGH VALUE IS	0.03300	ON 07022216:	AT (473890.79, 3770715.17, 306.00, 306.00, 2.00)	DC	
MITIGATE HIGH 1ST HIGH VALUE IS	0.02766	ON 07022216:	AT (473890.79, 3770715.17, 306.00, 306.00, 2.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
GP = GRIDPOLR
DC = DISCCART
DP = DISCPOLR
♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\GWS\Construction\CO\CO.isc *** 03/23/17
*** AERMET - VERSION 14134 *** *** *** 16:50:16

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** Message Summary : AERMOD Model Execution ***

--------- Summary of Total Messages --------

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 1086 Informational Message(s)

A Total of 43824 Hours Were Processed

A Total of 37 Calm Hours Identified

A Total of 1049 Missing Hours Identified (2.39 Percent)

******** FATAL ERROR MESSAGES ********
*** NONE ***

******** WARNING MESSAGES ********
*** NONE ***

****
*** AERMOD Finishes Successfully ***
****
**
****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.3.0
** Lakes Environmental Software Inc.

```
** Date: 3/23/2017
** File: C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.ADI
**
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2015355
   POLLUTID NO2
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL NO2.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL3         VOLUME     473776.173  3770597.226      304.210
** DESCRSRC Unmitigated
   LOCATION VOL4         VOLUME     473814.960  3770596.075      305.000
** DESCRSRC Unmitigated
   LOCATION VOL5         VOLUME     473855.056  3770595.961      305.000
** DESCRSRC Unmitigated
   LOCATION VOL6         VOLUME     473693.806  3770556.318      302.000
** DESCRSRC Unmitigated
   LOCATION VOL7         VOLUME     473736.340  3770555.672      302.000
** DESCRSRC Unmitigated
   LOCATION VOL8         VOLUME     473778.760  3770555.391      303.300
** DESCRSRC Unmitigated
   LOCATION VOL9         VOLUME     473819.858  3770556.123      304.670
** DESCRSRC Unmitigated
   LOCATION VOL10        VOLUME     473858.796  3770557.107      305.000
** DESCRSRC Unmitigated
   LOCATION VOL11        VOLUME     473693.175  3770515.033      302.000
** DESCRSRC Unmitigated
   LOCATION VOL12        VOLUME     473736.743  3770514.973      302.000
** DESCRSRC Unmitigated
   LOCATION VOL13        VOLUME     473779.328  3770515.988      303.320
** DESCRSRC Unmitigated
   LOCATION VOL14        VOLUME     473820.359  3770516.663      304.690
** DESCRSRC Unmitigated
   LOCATION VOL15        VOLUME     473857.852  3770517.085      305.000
** DESCRSRC Unmitigated
   LOCATION VOL16        VOLUME     473695.421  3770474.756      302.000
** DESCRSRC Unmitigated
   LOCATION VOL17        VOLUME     473738.924  3770475.402      302.000
** DESCRSRC Unmitigated
   LOCATION VOL18        VOLUME     473781.021  3770475.768      303.380
** DESCRSRC Unmitigated
   LOCATION VOL19        VOLUME     473820.189  3770476.611      304.680
** DESCRSRC Unmitigated
   LOCATION VOL20        VOLUME     473858.796  3770477.485      305.000
** DESCRSRC Unmitigated
   LOCATION VOL21        VOLUME     473694.775  3770434.939      302.000
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** DESCRSRC Unmitigated
   LOCATION VOL22        VOLUME     473737.632  3770436.231      302.310
** DESCRSRC Unmitigated
   LOCATION VOL23        VOLUME     473779.729  3770437.566      303.330
** DESCRSRC Unmitigated
   LOCATION VOL24        VOLUME     473820.504  3770437.975      304.690
** DESCRSRC Unmitigated
   LOCATION VOL25        VOLUME     473858.796  3770437.344      305.000
** DESCRSRC Unmitigated
   LOCATION VOL1         VOLUME     473694.024  3770596.594      302.000
** DESCRSRC Unmitigated
   LOCATION VOL2         VOLUME     473736.374  3770596.857      302.890
** DESCRSRC Unmitigated
   LOCATION VOL26        VOLUME     473776.175  3770597.229      304.210
** DESCRSRC Mitigated
   LOCATION VOL27        VOLUME     473814.961  3770596.079      305.000
** DESCRSRC Mitigated
   LOCATION VOL28        VOLUME     473855.058  3770595.959      305.000
** DESCRSRC Mitigated
   LOCATION VOL29        VOLUME     473693.806  3770556.322      302.000
** DESCRSRC Mitigated
   LOCATION VOL30        VOLUME     473736.339  3770555.672      302.000
** DESCRSRC Mitigated
   LOCATION VOL31        VOLUME     473778.763  3770555.392      303.300
** DESCRSRC Mitigated
   LOCATION VOL32        VOLUME     473819.861  3770556.127      304.670
** DESCRSRC Mitigated
   LOCATION VOL33        VOLUME     473858.799  3770557.112      305.000
** DESCRSRC Mitigated
   LOCATION VOL34        VOLUME     473693.180  3770515.034      302.000
** DESCRSRC Mitigated
   LOCATION VOL35        VOLUME     473736.744  3770514.974      302.000
** DESCRSRC Mitigated
   LOCATION VOL36        VOLUME     473779.327  3770515.984      303.320
** DESCRSRC Mitigated
   LOCATION VOL37        VOLUME     473820.355  3770516.659      304.690
** DESCRSRC Mitigated
   LOCATION VOL38        VOLUME     473857.853  3770517.085      305.000
** DESCRSRC Mitigated
   LOCATION VOL39        VOLUME     473695.426  3770474.757      302.000
** DESCRSRC Mitigated
   LOCATION VOL40        VOLUME     473738.929  3770475.407      302.000
** DESCRSRC Mitigated
   LOCATION VOL41        VOLUME     473781.023  3770475.767      303.380
** DESCRSRC Mitigated
   LOCATION VOL42        VOLUME     473820.185  3770476.607      304.680
** DESCRSRC Mitigated
   LOCATION VOL43        VOLUME     473858.799  3770477.488      305.000
** DESCRSRC Mitigated
   LOCATION VOL44        VOLUME     473694.776  3770434.941      302.000
** DESCRSRC Mitigated
   LOCATION VOL45        VOLUME     473737.629  3770436.231      302.310
** DESCRSRC Mitigated
   LOCATION VOL46        VOLUME     473779.733  3770437.571      303.330
** DESCRSRC Mitigated
   LOCATION VOL47        VOLUME     473820.501  3770437.976      304.690
** DESCRSRC Mitigated
   LOCATION VOL48        VOLUME     473858.799  3770437.341      305.000
** DESCRSRC Mitigated
   LOCATION VOL49        VOLUME     473694.021  3770596.599      302.000
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   LOCATION VOL50        VOLUME     473736.372  3770596.859      302.890
** DESCRSRC Mitigated
** Source Parameters **
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   SRCPARAM VOL4            0.1182     5.000     9.302     2.330
   SRCPARAM VOL5            0.1182     5.000     9.302     2.330
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   SRCPARAM VOL7            0.1182     5.000     9.302     2.330
   SRCPARAM VOL8            0.1182     5.000     9.302     2.330
   SRCPARAM VOL9            0.1182     5.000     9.302     2.330
   SRCPARAM VOL10           0.1182     5.000     9.302     2.330
   SRCPARAM VOL11           0.1182     5.000     9.302     2.330
   SRCPARAM VOL12           0.1182     5.000     9.302     2.330
   SRCPARAM VOL13           0.1182     5.000     9.302     2.330
   SRCPARAM VOL14           0.1182     5.000     9.302     2.330
   SRCPARAM VOL15           0.1182     5.000     9.302     2.330
   SRCPARAM VOL16           0.1182     5.000     9.302     2.330
   SRCPARAM VOL17           0.1182     5.000     9.302     2.330
   SRCPARAM VOL18           0.1182     5.000     9.302     2.330
   SRCPARAM VOL19           0.1182     5.000     9.302     2.330
   SRCPARAM VOL20           0.1182     5.000     9.302     2.330
   SRCPARAM VOL21           0.1182     5.000     9.302     2.330
   SRCPARAM VOL22           0.1182     5.000     9.302     2.330
   SRCPARAM VOL23           0.1182     5.000     9.302     2.330
   SRCPARAM VOL24           0.1182     5.000     9.302     2.330
   SRCPARAM VOL25           0.1182     5.000     9.302     2.330
   SRCPARAM VOL1            0.1182     5.000     9.302     2.326
   SRCPARAM VOL2            0.1182     5.000     9.302     2.326
   SRCPARAM VOL26        0.0564059752     5.000     9.302     2.330
   SRCPARAM VOL27           0.05641     5.000     9.302     2.330
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   SRCPARAM VOL29           0.05641     5.000     9.302     2.330
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   SRCPARAM VOL31           0.05641     5.000     9.302     2.330
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   SRCPARAM VOL37           0.05641     5.000     9.302     2.330
   SRCPARAM VOL38           0.05641     5.000     9.302     2.330
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   SRCPARAM VOL40           0.05641     5.000     9.302     2.330
   SRCPARAM VOL41           0.05641     5.000     9.302     2.330
   SRCPARAM VOL42           0.05641     5.000     9.302     2.330
   SRCPARAM VOL43           0.05641     5.000     9.302     2.330
   SRCPARAM VOL44           0.05641     5.000     9.302     2.330
   SRCPARAM VOL45           0.05641     5.000     9.302     2.330
   SRCPARAM VOL46           0.05641     5.000     9.302     2.330
   SRCPARAM VOL47           0.05641     5.000     9.302     2.330
   SRCPARAM VOL48           0.05641     5.000     9.302     2.330
   SRCPARAM VOL49           0.05641     5.000     9.302     2.330
   SRCPARAM VOL50           0.05641     5.000     9.302     2.330
   URBANSRC ALL

** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "Construction"
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   EMISFACT VOL39        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL40        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL40        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL40        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL41        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL41        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL41        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL42        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL42        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL42        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL43        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL43        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL44        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL45        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL46        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL47        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL48        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL49        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL50        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   CONCUNIT 531.5 G/S PPM
   SRCGROUP Unmitiga VOL3 VOL4 VOL5 VOL6 VOL7 VOL8 VOL9 VOL10 VOL11 VOL12
   SRCGROUP Unmitiga VOL13 VOL14 VOL15 VOL16 VOL17 VOL18 VOL19 VOL20 VOL21
   SRCGROUP Unmitiga VOL22 VOL23 VOL24 VOL25 VOL1 VOL2
   SRCGROUP Mitigate VOL26 VOL27 VOL28 VOL29 VOL30 VOL31 VOL32 VOL33 VOL34
   SRCGROUP Mitigate VOL35 VOL36 VOL37 VOL38 VOL39 VOL40 VOL41 VOL42 VOL43
   SRCGROUP Mitigate VOL44 VOL45 VOL46 VOL47 VOL48 VOL49 VOL50
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED NO2.rou
RE FINISHED
```

```
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\..\snbo8.sfc
   PROFFILE ..\..\snbo8.PFL
   SURFDATA 0 2007
   UAIRDATA 3190 2007
   SITEDATA 99999 2007
   PROFBASE 305.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** Auto-Generated Plotfiles
   PLOTFILE 1 Unmitiga 1ST NO2.AD\01H1G001.PLT 31
   PLOTFILE 1 Mitigate 1ST NO2.AD\01H1G002.PLT 32
   SUMMFILE NO2.sum
OU FINISHED

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc                    ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                    ***
   16:55:19

   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                                          ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses URBAN Dispersion Algorithm for the SBL for    50 Source(s),
   for Total of    1 Urban Area(s):
   Urban Population =   2015355.0 ;  Urban Roughness Length =  1.000 m

 **Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Full Conversion Assumed for NO2.
        7. Urban Roughness Length of 1.0 Meter Assumed.

 **Other Options Specified:
```

TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: NO2

**Note that special processing requirements apply for the 1-hour NO2 NAAQS - check available guidance.
Model will process user-specified ranks of daily maximum 1-hour values averaged across the number of years modeled.
For annual NO2 NAAQS modeling, the multi-year maximum of PERIOD values can be simulated using the MULTYEAR keyword.
Multi-year PERIOD and 1-hour values should only be done in a single model run using the MULTYEAR option with a single multi-year meteorological data file using STARTEND keyword.

**Model Calculates 1 Short Term Average(s) of: 1-HR

**This Run Includes: 50 Source(s); 2 Source Group(s); and 5 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 50 VOLUME source(s)
and: 0 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 305.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = G/S ; Emission Rate Unit Factor = 531.50
Output Units = PPM

**Approximate Storage Requirements of Model = 3.5 MB of RAM.

**Detailed Error/Message File: NO2.err

**File for Summary of Results: NO2.sum

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc *** 03/23/17
*** AERMET - VERSION 14134 *** *** *** 16:55:19

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
VOL3	0	0.11817E+00	473776.2	3770597.2	304.2	5.00	9.30	2.33	YES	HROFDY
VOL4	0	0.11820E+00	473815.0	3770596.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL5	0	0.11820E+00	473855.1	3770596.0	305.0	5.00	9.30	2.33	YES	HROFDY
VOL6	0	0.11820E+00	473693.8	3770556.3	302.0	5.00	9.30	2.33	YES	HROFDY
VOL7	0	0.11820E+00	473736.3	3770555.7	302.0	5.00	9.30	2.33	YES	HROFDY
VOL8	0	0.11820E+00	473778.8	3770555.4	303.3	5.00	9.30	2.33	YES	HROFDY
VOL9	0	0.11820E+00	473819.9	3770556.1	304.7	5.00	9.30	2.33	YES	HROFDY
VOL10	0	0.11820E+00	473858.8	3770557.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL11	0	0.11820E+00	473693.2	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL12	0	0.11820E+00	473736.7	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL13	0	0.11820E+00	473779.3	3770516.0	303.3	5.00	9.30	2.33	YES	HROFDY
VOL14	0	0.11820E+00	473820.4	3770516.7	304.7	5.00	9.30	2.33	YES	HROFDY
VOL15	0	0.11820E+00	473857.9	3770517.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL16	0	0.11820E+00	473695.4	3770474.8	302.0	5.00	9.30	2.33	YES	HROFDY
VOL17	0	0.11820E+00	473738.9	3770475.4	302.0	5.00	9.30	2.33	YES	HROFDY
VOL18	0	0.11820E+00	473781.0	3770475.8	303.4	5.00	9.30	2.33	YES	HROFDY
VOL19	0	0.11820E+00	473820.2	3770476.6	304.7	5.00	9.30	2.33	YES	HROFDY
VOL20	0	0.11820E+00	473858.8	3770477.5	305.0	5.00	9.30	2.33	YES	HROFDY
VOL21	0	0.11820E+00	473694.8	3770434.9	302.0	5.00	9.30	2.33	YES	HROFDY
VOL22	0	0.11820E+00	473737.6	3770436.2	302.3	5.00	9.30	2.33	YES	HROFDY
VOL23	0	0.11820E+00	473779.7	3770437.6	303.3	5.00	9.30	2.33	YES	HROFDY
VOL24	0	0.11820E+00	473820.5	3770438.0	304.7	5.00	9.30	2.33	YES	HROFDY
VOL25	0	0.11820E+00	473858.8	3770437.3	305.0	5.00	9.30	2.33	YES	HROFDY
VOL1	0	0.11820E+00	473694.0	3770596.6	302.0	5.00	9.30	2.33	YES	HROFDY
VOL2	0	0.11820E+00	473736.4	3770596.9	302.9	5.00	9.30	2.33	YES	HROFDY
VOL26	0	0.56406E-01	473776.2	3770597.2	304.2	5.00	9.30	2.33	YES	HROFDY
VOL27	0	0.56410E-01	473815.0	3770596.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL28	0	0.56410E-01	473855.1	3770596.0	305.0	5.00	9.30	2.33	YES	HROFDY
VOL29	0	0.56410E-01	473693.8	3770556.3	302.0	5.00	9.30	2.33	YES	HROFDY
VOL30	0	0.56410E-01	473736.3	3770555.7	302.0	5.00	9.30	2.33	YES	HROFDY
VOL31	0	0.56410E-01	473778.8	3770555.4	303.3	5.00	9.30	2.33	YES	HROFDY
VOL32	0	0.56410E-01	473819.9	3770556.1	304.7	5.00	9.30	2.33	YES	HROFDY
VOL33	0	0.56410E-01	473858.8	3770557.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL34	0	0.56410E-01	473693.2	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL35	0	0.56410E-01	473736.7	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL36	0	0.56410E-01	473779.3	3770516.0	303.3	5.00	9.30	2.33	YES	HROFDY
VOL37	0	0.56410E-01	473820.4	3770516.7	304.7	5.00	9.30	2.33	YES	HROFDY
VOL38	0	0.56410E-01	473857.9	3770517.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL39	0	0.56410E-01	473695.4	3770474.8	302.0	5.00	9.30	2.33	YES	HROFDY
VOL40	0	0.56410E-01	473738.9	3770475.4	302.0	5.00	9.30	2.33	YES	HROFDY

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc *** *** 03/23/17

*** AERMET - VERSION 14134 *** *** *** 16:55:19

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
VOL41	0	0.56410E-01	473781.0	3770475.8	303.4	5.00	9.30	2.33	YES	HROFDY
VOL42	0	0.56410E-01	473820.2	3770476.6	304.7	5.00	9.30	2.33	YES	HROFDY
VOL43	0	0.56410E-01	473858.8	3770477.5	305.0	5.00	9.30	2.33	YES	HROFDY
VOL44	0	0.56410E-01	473694.8	3770434.9	302.0	5.00	9.30	2.33	YES	HROFDY
VOL45	0	0.56410E-01	473737.6	3770436.2	302.3	5.00	9.30	2.33	YES	HROFDY
VOL46	0	0.56410E-01	473779.7	3770437.6	303.3	5.00	9.30	2.33	YES	HROFDY
VOL47	0	0.56410E-01	473820.5	3770438.0	304.7	5.00	9.30	2.33	YES	HROFDY
VOL48	0	0.56410E-01	473858.8	3770437.3	305.0	5.00	9.30	2.33	YES	HROFDY

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
UNMITIGA	VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20 , VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , VOL1 , VOL2 ,
MITIGATE	VOL26 , VOL27 , VOL28 , VOL29 , VOL30 , VOL31 , VOL32 , VOL33 , VOL34 , VOL35 , VOL36 , VOL37 , VOL38 , VOL39 , VOL40 , VOL41 , VOL42 , VOL43 , VOL44 , VOL45 , VOL46 , VOL47 , VOL48 , VOL49 , VOL50 ,

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
2015355.		VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20 , VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , VOL1 , VOL2 , VOL26 , VOL27 , VOL28 , VOL29 , VOL30 , VOL31 , VOL32 , VOL33 , VOL34 , VOL35 , VOL36 , VOL37 , VOL38 , VOL39 ,

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL3   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL4   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL5   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL6   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL7   ; SOURCE TYPE = VOLUME   :

1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .00000E+00 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR

SOURCE ID = VOL8 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .00000E+00 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = VOL9 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .00000E+00 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = VOL10 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .00000E+00 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

SOURCE ID = VOL11 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6 .00000E+00
7 .00000E+00 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12 .10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .00000E+00 17 .00000E+00 18 .00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24 .00000E+00

 SOURCE ID = VOL12   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL13   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL14   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL15   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL16   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18

.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL17   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc   ***
    03/23/17
 *** AERMET - VERSION 14134 ***   ***   ***
   16:55:19

   PAGE   9
 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL18   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL19   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL20   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL21   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00

```
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL22        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc                    ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                     ***
   16:55:19

   PAGE  10
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL23        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL24        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL25        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```

SOURCE ID = VOL1 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL2 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = VOL26 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL27 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL28 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

.00000E+00

 SOURCE ID = VOL29   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL30   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL31   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL32   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL33   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01

```
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL34        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL35        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc                    ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                      ***
   16:55:19

   PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL36        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL38        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
```

```
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL40        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc                    ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                      ***
   16:55:19

   PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                            * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL42        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```

 SOURCE ID = VOL43   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL44   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL45   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc   ***
    03/23/17
 *** AERMET - VERSION 14134 ***   ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL46   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL47   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00

CO
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24
.00000E+00

SOURCE ID = VOL48 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6
.00000E+00
7 .00000E+00 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12
.10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .00000E+00 17 .00000E+00 18
.00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24
.00000E+00

SOURCE ID = VOL49 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6
.00000E+00
7 .00000E+00 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12
.10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .00000E+00 17 .00000E+00 18
.00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24
.00000E+00

SOURCE ID = VOL50 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6
.00000E+00
7 .00000E+00 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12
.10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .00000E+00 17 .00000E+00 18
.00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24
.00000E+00

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc ***
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*** AERMET - VERSION 14134 *** *** ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(473813.1, 3770772.6, 305.4, 305.4, 2.0); (473890.8, 3770715.2, 306.0, 306.0,
2.0);
(474193.3, 3770710.4, 307.0, 307.0, 2.0); (474201.6, 3769929.2, 305.0, 305.0,
2.0);
(473829.0, 3770011.1, 302.0, 302.0, 2.0);

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc ***
03/23/17
*** AERMET - VERSION 14134 *** *** ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1

```
                                                                    CO
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1
1 1
            1 1 1 1 1 1 1 1 1 1  1 1 1 1 1

                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA
FILE.


                                  *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                                          (METERS/SEC)

                                                  1.54,   3.09,   5.14,   8.23,  10.80,
♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc                    ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                      ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                                    *** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

   Surface file:   ..\..\snbo8.sfc                                                                Met Version:
14134
   Profile file:   ..\..\snbo8.PFL
   Surface format: FREE

   Profile format: FREE

   Surface station no.:        0                  Upper air station no.:     3190
                Name: UNKNOWN                                  Name: UNKNOWN
                Year:   2007                                   Year:   2007

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO  REF WS   WD     HT  REF TA
  HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - -
 07 01 01   1 01   -0.5  0.030 -9.000 -9.000 -999.   12.      4.4  0.32   1.00   1.00    0.50   27.    9.1  279.9
 5.5
 07 01 01   1 02   -0.5  0.030 -9.000 -9.000 -999.   12.      4.3  0.32   1.00   1.00    0.50    7.    9.1  279.2
 5.5
 07 01 01   1 03   -0.5  0.030 -9.000 -9.000 -999.   12.      4.3  0.32   1.00   1.00    0.50   97.    9.1  278.8
 5.5
 07 01 01   1 04   -0.7  0.030 -9.000 -9.000 -999.   12.      3.1  0.32   1.00   1.00    0.50  148.    9.1  278.1
 5.5
 07 01 01   1 05   -2.4  0.054 -9.000 -9.000 -999.   30.      5.5  0.32   1.00   1.00    0.90   87.    9.1  278.1
 5.5
 07 01 01   1 06   -1.7  0.054 -9.000 -9.000 -999.   30.      7.8  0.32   1.00   1.00    0.90  208.    9.1  277.0
 5.5
 07 01 01   1 07   -1.7  0.054 -9.000 -9.000 -999.   30.      7.8  0.32   1.00   1.00    0.90  156.    9.1  277.5
 5.5
 07 01 01   1 08   -1.7  0.054 -9.000 -9.000 -999.   30.      7.8  0.32   1.00   0.52    0.90   60.    9.1  277.5
 5.5
 07 01 01   1 09   34.6  0.390  0.621  0.005  241.  585.   -149.6  0.32   1.00   0.31    3.10  264.    9.1  282.5
 5.5
```

```
                                                                CO
 07 01 01   1 10   78.0  0.267  1.066  0.005  541.  341.    -21.3  0.32   1.00   0.24    1.80  242.    9.1  289.2
 5.5
 07 01 01   1 11  112.9  0.612  1.395  0.019  839. 1149.   -176.9  0.32   1.00   0.21    4.90   82.    9.1  290.4
 5.5
 07 01 01   1 12  130.3  0.615  1.611  0.020 1120. 1158.   -155.8  0.32   1.00   0.20    4.90   74.    9.1  290.9
 5.5
 07 01 01   1 13  128.2  0.671  1.662  0.015 1250. 1315.   -204.9  0.32   1.00   0.20    5.40   59.    9.1  290.9
 5.5
 07 01 01   1 14  107.5  0.712  1.575  0.007 1267. 1439.   -292.1  0.32   1.00   0.22    5.80   58.    9.1  291.4
 5.5
 07 01 01   1 15   68.1  0.602  1.356  0.021 1277. 1137.   -279.3  0.32   1.00   0.25    4.90   40.    9.1  291.4
 5.5
 07 01 01   1 16   18.1  0.438  0.872  0.021 1278.  724.   -405.7  0.32   1.00   0.34    3.60  312.    9.1  292.0
 5.5
 07 01 01   1 17  -25.8  0.263 -9.000 -9.000 -999.  353.     61.6  0.32   1.00   0.63    2.70  342.    9.1  290.9
 5.5
 07 01 01   1 18   -4.9  0.077 -9.000 -9.000 -999.  114.      8.1  0.32   1.00   1.00    1.30  256.    9.1  289.2
 5.5
 07 01 01   1 19   -4.9  0.077 -9.000 -9.000 -999.   52.      8.1  0.32   1.00   1.00    1.30  191.    9.1  289.9
 5.5
 07 01 01   1 20   -4.9  0.077 -9.000 -9.000 -999.   52.      8.1  0.32   1.00   1.00    1.30  197.    9.1  289.9
 5.5
 07 01 01   1 21   -4.9  0.077 -9.000 -9.000 -999.   52.      8.1  0.32   1.00   1.00    1.30  190.    9.1  289.9
 5.5
 07 01 01   1 22   -2.4  0.054 -9.000 -9.000 -999.   30.      5.6  0.32   1.00   1.00    0.90  188.    9.1  289.2
 5.5
 07 01 01   1 23   -9.5  0.107 -9.000 -9.000 -999.   84.     11.3  0.32   1.00   1.00    1.80  162.    9.1  289.9
 5.5
 07 01 01   1 24   -9.5  0.107 -9.000 -9.000 -999.   84.     11.3  0.32   1.00   1.00    1.80   42.    9.1  289.2
 5.5


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 07 01 01 01    5.5 0 -999.  -99.00   279.9   99.0  -99.00  -99.00
 07 01 01 01    9.1 1   27.    0.50  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc                    ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

    *** THE   1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5 YEARS FOR SOURCE GROUP:
UNMITIGA ***
                                  INCLUDING SOURCE(S):     VOL3        , VOL4        , VOL5        , VOL6        ,
VOL7        ,
                VOL8        , VOL9        , VOL10       , VOL11       , VOL12       , VOL13       , VOL14       ,
VOL15       ,
                VOL16       , VOL17       , VOL18       , VOL19       , VOL20       , VOL21       , VOL22       ,
VOL23       ,
                VOL24       , VOL25       , VOL1        , VOL2        ,

                                       *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                    ** CONC OF NO2      IN PPM                                    **

       X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)   Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -
         473813.12    3770772.61        0.07946                    473890.79    3770715.17        0.09269

         474193.26    3770710.36        0.04421                    474201.58    3769929.23        0.01201
```

473829.05 3770011.13 0.02699

*** THE 1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION VALUES AVERAGED OVER 5 YEARS FOR SOURCE GROUP: MITIGATE ***
INCLUDING SOURCE(S): VOL26 , VOL27 , VOL28 , VOL29 , VOL30 ,
VOL31 , VOL32 , VOL33 , VOL34 , VOL35 , VOL36 , VOL37 , VOL38 ,
VOL39 , VOL40 , VOL41 , VOL42 , VOL43 , VOL44 , VOL45 , VOL46 ,
VOL47 , VOL48 , VOL49 , VOL50 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NO2 IN PPM **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
473813.12	3770772.61	0.03792	473890.79	3770715.17	0.04423
474193.26	3770710.36	0.02110	474201.58	3769929.23	0.00573
473829.05	3770011.13	0.01288			

*** THE SUMMARY OF MAXIMUM 1ST-HIGHEST MAX DAILY 1-HR RESULTS AVERAGED OVER 5 YEARS ***

** CONC OF NO2 IN PPM **

NETWORK GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)					OF TYPE GRID-ID
UNMITIGA	1ST HIGHEST VALUE IS	0.09269 AT	473890.79,	3770715.17,	306.00,	306.00,	2.00)	DC
	2ND HIGHEST VALUE IS	0.07946 AT	473813.12,	3770772.61,	305.39,	305.39,	2.00)	DC
	3RD HIGHEST VALUE IS	0.04421 AT	474193.26,	3770710.36,	307.00,	307.00,	2.00)	DC
	4TH HIGHEST VALUE IS	0.02699 AT	473829.05,	3770011.13,	301.98,	301.98,	2.00)	DC
	5TH HIGHEST VALUE IS	0.01201 AT	474201.58,	3769929.23,	305.00,	305.00,	2.00)	DC
	6TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00,	0.00)	
	7TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00,	0.00)	
	8TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00,	0.00)	
	9TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00,	0.00)	

```
                                                    CO
         10TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)

MITIGATE  1ST HIGHEST VALUE IS       0.04423 AT (  473890.79,  3770715.17,   306.00,   306.00,    2.00)  DC

          2ND HIGHEST VALUE IS       0.03792 AT (  473813.12,  3770772.61,   305.39,   305.39,    2.00)  DC

          3RD HIGHEST VALUE IS       0.02110 AT (  474193.26,  3770710.36,   307.00,   307.00,    2.00)  DC

          4TH HIGHEST VALUE IS       0.01288 AT (  473829.05,  3770011.13,   301.98,   301.98,    2.00)  DC

          5TH HIGHEST VALUE IS       0.00573 AT (  474201.58,  3769929.23,   305.00,   305.00,    2.00)  DC

          6TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)
          7TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)
          8TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)
          9TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)
         10TH HIGHEST VALUE IS       0.00000 AT (       0.00,        0.00,     0.00,     0.00,    0.00)


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\NO2\NO2.isc                    ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of            0 Fatal Error Message(s)
 A Total of            0 Warning Message(s)
 A Total of         1086 Informational Message(s)

 A Total of        43824 Hours Were Processed

 A Total of           37 Calm Hours Identified

 A Total of         1049 Missing Hours Identified (  2.39 Percent)


    ******** FATAL ERROR MESSAGES ********
               ***  NONE  ***


    ********   WARNING MESSAGES   ********
               ***  NONE  ***


    ***********************************
    *** AERMOD Finishes Successfully ***
    ***********************************

**
****************************************
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.3.0
** Lakes Environmental Software Inc.
** Date: 3/23/2017
** File: C:\Lakes\AERMOD View\GWS\Construction\PM10\PM10.ADI
**
```

```
**************************************
**
**
**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\GWS\Construction\PM10\PM10.isc
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2015355
   POLLUTID PM_10
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL PM10.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL3         VOLUME     473776.173  3770597.226      304.210
** DESCRSRC Unmitigated
   LOCATION VOL4         VOLUME     473814.960  3770596.075      305.000
** DESCRSRC Unmitigated
   LOCATION VOL5         VOLUME     473855.056  3770595.961      305.000
** DESCRSRC Unmitigated
   LOCATION VOL6         VOLUME     473693.806  3770556.318      302.000
** DESCRSRC Unmitigated
   LOCATION VOL7         VOLUME     473736.340  3770555.672      302.000
** DESCRSRC Unmitigated
   LOCATION VOL8         VOLUME     473778.760  3770555.391      303.300
** DESCRSRC Unmitigated
   LOCATION VOL9         VOLUME     473819.858  3770556.123      304.670
** DESCRSRC Unmitigated
   LOCATION VOL10        VOLUME     473858.796  3770557.107      305.000
** DESCRSRC Unmitigated
   LOCATION VOL11        VOLUME     473693.175  3770515.033      302.000
** DESCRSRC Unmitigated
   LOCATION VOL12        VOLUME     473736.743  3770514.973      302.000
** DESCRSRC Unmitigated
   LOCATION VOL13        VOLUME     473779.328  3770515.988      303.320
** DESCRSRC Unmitigated
   LOCATION VOL14        VOLUME     473820.359  3770516.663      304.690
** DESCRSRC Unmitigated
   LOCATION VOL15        VOLUME     473857.852  3770517.085      305.000
** DESCRSRC Unmitigated
   LOCATION VOL16        VOLUME     473695.421  3770474.756      302.000
** DESCRSRC Unmitigated
   LOCATION VOL17        VOLUME     473738.924  3770475.402      302.000
** DESCRSRC Unmitigated
   LOCATION VOL18        VOLUME     473781.021  3770475.768      303.380
** DESCRSRC Unmitigated
   LOCATION VOL19        VOLUME     473820.189  3770476.611      304.680
** DESCRSRC Unmitigated
   LOCATION VOL20        VOLUME     473858.796  3770477.485      305.000
** DESCRSRC Unmitigated
   LOCATION VOL21        VOLUME     473694.775  3770434.939      302.000
** DESCRSRC Unmitigated
   LOCATION VOL22        VOLUME     473737.632  3770436.231      302.310
** DESCRSRC Unmitigated
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                                                    CO
   LOCATION VOL23        VOLUME     473779.729  3770437.566      303.330
** DESCRSRC Unmitigated
   LOCATION VOL24        VOLUME     473820.504  3770437.975      304.690
** DESCRSRC Unmitigated
   LOCATION VOL25        VOLUME     473858.796  3770437.344      305.000
** DESCRSRC Unmitigated
   LOCATION VOL1         VOLUME     473694.024  3770596.594      302.000
** DESCRSRC Unmitigated
   LOCATION VOL2         VOLUME     473736.374  3770596.857      302.890
** DESCRSRC Unmitigated
   LOCATION AREA1        AREA       473675.801  3770412.761      302.020
** DESCRSRC Unmitigated
   LOCATION AREA2        AREA       473675.801  3770412.761      302.020
** DESCRSRC Mitigated
   LOCATION VOL26        VOLUME     473776.175  3770597.229      304.210
** DESCRSRC Mitigated
   LOCATION VOL27        VOLUME     473814.961  3770596.079      305.000
** DESCRSRC Mitigated
   LOCATION VOL28        VOLUME     473855.058  3770595.959      305.000
** DESCRSRC Mitigated
   LOCATION VOL29        VOLUME     473693.806  3770556.322      302.000
** DESCRSRC Mitigated
   LOCATION VOL30        VOLUME     473736.339  3770555.672      302.000
** DESCRSRC Mitigated
   LOCATION VOL31        VOLUME     473778.763  3770555.392      303.300
** DESCRSRC Mitigated
   LOCATION VOL32        VOLUME     473819.861  3770556.127      304.670
** DESCRSRC Mitigated
   LOCATION VOL33        VOLUME     473858.799  3770557.112      305.000
** DESCRSRC Mitigated
   LOCATION VOL34        VOLUME     473693.180  3770515.034      302.000
** DESCRSRC Mitigated
   LOCATION VOL35        VOLUME     473736.744  3770514.974      302.000
** DESCRSRC Mitigated
   LOCATION VOL36        VOLUME     473779.327  3770515.984      303.320
** DESCRSRC Mitigated
   LOCATION VOL37        VOLUME     473820.355  3770516.659      304.690
** DESCRSRC Mitigated
   LOCATION VOL38        VOLUME     473857.853  3770517.085      305.000
** DESCRSRC Mitigated
   LOCATION VOL39        VOLUME     473695.426  3770474.757      302.000
** DESCRSRC Mitigated
   LOCATION VOL40        VOLUME     473738.929  3770475.407      302.000
** DESCRSRC Mitigated
   LOCATION VOL41        VOLUME     473781.023  3770475.767      303.380
** DESCRSRC Mitigated
   LOCATION VOL42        VOLUME     473820.185  3770476.607      304.680
** DESCRSRC Mitigated
   LOCATION VOL43        VOLUME     473858.799  3770477.488      305.000
** DESCRSRC Mitigated
   LOCATION VOL44        VOLUME     473694.776  3770434.941      302.000
** DESCRSRC Mitigated
   LOCATION VOL45        VOLUME     473737.629  3770436.231      302.310
** DESCRSRC Mitigated
   LOCATION VOL46        VOLUME     473779.733  3770437.571      303.330
** DESCRSRC Mitigated
   LOCATION VOL47        VOLUME     473820.501  3770437.976      304.690
** DESCRSRC Mitigated
   LOCATION VOL48        VOLUME     473858.799  3770437.341      305.000
** DESCRSRC Mitigated
   LOCATION VOL49        VOLUME     473694.021  3770596.599      302.000
** DESCRSRC Mitigated
   LOCATION VOL50        VOLUME     473736.372  3770596.859      302.890
** DESCRSRC Mitigated
** Source Parameters **
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   SRCPARAM VOL4          0.005018     5.000     9.302     2.330
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   SRCPARAM VOL6          0.005018     5.000     9.302     2.330
   SRCPARAM VOL7          0.005018     5.000     9.302     2.330
   SRCPARAM VOL8          0.005018     5.000     9.302     2.330
   SRCPARAM VOL9          0.005018     5.000     9.302     2.330
   SRCPARAM VOL10         0.005018     5.000     9.302     2.330
   SRCPARAM VOL11         0.005018     5.000     9.302     2.330
   SRCPARAM VOL12         0.005018     5.000     9.302     2.330
   SRCPARAM VOL13         0.005018     5.000     9.302     2.330
   SRCPARAM VOL14         0.005018     5.000     9.302     2.330
   SRCPARAM VOL15         0.005018     5.000     9.302     2.330
   SRCPARAM VOL16         0.005018     5.000     9.302     2.330
   SRCPARAM VOL17         0.005018     5.000     9.302     2.330
   SRCPARAM VOL18         0.005018     5.000     9.302     2.330
   SRCPARAM VOL19         0.005018     5.000     9.302     2.330
   SRCPARAM VOL20         0.005018     5.000     9.302     2.330
   SRCPARAM VOL21         0.005018     5.000     9.302     2.330
   SRCPARAM VOL22         0.005018     5.000     9.302     2.330
   SRCPARAM VOL23         0.005018     5.000     9.302     2.330
   SRCPARAM VOL24         0.005018     5.000     9.302     2.330
   SRCPARAM VOL25         0.005018     5.000     9.302     2.330
   SRCPARAM VOL1          0.005018     5.000     9.302     2.326
   SRCPARAM VOL2          0.005018     5.000     9.302     2.326
   SRCPARAM AREA1        3.3645E-06     0.000   196.074   196.074     0.000     1.000
   SRCPARAM AREA2        3.3645E-06     0.000   196.074   196.074     0.000     1.000
   SRCPARAM VOL26        0.0023309608     5.000     9.302     2.330
   SRCPARAM VOL27         0.002331     5.000     9.302     2.330
   SRCPARAM VOL28         0.002331     5.000     9.302     2.330
   SRCPARAM VOL29         0.002331     5.000     9.302     2.330
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   SRCPARAM VOL31         0.002331     5.000     9.302     2.330
   SRCPARAM VOL32         0.002331     5.000     9.302     2.330
   SRCPARAM VOL33         0.002331     5.000     9.302     2.330
   SRCPARAM VOL34         0.002331     5.000     9.302     2.330
   SRCPARAM VOL35         0.002331     5.000     9.302     2.330
   SRCPARAM VOL36         0.002331     5.000     9.302     2.330
   SRCPARAM VOL37         0.002331     5.000     9.302     2.330
   SRCPARAM VOL38         0.002331     5.000     9.302     2.330
   SRCPARAM VOL39         0.002331     5.000     9.302     2.330
   SRCPARAM VOL40         0.002331     5.000     9.302     2.330
   SRCPARAM VOL41         0.002331     5.000     9.302     2.330
   SRCPARAM VOL42         0.002331     5.000     9.302     2.330
   SRCPARAM VOL43         0.002331     5.000     9.302     2.330
   SRCPARAM VOL44         0.002331     5.000     9.302     2.330
   SRCPARAM VOL45         0.002331     5.000     9.302     2.330
   SRCPARAM VOL46         0.002331     5.000     9.302     2.330
   SRCPARAM VOL47         0.002331     5.000     9.302     2.330
   SRCPARAM VOL48         0.002331     5.000     9.302     2.330
   SRCPARAM VOL49         0.002331     5.000     9.302     2.330
   SRCPARAM VOL50         0.002331     5.000     9.302     2.330
   URBANSRC ALL

** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "Construction"
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   EMISFACT VOL3         HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL3         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL4         HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL4         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL5         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
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EMISFACT VOL39        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL39        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL39        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL40        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL40        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL40        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL40        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL41        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL41        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL41        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL41        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL42        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL42        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL42        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL42        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL43        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL43        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL43        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL43        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL44        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL44        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL44        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL44        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL45        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL45        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL45        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL45        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL46        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL46        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL46        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL46        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL47        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL47        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL47        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL47        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL48        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL48        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL48        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL48        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL49        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL49        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL49        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL49        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL50        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL50        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL50        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL50        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
SRCGROUP Unmitiga VOL3 VOL4 VOL5 VOL6 VOL7 VOL8 VOL9 VOL10 VOL11 VOL12
SRCGROUP Unmitiga VOL13 VOL14 VOL15 VOL16 VOL17 VOL18 VOL19 VOL20 VOL21
SRCGROUP Unmitiga VOL22 VOL23 VOL24 VOL25 VOL1 VOL2 AREA1
SRCGROUP Mitigate AREA2 VOL26 VOL27 VOL28 VOL29 VOL30 VOL31 VOL32 VOL33
SRCGROUP Mitigate VOL34 VOL35 VOL36 VOL37 VOL38 VOL39 VOL40 VOL41 VOL42
SRCGROUP Mitigate VOL43 VOL44 VOL45 VOL46 VOL47 VOL48 VOL49 VOL50
```

```
SO FINISHED
**
****************************************
** AERMOD Receptor Pathway
****************************************
**
**
RE STARTING
   INCLUDED PM10.rou
RE FINISHED
**
****************************************
** AERMOD Meteorology Pathway
****************************************
**
**
ME STARTING
   SURFFILE ..\..\snbo8.sfc
   PROFFILE ..\..\snbo8.PFL
   SURFDATA 0 2007
   UAIRDATA 3190 2007
   SITEDATA 99999 2007
   PROFBASE 305.0 METERS
ME FINISHED
**
****************************************
** AERMOD Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 Unmitiga 1ST PM10.AD\24H1G001.PLT 31
   PLOTFILE 24 Mitigate 1ST PM10.AD\24H1G002.PLT 32
   SUMMFILE PM10.sum
OU FINISHED

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

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    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                      ***
   14:25:41

   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                                        ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses URBAN Dispersion Algorithm for the SBL for    52 Source(s),
   for Total of    1 Urban Area(s):
   Urban Population =   2015355.0 ;  Urban Roughness Length =  1.000 m
```

**Model Uses Regulatory DEFAULT Options:
1. Stack-tip Downwash.
2. Model Accounts for ELEVated Terrain Effects.
3. Use Calms Processing Routine.
4. Use Missing Data Processing Routine.
5. No Exponential Decay.
6. Urban Roughness Length of 1.0 Meter Assumed.

**Other Options Specified:
TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of: PM_10

**Model Calculates 1 Short Term Average(s) of: 24-HR

**This Run Includes: 52 Source(s); 2 Source Group(s); and 5 Receptor(s)

with: 0 POINT(s), including
0 POINTCAP(s) and 0 POINTHOR(s)
and: 50 VOLUME source(s)
and: 2 AREA type source(s)
and: 0 LINE source(s)
and: 0 OPENPIT source(s)
and: 0 BUOYANT LINE source(s) with 0 line(s)

**Model Set To Continue RUNning After the Setup Testing.

**The AERMET Input Meteorological Data Version Date: 14134

**Output Options Selected:
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) = 305.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 3.5 MB of RAM.

**Detailed Error/Message File: PM10.err

**File for Summary of Results: PM10.sum

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
VOL3	0	0.50179E-02	473776.2	3770597.2	304.2	5.00	9.30	2.33	YES	HROFDY
VOL4	0	0.50180E-02	473815.0	3770596.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL5	0	0.50180E-02	473855.1	3770596.0	305.0	5.00	9.30	2.33	YES	HROFDY
VOL6	0	0.50180E-02	473693.8	3770556.3	302.0	5.00	9.30	2.33	YES	HROFDY
VOL7	0	0.50180E-02	473736.3	3770555.7	302.0	5.00	9.30	2.33	YES	HROFDY
VOL8	0	0.50180E-02	473778.8	3770555.4	303.3	5.00	9.30	2.33	YES	HROFDY
VOL9	0	0.50180E-02	473819.9	3770556.1	304.7	5.00	9.30	2.33	YES	HROFDY
VOL10	0	0.50180E-02	473858.8	3770557.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL11	0	0.50180E-02	473693.2	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL12	0	0.50180E-02	473736.7	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL13	0	0.50180E-02	473779.3	3770516.0	303.3	5.00	9.30	2.33	YES	HROFDY
VOL14	0	0.50180E-02	473820.4	3770516.7	304.7	5.00	9.30	2.33	YES	HROFDY
VOL15	0	0.50180E-02	473857.9	3770517.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL16	0	0.50180E-02	473695.4	3770474.8	302.0	5.00	9.30	2.33	YES	HROFDY
VOL17	0	0.50180E-02	473738.9	3770475.4	302.0	5.00	9.30	2.33	YES	HROFDY
VOL18	0	0.50180E-02	473781.0	3770475.8	303.4	5.00	9.30	2.33	YES	HROFDY
VOL19	0	0.50180E-02	473820.2	3770476.6	304.7	5.00	9.30	2.33	YES	HROFDY
VOL20	0	0.50180E-02	473858.8	3770477.5	305.0	5.00	9.30	2.33	YES	HROFDY
VOL21	0	0.50180E-02	473694.8	3770434.9	302.0	5.00	9.30	2.33	YES	HROFDY
VOL22	0	0.50180E-02	473737.6	3770436.2	302.3	5.00	9.30	2.33	YES	HROFDY
VOL23	0	0.50180E-02	473779.7	3770437.6	303.3	5.00	9.30	2.33	YES	HROFDY
VOL24	0	0.50180E-02	473820.5	3770438.0	304.7	5.00	9.30	2.33	YES	HROFDY
VOL25	0	0.50180E-02	473858.8	3770437.3	305.0	5.00	9.30	2.33	YES	HROFDY
VOL1	0	0.50180E-02	473694.0	3770596.6	302.0	5.00	9.30	2.33	YES	HROFDY
VOL2	0	0.50180E-02	473736.4	3770596.9	302.9	5.00	9.30	2.33	YES	HROFDY
VOL26	0	0.23310E-02	473776.2	3770597.2	304.2	5.00	9.30	2.33	YES	HROFDY
VOL27	0	0.23310E-02	473815.0	3770596.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL28	0	0.23310E-02	473855.1	3770596.0	305.0	5.00	9.30	2.33	YES	HROFDY
VOL29	0	0.23310E-02	473693.8	3770556.3	302.0	5.00	9.30	2.33	YES	HROFDY
VOL30	0	0.23310E-02	473736.3	3770555.7	302.0	5.00	9.30	2.33	YES	HROFDY
VOL31	0	0.23310E-02	473778.8	3770555.4	303.3	5.00	9.30	2.33	YES	HROFDY
VOL32	0	0.23310E-02	473819.9	3770556.1	304.7	5.00	9.30	2.33	YES	HROFDY
VOL33	0	0.23310E-02	473858.8	3770557.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL34	0	0.23310E-02	473693.2	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL35	0	0.23310E-02	473736.7	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL36	0	0.23310E-02	473779.3	3770516.0	303.3	5.00	9.30	2.33	YES	HROFDY
VOL37	0	0.23310E-02	473820.4	3770516.7	304.7	5.00	9.30	2.33	YES	HROFDY
VOL38	0	0.23310E-02	473857.9	3770517.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL39	0	0.23310E-02	473695.4	3770474.8	302.0	5.00	9.30	2.33	YES	HROFDY
VOL40	0	0.23310E-02	473738.9	3770475.4	302.0	5.00	9.30	2.33	YES	HROFDY

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
VOL41	0	0.23310E-02	473781.0	3770475.8	303.4	5.00	9.30	2.33	YES	HROFDY
VOL42	0	0.23310E-02	473820.2	3770476.6	304.7	5.00	9.30	2.33	YES	HROFDY
VOL43	0	0.23310E-02	473858.8	3770477.5	305.0	5.00	9.30	2.33	YES	HROFDY
VOL44	0	0.23310E-02	473694.8	3770434.9	302.0	5.00	9.30	2.33	YES	HROFDY
VOL45	0	0.23310E-02	473737.6	3770436.2	302.3	5.00	9.30	2.33	YES	HROFDY
VOL46	0	0.23310E-02	473779.7	3770437.6	303.3	5.00	9.30	2.33	YES	HROFDY
VOL47	0	0.23310E-02	473820.5	3770438.0	304.7	5.00	9.30	2.33	YES	HROFDY

*** AREA SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X (METERS)	COORD (SW CORNER) Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
AREA1	0	0.33645E-05	473675.8	3770412.8	302.0	0.00	196.07	196.07	0.00	1.00	YES	HROFDY
AREA2	0	0.33645E-05	473675.8	3770412.8	302.0	0.00	196.07	196.07	0.00	1.00	YES	HROFDY

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
UNMITIGA	VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 , VOL11 , VOL12 , VOL13 , VOL14 , VOL15 , VOL16 , VOL17 , VOL18 , VOL19 , VOL20 , VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , VOL1 , VOL2 , AREA1 ,
MITIGATE	AREA2 , VOL26 , VOL27 , VOL28 , VOL29 , VOL30 , VOL31 , VOL32 , VOL33 , VOL34 , VOL35 , VOL36 , VOL37 , VOL38 , VOL39 , VOL40 , VOL41 , VOL42 , VOL43 , VOL44 , VOL45 , VOL46 , VOL47 , VOL48 , VOL49 , VOL50 ,

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
	2015355.	VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,
		VOL11 , VOL12 , VOL13 , VOL14 , VOL15 , VOL16 , VOL17 , VOL18 ,
		VOL19 , VOL20 , VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , VOL1 ,
		VOL2 , AREA1 , AREA2 , VOL26 , VOL27 , VOL28 , VOL29 , VOL30 ,
		VOL31 , VOL32 , VOL33 , VOL34 , VOL35 , VOL36 , VOL37 , VOL38 ,
		VOL39 , VOL40 , VOL41 , VOL42 , VOL43 , VOL44 , VOL45 , VOL46 ,
		VOL47 , VOL48 , VOL49 , VOL50 ,

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = VOL3 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00
SOURCE ID = VOL4 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

```
 SOURCE ID = VOL5         ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL6         ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL7         ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

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 *** AERMET - VERSION  14134 ***   ***                                                                    ***
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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL8         ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL9         ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
```

.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL10   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL11   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL12   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - -

 SOURCE ID = VOL13   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL14   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00

```
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL15        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL16        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL17        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```


 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

```
     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL18        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```

SOURCE ID = VOL19 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL20 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL21 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL22 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = VOL23 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

.00000E+00

 SOURCE ID = VOL24   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL25   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL1   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL2   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = AREA1   ; SOURCE TYPE = AREA   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01

CO

```
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = AREA2        ; SOURCE TYPE = AREA     :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM10\PM10.isc                  ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                    ***
   14:25:41

   PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
```

```
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL32        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL33        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM10\PM10.isc                 ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                     ***
   14:25:41

   PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                             * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR       HOUR    SCALAR       HOUR    SCALAR       HOUR    SCALAR       HOUR    SCALAR       HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -
```

 SOURCE ID = VOL34   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL35   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL36   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL37   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL38   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR

SOURCE ID = VOL39 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL40 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL41 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL42 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL43 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

```
     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL44        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL45        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL46        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL47        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL48        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```

CO
*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR SCALAR HOUR
SCALAR
- -
- - - - - - - -

SOURCE ID = VOL49 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6
.00000E+00
7 .00000E+00 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12
.10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .00000E+00 17 .00000E+00 18
.00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24
.00000E+00

SOURCE ID = VOL50 ; SOURCE TYPE = VOLUME :
1 .00000E+00 2 .00000E+00 3 .00000E+00 4 .00000E+00 5 .00000E+00 6
.00000E+00
7 .00000E+00 8 .10000E+01 9 .10000E+01 10 .10000E+01 11 .10000E+01 12
.10000E+01
13 .10000E+01 14 .10000E+01 15 .10000E+01 16 .00000E+00 17 .00000E+00 18
.00000E+00
19 .00000E+00 20 .00000E+00 21 .00000E+00 22 .00000E+00 23 .00000E+00 24
.00000E+00

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\GWS\Construction\PM10\PM10.isc ***
03/23/17
*** AERMET - VERSION 14134 *** *** ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(473813.1, 3770772.6, 305.4, 305.4, 2.0); (473890.8, 3770715.2, 306.0, 306.0,
2.0);
(474193.3, 3770710.4, 307.0, 307.0, 2.0); (474201.6, 3769929.2, 305.0, 305.0,
2.0);
(473829.0, 3770011.1, 302.0, 302.0, 2.0);

♀ *** AERMOD - VERSION 16216r *** *** C:\Lakes\AERMOD View\GWS\Construction\PM10\PM10.isc ***
03/23/17
*** AERMET - VERSION 14134 *** *** ***
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

CO
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54,   3.09,   5.14,   8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\..\snbo8.sfc   Met Version: 14134
Profile file: ..\..\snbo8.PFL
Surface format: FREE

Profile format: FREE

Surface station no.:   0   Upper air station no.:   3190
Name: UNKNOWN   Name: UNKNOWN
Year: 2007   Year: 2007

First 24 hours of scalar data

YR MO DY JDY HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
07 01 01 1 01	-0.5	0.030	-9.000	-9.000	-999.	12.	4.4	0.32	1.00	1.00	0.50	27.	9.1	279.9	5.5
07 01 01 1 02	-0.5	0.030	-9.000	-9.000	-999.	12.	4.3	0.32	1.00	1.00	0.50	7.	9.1	279.2	5.5
07 01 01 1 03	-0.5	0.030	-9.000	-9.000	-999.	12.	4.3	0.32	1.00	1.00	0.50	97.	9.1	278.8	5.5
07 01 01 1 04	-0.7	0.030	-9.000	-9.000	-999.	12.	3.1	0.32	1.00	1.00	0.50	148.	9.1	278.1	5.5
07 01 01 1 05	-2.4	0.054	-9.000	-9.000	-999.	30.	5.5	0.32	1.00	1.00	0.90	87.	9.1	278.1	5.5
07 01 01 1 06	-1.7	0.054	-9.000	-9.000	-999.	30.	7.8	0.32	1.00	1.00	0.90	208.	9.1	277.0	5.5
07 01 01 1 07	-1.7	0.054	-9.000	-9.000	-999.	30.	7.8	0.32	1.00	1.00	0.90	156.	9.1	277.5	5.5
07 01 01 1 08	-1.7	0.054	-9.000	-9.000	-999.	30.	7.8	0.32	1.00	0.52	0.90	60.	9.1	277.5	5.5
07 01 01 1 09	34.6	0.390	0.621	0.005	241.	585.	-149.6	0.32	1.00	0.31	3.10	264.	9.1	282.5	5.5
07 01 01 1 10	78.0	0.267	1.066	0.005	541.	341.	-21.3	0.32	1.00	0.24	1.80	242.	9.1	289.2	5.5
07 01 01 1 11	112.9	0.612	1.395	0.019	839.	1149.	-176.9	0.32	1.00	0.21	4.90	82.	9.1	290.4	5.5
07 01 01 1 12	130.3	0.615	1.611	0.020	1120.	1158.	-155.8	0.32	1.00	0.20	4.90	74.	9.1	290.9	

```
 5.5
 07 01 01   1 13  128.2  0.671  1.662  0.015 1250. 1315.   -204.9  0.32   1.00   0.20    5.40   59.    9.1  290.9
 5.5
 07 01 01   1 14  107.5  0.712  1.575  0.007 1267. 1439.   -292.1  0.32   1.00   0.22    5.80   58.    9.1  291.4
 5.5
 07 01 01   1 15   68.1  0.602  1.356  0.021 1277. 1137.   -279.3  0.32   1.00   0.25    4.90   40.    9.1  291.4
 5.5
 07 01 01   1 16   18.1  0.438  0.872  0.021 1278.  724.   -405.7  0.32   1.00   0.34    3.60  312.    9.1  292.0
 5.5
 07 01 01   1 17  -25.8  0.263 -9.000 -9.000 -999.  353.     61.6  0.32   1.00   0.63    2.70  342.    9.1  290.9
 5.5
 07 01 01   1 18   -4.9  0.077 -9.000 -9.000 -999.  114.      8.1  0.32   1.00   1.00    1.30  256.    9.1  289.2
 5.5
 07 01 01   1 19   -4.9  0.077 -9.000 -9.000 -999.   52.      8.1  0.32   1.00   1.00    1.30  191.    9.1  289.9
 5.5
 07 01 01   1 20   -4.9  0.077 -9.000 -9.000 -999.   52.      8.1  0.32   1.00   1.00    1.30  197.    9.1  289.9
 5.5
 07 01 01   1 21   -4.9  0.077 -9.000 -9.000 -999.   52.      8.1  0.32   1.00   1.00    1.30  190.    9.1  289.9
 5.5
 07 01 01   1 22   -2.4  0.054 -9.000 -9.000 -999.   30.      5.6  0.32   1.00   1.00    0.90  188.    9.1  289.2
 5.5
 07 01 01   1 23   -9.5  0.107 -9.000 -9.000 -999.   84.     11.3  0.32   1.00   1.00    1.80  162.    9.1  289.9
 5.5
 07 01 01   1 24   -9.5  0.107 -9.000 -9.000 -999.   84.     11.3  0.32   1.00   1.00    1.80   42.    9.1  289.2
 5.5


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 07 01 01 01    5.5 0 -999.  -99.00   279.9   99.0  -99.00  -99.00
 07 01 01 01    9.1 1   27.    0.50  -999.0   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM10\PM10.isc                  ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                    ***
   14:25:41

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                            *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP:
UNMITIGA ***
                                INCLUDING SOURCE(S):     VOL3        , VOL4        , VOL5        , VOL6        ,
VOL7        ,
                VOL8        , VOL9        , VOL10       , VOL11       , VOL12       , VOL13       , VOL14       ,
VOL15       ,
                VOL16       , VOL17       , VOL18       , VOL19       , VOL20       , VOL21       , VOL22       ,
VOL23       ,
                VOL24       , VOL25       , VOL1        , VOL2        , AREA1       ,

                                       *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                    ** CONC OF PM_10    IN MICROGRAMS/M**3                          **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)  Y-COORD (M)        CONC
(YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - -
        473813.12   3770772.61        2.90911m (08010624)                473890.79   3770715.17        4.90086m
(11010824)
        474193.26   3770710.36        1.50487m (11020124)                474201.58   3769929.23        1.02554m
(08121824)
        473829.05   3770011.13        1.25885  (08112824)

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM10\PM10.isc                  ***
    03/23/17
```

*** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP:
MITIGATE ***
    INCLUDING SOURCE(S):   AREA2   , VOL26   , VOL27   , VOL28   ,
VOL29   ,
     VOL30   , VOL31   , VOL32   , VOL33   , VOL34   , VOL35   , VOL36   ,
VOL37   ,
     VOL38   , VOL39   , VOL40   , VOL41   , VOL42   , VOL43   , VOL44   ,
VOL45   ,
     VOL46   , VOL47   , VOL48   , VOL49   , VOL50   ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3   **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
473813.12	3770772.61	2.43937m	(08010624)	473890.79	3770715.17	4.37983m	(11010824)
474193.26	3770710.36	1.38939m	(11020124)	474201.58	3769929.23	0.99410m	(08121824)
473829.05	3770011.13	1.19704	(08112824)				

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM_10   IN MICROGRAMS/M**3   **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE	GRID-ID
UNMITIGA	HIGH 1ST HIGH VALUE IS	4.90086m	ON 11010824:	AT (473890.79, 3770715.17, 306.00, 306.00, 2.00)	DC	
MITIGATE	HIGH 1ST HIGH VALUE IS	4.37983m	ON 11010824:	AT (473890.79, 3770715.17, 306.00, 306.00, 2.00)	DC	

*** RECEPTOR TYPES: GC = GRIDCART
                     GP = GRIDPOLR
                     DC = DISCCART
                     DP = DISCPOLR

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of   0 Fatal Error Message(s)
 A Total of   0 Warning Message(s)
 A Total of   1086 Informational Message(s)

 A Total of   43824 Hours Were Processed

 A Total of   37 Calm Hours Identified

 A Total of   1049 Missing Hours Identified (2.39 Percent)

    ******** FATAL ERROR MESSAGES ********
               *** NONE ***

    ********   WARNING MESSAGES   ********
               *** NONE ***

    ****
    *** AERMOD Finishes Successfully ***
    ****
**
****
**
** AERMOD Input Produced by:
** AERMOD View Ver. 9.3.0
** Lakes Environmental Software Inc.
** Date: 3/23/2017
** File: C:\Lakes\AERMOD View\GWS\Construction\PM25\PM25.ADI
**
****
**
**
****
** AERMOD Control Pathway
****
**
**
CO STARTING
   TITLEONE C:\Lakes\AERMOD View\GWS\Construction\PM25\PM25.isc
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2015355
   POLLUTID PM_2.5
   FLAGPOLE 2.00
   RUNORNOT RUN
   ERRORFIL PM25.err
CO FINISHED
**
****
** AERMOD Source Pathway
****
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL3   VOLUME   473776.173 3770597.226   304.210
** DESCRSRC Unmitigated
   LOCATION VOL4   VOLUME   473814.960 3770596.075   305.000

```
** DESCRSRC Unmitigated
   LOCATION VOL5         VOLUME     473855.056  3770595.961      305.000
** DESCRSRC Unmitigated
   LOCATION VOL6         VOLUME     473693.806  3770556.318      302.000
** DESCRSRC Unmitigated
   LOCATION VOL7         VOLUME     473736.340  3770555.672      302.000
** DESCRSRC Unmitigated
   LOCATION VOL8         VOLUME     473778.760  3770555.391      303.300
** DESCRSRC Unmitigated
   LOCATION VOL9         VOLUME     473819.858  3770556.123      304.670
** DESCRSRC Unmitigated
   LOCATION VOL10        VOLUME     473858.796  3770557.107      305.000
** DESCRSRC Unmitigated
   LOCATION VOL11        VOLUME     473693.175  3770515.033      302.000
** DESCRSRC Unmitigated
   LOCATION VOL12        VOLUME     473736.743  3770514.973      302.000
** DESCRSRC Unmitigated
   LOCATION VOL13        VOLUME     473779.328  3770515.988      303.320
** DESCRSRC Unmitigated
   LOCATION VOL14        VOLUME     473820.359  3770516.663      304.690
** DESCRSRC Unmitigated
   LOCATION VOL15        VOLUME     473857.852  3770517.085      305.000
** DESCRSRC Unmitigated
   LOCATION VOL16        VOLUME     473695.421  3770474.756      302.000
** DESCRSRC Unmitigated
   LOCATION VOL17        VOLUME     473738.924  3770475.402      302.000
** DESCRSRC Unmitigated
   LOCATION VOL18        VOLUME     473781.021  3770475.768      303.380
** DESCRSRC Unmitigated
   LOCATION VOL19        VOLUME     473820.189  3770476.611      304.680
** DESCRSRC Unmitigated
   LOCATION VOL20        VOLUME     473858.796  3770477.485      305.000
** DESCRSRC Unmitigated
   LOCATION VOL21        VOLUME     473694.775  3770434.939      302.000
** DESCRSRC Unmitigated
   LOCATION VOL22        VOLUME     473737.632  3770436.231      302.310
** DESCRSRC Unmitigated
   LOCATION VOL23        VOLUME     473779.729  3770437.566      303.330
** DESCRSRC Unmitigated
   LOCATION VOL24        VOLUME     473820.504  3770437.975      304.690
** DESCRSRC Unmitigated
   LOCATION VOL25        VOLUME     473858.796  3770437.344      305.000
** DESCRSRC Unmitigated
   LOCATION VOL1         VOLUME     473694.024  3770596.594      302.000
** DESCRSRC Unmitigated
   LOCATION VOL2         VOLUME     473736.374  3770596.857      302.890
** DESCRSRC Unmitigated
   LOCATION AREA1        AREA       473675.801  3770412.761      302.020
** DESCRSRC Unmitigated
   LOCATION AREA2        AREA       473675.801  3770412.761      302.020
** DESCRSRC Mitigated
   LOCATION VOL26        VOLUME     473776.175  3770597.229      304.210
** DESCRSRC Mitigated
   LOCATION VOL27        VOLUME     473814.961  3770596.079      305.000
** DESCRSRC Mitigated
   LOCATION VOL28        VOLUME     473855.058  3770595.959      305.000
** DESCRSRC Mitigated
   LOCATION VOL29        VOLUME     473693.806  3770556.322      302.000
** DESCRSRC Mitigated
   LOCATION VOL30        VOLUME     473736.339  3770555.672      302.000
** DESCRSRC Mitigated
   LOCATION VOL31        VOLUME     473778.763  3770555.392      303.300
** DESCRSRC Mitigated
   LOCATION VOL32        VOLUME     473819.861  3770556.127      304.670
** DESCRSRC Mitigated
   LOCATION VOL33        VOLUME     473858.799  3770557.112      305.000
** DESCRSRC Mitigated
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   LOCATION VOL34        VOLUME     473693.180  3770515.034      302.000
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   LOCATION VOL35        VOLUME     473736.744  3770514.974      302.000
** DESCRSRC Mitigated
   LOCATION VOL36        VOLUME     473779.327  3770515.984      303.320
** DESCRSRC Mitigated
   LOCATION VOL37        VOLUME     473820.355  3770516.659      304.690
** DESCRSRC Mitigated
   LOCATION VOL38        VOLUME     473857.853  3770517.085      305.000
** DESCRSRC Mitigated
   LOCATION VOL39        VOLUME     473695.426  3770474.757      302.000
** DESCRSRC Mitigated
   LOCATION VOL40        VOLUME     473738.929  3770475.407      302.000
** DESCRSRC Mitigated
   LOCATION VOL41        VOLUME     473781.023  3770475.767      303.380
** DESCRSRC Mitigated
   LOCATION VOL42        VOLUME     473820.185  3770476.607      304.680
** DESCRSRC Mitigated
   LOCATION VOL43        VOLUME     473858.799  3770477.488      305.000
** DESCRSRC Mitigated
   LOCATION VOL44        VOLUME     473694.776  3770434.941      302.000
** DESCRSRC Mitigated
   LOCATION VOL45        VOLUME     473737.629  3770436.231      302.310
** DESCRSRC Mitigated
   LOCATION VOL46        VOLUME     473779.733  3770437.571      303.330
** DESCRSRC Mitigated
   LOCATION VOL47        VOLUME     473820.501  3770437.976      304.690
** DESCRSRC Mitigated
   LOCATION VOL48        VOLUME     473858.799  3770437.341      305.000
** DESCRSRC Mitigated
   LOCATION VOL49        VOLUME     473694.021  3770596.599      302.000
** DESCRSRC Mitigated
   LOCATION VOL50        VOLUME     473736.372  3770596.859      302.890
** DESCRSRC Mitigated
** Source Parameters **
   SRCPARAM VOL3        0.0046164363     5.000     9.302     2.330
   SRCPARAM VOL4         0.004616     5.000     9.302     2.330
   SRCPARAM VOL5         0.004616     5.000     9.302     2.330
   SRCPARAM VOL6         0.004616     5.000     9.302     2.330
   SRCPARAM VOL7         0.004616     5.000     9.302     2.330
   SRCPARAM VOL8         0.004616     5.000     9.302     2.330
   SRCPARAM VOL9         0.004616     5.000     9.302     2.330
   SRCPARAM VOL10        0.004616     5.000     9.302     2.330
   SRCPARAM VOL11        0.004616     5.000     9.302     2.330
   SRCPARAM VOL12        0.004616     5.000     9.302     2.330
   SRCPARAM VOL13        0.004616     5.000     9.302     2.330
   SRCPARAM VOL14        0.004616     5.000     9.302     2.330
   SRCPARAM VOL15        0.004616     5.000     9.302     2.330
   SRCPARAM VOL16        0.004616     5.000     9.302     2.330
   SRCPARAM VOL17        0.004616     5.000     9.302     2.330
   SRCPARAM VOL18        0.004616     5.000     9.302     2.330
   SRCPARAM VOL19        0.004616     5.000     9.302     2.330
   SRCPARAM VOL20        0.004616     5.000     9.302     2.330
   SRCPARAM VOL21        0.004616     5.000     9.302     2.330
   SRCPARAM VOL22        0.004616     5.000     9.302     2.330
   SRCPARAM VOL23        0.004616     5.000     9.302     2.330
   SRCPARAM VOL24        0.004616     5.000     9.302     2.330
   SRCPARAM VOL25        0.004616     5.000     9.302     2.330
   SRCPARAM VOL1         0.004616     5.000     9.302     2.326
   SRCPARAM VOL2         0.004616     5.000     9.302     2.326
   SRCPARAM AREA1       1.2133E-06     0.000   196.074   196.074     0.000     1.000
   SRCPARAM AREA2       1.2133E-06     0.000   196.074   196.074     0.000     1.000
   SRCPARAM VOL26       0.0022761517     5.000     9.302     2.330
   SRCPARAM VOL27        0.002276     5.000     9.302     2.330
   SRCPARAM VOL28        0.002276     5.000     9.302     2.330
   SRCPARAM VOL29        0.002276     5.000     9.302     2.330
   SRCPARAM VOL30        0.002276     5.000     9.302     2.330
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   SRCPARAM VOL32         0.002276     5.000     9.302     2.330
   SRCPARAM VOL33         0.002276     5.000     9.302     2.330
   SRCPARAM VOL34         0.002276     5.000     9.302     2.330
   SRCPARAM VOL35         0.002276     5.000     9.302     2.330
   SRCPARAM VOL36         0.002276     5.000     9.302     2.330
   SRCPARAM VOL37         0.002276     5.000     9.302     2.330
   SRCPARAM VOL38         0.002276     5.000     9.302     2.330
   SRCPARAM VOL39         0.002276     5.000     9.302     2.330
   SRCPARAM VOL40         0.002276     5.000     9.302     2.330
   SRCPARAM VOL41         0.002276     5.000     9.302     2.330
   SRCPARAM VOL42         0.002276     5.000     9.302     2.330
   SRCPARAM VOL43         0.002276     5.000     9.302     2.330
   SRCPARAM VOL44         0.002276     5.000     9.302     2.330
   SRCPARAM VOL45         0.002276     5.000     9.302     2.330
   SRCPARAM VOL46         0.002276     5.000     9.302     2.330
   SRCPARAM VOL47         0.002276     5.000     9.302     2.330
   SRCPARAM VOL48         0.002276     5.000     9.302     2.330
   SRCPARAM VOL49         0.002276     5.000     9.302     2.330
   SRCPARAM VOL50         0.002276     5.000     9.302     2.330
   URBANSRC ALL

** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
** Variable Emission Scenario: "Construction"
   EMISFACT VOL3         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL3         HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL3         HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL3         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL4         HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL4         HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL4         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL5         HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL5         HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL5         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL6         HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL6         HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL6         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL7         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL7         HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL7         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL8         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
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   EMISFACT VOL10        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL10        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
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   EMISFACT VOL13        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
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EMISFACT VOL38        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL38        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL38        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL39        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL39        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL39        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL39        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL40        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL40        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL40        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL40        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL41        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL41        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL41        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL41        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL42        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL42        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
EMISFACT VOL42        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
EMISFACT VOL42        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
EMISFACT VOL43        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
```

```
   EMISFACT VOL43        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL43        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL43        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL44        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL44        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL44        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL45        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL45        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL45        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL46        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL46        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL46        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL47        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL47        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL47        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL48        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL48        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL48        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL49        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL49        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL49        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   EMISFACT VOL50        HROFDY 0.0 1.0 1.0 1.0 1.0 1.0
   EMISFACT VOL50        HROFDY 1.0 1.0 1.0 0.0 0.0 0.0
   EMISFACT VOL50        HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
   SRCGROUP Unmitiga VOL3 VOL4 VOL5 VOL6 VOL7 VOL8 VOL9 VOL10 VOL11 VOL12
   SRCGROUP Unmitiga VOL13 VOL14 VOL15 VOL16 VOL17 VOL18 VOL19 VOL20 VOL21
   SRCGROUP Unmitiga VOL22 VOL23 VOL24 VOL25 VOL1 VOL2 AREA1
   SRCGROUP Mitigate AREA2 VOL26 VOL27 VOL28 VOL29 VOL30 VOL31 VOL32 VOL33
   SRCGROUP Mitigate VOL34 VOL35 VOL36 VOL37 VOL38 VOL39 VOL40 VOL41 VOL42
   SRCGROUP Mitigate VOL43 VOL44 VOL45 VOL46 VOL47 VOL48 VOL49 VOL50
SO FINISHED
**
**************************************
** AERMOD Receptor Pathway
**************************************
**
**
RE STARTING
   INCLUDED PM25.rou
RE FINISHED
**
**************************************
** AERMOD Meteorology Pathway
**************************************
**
**
ME STARTING
   SURFFILE ..\..\snbo8.sfc
   PROFFILE ..\..\snbo8.PFL
   SURFDATA 0 2007
   UAIRDATA 3190 2007
   SITEDATA 99999 2007
   PROFBASE 305.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
```

```
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** Auto-Generated Plotfiles
   PLOTFILE 24 Unmitiga 1ST PM25.AD\24H1G001.PLT 31
   PLOTFILE 24 Mitigate 1ST PM25.AD\24H1G002.PLT 32
   SUMMFILE PM25.sum
OU FINISHED

 ***********************************
 *** SETUP Finishes Successfully ***
 ***********************************

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM25\PM25.isc                  ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                    ***
   16:45:32

   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                                          ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - -

 **Model Is Setup For Calculation of Average CONCentration Values.

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses URBAN Dispersion Algorithm for the SBL for    52 Source(s),
   for Total of    1 Urban Area(s):
   Urban Population =   2015355.0 ;  Urban Roughness Length =  1.000 m

 **Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.
        6. Urban Roughness Length of 1.0 Meter Assumed.

 **Other Options Specified:
        TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Accepts FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  PM_2.5

 **Model Calculates  1 Short Term Average(s) of:  24-HR

 **This Run Includes:     52 Source(s);       2 Source Group(s); and       5 Receptor(s)

                with:      0 POINT(s), including
                           0 POINTCAP(s) and      0 POINTHOR(s)
                 and:     50 VOLUME source(s)
                 and:      2 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 OPENPIT source(s)
                 and:      0 BUOYANT LINE source(s) with      0 line(s)


 **Model Set To Continue RUNning After the Setup Testing.
```

 **The AERMET Input Meteorological Data Version Date: 14134

 **Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

 **NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
                                                                 m for Missing Hours
                                                                 b for Both Calm and Missing Hours

 **Misc. Inputs: Base Elev. for Pot. Temp. Profile (m MSL) =   305.00 ; Decay Coef. =   0.000   ; Rot. Angle
=   0.0
                  Emission Units = GRAMS/SEC   ; Emission Rate Unit Factor =
0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =   3.5 MB of RAM.

 **Detailed Error/Message File: PM25.err

 **File for Summary of Results: PM25.sum

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM25\PM25.isc   ***
    03/23/17
 *** AERMET - VERSION 14134 ***   ***   ***
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   PAGE   2
 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                                                *** VOLUME SOURCE DATA ***

              NUMBER EMISSION RATE   BASE   RELEASE   INIT.   INIT.   URBAN EMISSION RATE
   SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY   SZ   SOURCE SCALAR VARY
     ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS) (METERS)   BY
 -
- - - -

 VOL3   0   0.46164E-02 473776.2 3770597.2   304.2   5.00   9.30   2.33   YES   HROFDY
 VOL4   0   0.46160E-02 473815.0 3770596.1   305.0   5.00   9.30   2.33   YES   HROFDY
 VOL5   0   0.46160E-02 473855.1 3770596.0   305.0   5.00   9.30   2.33   YES   HROFDY
 VOL6   0   0.46160E-02 473693.8 3770556.3   302.0   5.00   9.30   2.33   YES   HROFDY
 VOL7   0   0.46160E-02 473736.3 3770555.7   302.0   5.00   9.30   2.33   YES   HROFDY
 VOL8   0   0.46160E-02 473778.8 3770555.4   303.3   5.00   9.30   2.33   YES   HROFDY
 VOL9   0   0.46160E-02 473819.9 3770556.1   304.7   5.00   9.30   2.33   YES   HROFDY
 VOL10   0   0.46160E-02 473858.8 3770557.1   305.0   5.00   9.30   2.33   YES   HROFDY
 VOL11   0   0.46160E-02 473693.2 3770515.0   302.0   5.00   9.30   2.33   YES   HROFDY
 VOL12   0   0.46160E-02 473736.7 3770515.0   302.0   5.00   9.30   2.33   YES   HROFDY
 VOL13   0   0.46160E-02 473779.3 3770516.0   303.3   5.00   9.30   2.33   YES   HROFDY
 VOL14   0   0.46160E-02 473820.4 3770516.7   304.7   5.00   9.30   2.33   YES   HROFDY
 VOL15   0   0.46160E-02 473857.9 3770517.1   305.0   5.00   9.30   2.33   YES   HROFDY
 VOL16   0   0.46160E-02 473695.4 3770474.8   302.0   5.00   9.30   2.33   YES   HROFDY
 VOL17   0   0.46160E-02 473738.9 3770475.4   302.0   5.00   9.30   2.33   YES   HROFDY
 VOL18   0   0.46160E-02 473781.0 3770475.8   303.4   5.00   9.30   2.33   YES   HROFDY
 VOL19   0   0.46160E-02 473820.2 3770476.6   304.7   5.00   9.30   2.33   YES   HROFDY
 VOL20   0   0.46160E-02 473858.8 3770477.5   305.0   5.00   9.30   2.33   YES   HROFDY
 VOL21   0   0.46160E-02 473694.8 3770434.9   302.0   5.00   9.30   2.33   YES   HROFDY
 VOL22   0   0.46160E-02 473737.6 3770436.2   302.3   5.00   9.30   2.33   YES   HROFDY
 VOL23   0   0.46160E-02 473779.7 3770437.6   303.3   5.00   9.30   2.33   YES   HROFDY
 VOL24   0   0.46160E-02 473820.5 3770438.0   304.7   5.00   9.30   2.33   YES   HROFDY
 VOL25   0   0.46160E-02 473858.8 3770437.3   305.0   5.00   9.30   2.33   YES   HROFDY
 VOL1   0   0.46160E-02 473694.0 3770596.6   302.0   5.00   9.30   2.33   YES   HROFDY
 VOL2   0   0.46160E-02 473736.4 3770596.9   302.9   5.00   9.30   2.33   YES   HROFDY
 VOL26   0   0.22762E-02 473776.2 3770597.2   304.2   5.00   9.30   2.33   YES   HROFDY
 VOL27   0   0.22760E-02 473815.0 3770596.1   305.0   5.00   9.30   2.33   YES   HROFDY

VOL28	0	0.22760E-02	473855.1	3770596.0	305.0	5.00	9.30	2.33	YES	HROFDY
VOL29	0	0.22760E-02	473693.8	3770556.3	302.0	5.00	9.30	2.33	YES	HROFDY
VOL30	0	0.22760E-02	473736.3	3770555.7	302.0	5.00	9.30	2.33	YES	HROFDY
VOL31	0	0.22760E-02	473778.8	3770555.4	303.3	5.00	9.30	2.33	YES	HROFDY
VOL32	0	0.22760E-02	473819.9	3770556.1	304.7	5.00	9.30	2.33	YES	HROFDY
VOL33	0	0.22760E-02	473858.8	3770557.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL34	0	0.22760E-02	473693.2	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL35	0	0.22760E-02	473736.7	3770515.0	302.0	5.00	9.30	2.33	YES	HROFDY
VOL36	0	0.22760E-02	473779.3	3770516.0	303.3	5.00	9.30	2.33	YES	HROFDY
VOL37	0	0.22760E-02	473820.4	3770516.7	304.7	5.00	9.30	2.33	YES	HROFDY
VOL38	0	0.22760E-02	473857.9	3770517.1	305.0	5.00	9.30	2.33	YES	HROFDY
VOL39	0	0.22760E-02	473695.4	3770474.8	302.0	5.00	9.30	2.33	YES	HROFDY
VOL40	0	0.22760E-02	473738.9	3770475.4	302.0	5.00	9.30	2.33	YES	HROFDY

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
VOL41	0	0.22760E-02	473781.0	3770475.8	303.4	5.00	9.30	2.33	YES	HROFDY
VOL42	0	0.22760E-02	473820.2	3770476.6	304.7	5.00	9.30	2.33	YES	HROFDY
VOL43	0	0.22760E-02	473858.8	3770477.5	305.0	5.00	9.30	2.33	YES	HROFDY
VOL44	0	0.22760E-02	473694.8	3770434.9	302.0	5.00	9.30	2.33	YES	HROFDY
VOL45	0	0.22760E-02	473737.6	3770436.2	302.3	5.00	9.30	2.33	YES	HROFDY
VOL46	0	0.22760E-02	473779.7	3770437.6	303.3	5.00	9.30	2.33	YES	HROFDY
VOL47	0	0.22760E-02	473820.5	3770438.0	304.7	5.00	9.30	2.33	YES	HROFDY
VOL48	0	0.22760E-02	473858.8	3770437.3	305.0	5.00	9.30	2.33	YES	HROFDY
VOL49	0	0.22760E-02	473694.0	3770596.6	302.0	5.00	9.30	2.33	YES	HROFDY
VOL50	0	0.22760E-02	473736.4	3770596.9	302.9	5.00	9.30	2.33	YES	HROFDY

*** AREA SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC /METER**2)	COORD (SW CORNER) X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	X-DIM OF AREA (METERS)	Y-DIM OF AREA (METERS)	ORIENT. OF AREA (DEG.)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
AREA1	0	0.12133E-05	473675.8	3770412.8	302.0	0.00	196.07	196.07	0.00	1.00	YES	HROFDY
AREA2	0	0.12133E-05	473675.8	3770412.8	302.0	0.00	196.07	196.07	0.00	1.00	YES	HROFDY

*** SOURCE IDs DEFINING SOURCE GROUPS ***

SRCGROUP ID	SOURCE IDs
UNMITIGA	VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,
	VOL11 , VOL12 , VOL13 , VOL14 , VOL15 , VOL16 , VOL17 , VOL18 ,
	VOL19 , VOL20 , VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , VOL1 ,
	VOL2 , AREA1 ,
MITIGATE	AREA2 , VOL26 , VOL27 , VOL28 , VOL29 , VOL30 , VOL31 , VOL32 ,
	VOL33 , VOL34 , VOL35 , VOL36 , VOL37 , VOL38 , VOL39 , VOL40 ,
	VOL41 , VOL42 , VOL43 , VOL44 , VOL45 , VOL46 , VOL47 , VOL48 ,
	VOL49 , VOL50 ,

*** SOURCE IDs DEFINED AS URBAN SOURCES ***

URBAN ID	URBAN POP	SOURCE IDs
	2015355.	VOL3 , VOL4 , VOL5 , VOL6 , VOL7 , VOL8 , VOL9 , VOL10 ,
		VOL11 , VOL12 , VOL13 , VOL14 , VOL15 , VOL16 , VOL17 , VOL18 ,
		VOL19 , VOL20 , VOL21 , VOL22 , VOL23 , VOL24 , VOL25 , VOL1 ,
		VOL2 , AREA1 , AREA2 , VOL26 , VOL27 , VOL28 , VOL29 , VOL30 ,
		VOL31 , VOL32 , VOL33 , VOL34 , VOL35 , VOL36 , VOL37 , VOL38 ,
		VOL39 , VOL40 , VOL41 , VOL42 , VOL43 , VOL44 , VOL45 , VOL46 ,

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL3   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL4   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL5   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL6   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL7   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18

.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM25\PM25.isc   ***
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 *** AERMET - VERSION 14134 ***   ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL8   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL9   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL10   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL11   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL12   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00

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                                                          CO
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM25\PM25.isc                 ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                     ***
   16:45:32

   PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                            * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL13       ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL14       ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL15       ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL16       ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```

SOURCE ID = VOL17 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR

SOURCE ID = VOL18 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL19 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL20 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

SOURCE ID = VOL21 ; SOURCE TYPE = VOLUME :

1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.10000E+01	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.00000E+00	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

.00000E+00

 SOURCE ID = VOL22   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL23   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL24   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL25   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL1   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01

```
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL2         ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```


```
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = AREA1        ; SOURCE TYPE = AREA     :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = AREA2        ; SOURCE TYPE = AREA     :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL26        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL27        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
```

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.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL28        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM25\PM25.isc                 ***
    03/23/17
 *** AERMET - VERSION  14134 ***   ***                                                                     ***
   16:45:32

   PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                        * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL29        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL30        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL31        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
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 SOURCE ID = VOL32   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL33   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL34   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL35   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL36   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00

CO

```
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL37        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL38        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```



```
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  URBAN

                           * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL39        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL40        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
      13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
      19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL41        ; SOURCE TYPE = VOLUME   :
       1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
       7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
```

.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL42   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL43   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM25\PM25.isc   ***
    03/23/17
 *** AERMET - VERSION 14134 ***   ***   ***
   16:45:32

   PAGE 16
 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

                          * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

     HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR   SCALAR   HOUR
SCALAR
 -
- - - - - - - -

 SOURCE ID = VOL44   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL45   ; SOURCE TYPE = VOLUME   :
       1   .00000E+00   2   .00000E+00   3   .00000E+00   4   .00000E+00   5   .00000E+00   6
.00000E+00
       7   .00000E+00   8   .10000E+01   9   .10000E+01   10   .10000E+01   11   .10000E+01   12
.10000E+01
      13   .10000E+01   14   .10000E+01   15   .10000E+01   16   .00000E+00   17   .00000E+00   18
.00000E+00
      19   .00000E+00   20   .00000E+00   21   .00000E+00   22   .00000E+00   23   .00000E+00   24
.00000E+00

 SOURCE ID = VOL46   ; SOURCE TYPE = VOLUME   :

CO

```
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL47        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL48        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```


*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

```
     HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR
SCALAR
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - -


 SOURCE ID = VOL49        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00


 SOURCE ID = VOL50        ; SOURCE TYPE = VOLUME   :
      1   .00000E+00      2   .00000E+00      3   .00000E+00      4   .00000E+00      5   .00000E+00      6
.00000E+00
      7   .00000E+00      8   .10000E+01      9   .10000E+01     10   .10000E+01     11   .10000E+01     12
.10000E+01
     13   .10000E+01     14   .10000E+01     15   .10000E+01     16   .00000E+00     17   .00000E+00     18
.00000E+00
     19   .00000E+00     20   .00000E+00     21   .00000E+00     22   .00000E+00     23   .00000E+00     24
.00000E+00
```

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM25\PM25.isc   ***
03/23/17
*** AERMET - VERSION 14134 ***   ***   ***
16:45:32

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
(METERS)

(473813.1, 3770772.6,   305.4,   305.4,   2.0);   (473890.8, 3770715.2,   306.0,   306.0,
2.0);
(474193.3, 3770710.4,   307.0,   307.0,   2.0);   (474201.6, 3769929.2,   305.0,   305.0,
2.0);
(473829.0, 3770011.1,   302.0,   302.0,   2.0);

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM25\PM25.isc   ***
03/23/17
*** AERMET - VERSION 14134 ***   ***   ***
16:45:32

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA
FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54,   3.09,   5.14,   8.23, 10.80,

♀ *** AERMOD - VERSION 16216r ***   *** C:\Lakes\AERMOD View\GWS\Construction\PM25\PM25.isc   ***
03/23/17
*** AERMET - VERSION 14134 ***   ***   ***
16:45:32

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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL URBAN

*** UP TO THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

Surface file: ..\..\snbo8.sfc   Met Version:
14134

Profile file: ..\..\snbo8.PFL
Surface format: FREE

Profile format: FREE

Surface station no.: 0 Upper air station no.: 3190
Name: UNKNOWN Name: UNKNOWN
Year: 2007 Year: 2007

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
07	01	01	1	01	-0.5	0.030	-9.000	-9.000	-999.	12.	4.4	0.32	1.00	1.00	0.50	27.	9.1	279.9	5.5
07	01	01	1	02	-0.5	0.030	-9.000	-9.000	-999.	12.	4.3	0.32	1.00	1.00	0.50	7.	9.1	279.2	5.5
07	01	01	1	03	-0.5	0.030	-9.000	-9.000	-999.	12.	4.3	0.32	1.00	1.00	0.50	97.	9.1	278.8	5.5
07	01	01	1	04	-0.7	0.030	-9.000	-9.000	-999.	12.	3.1	0.32	1.00	1.00	0.50	148.	9.1	278.1	5.5
07	01	01	1	05	-2.4	0.054	-9.000	-9.000	-999.	30.	5.5	0.32	1.00	1.00	0.90	87.	9.1	278.1	5.5
07	01	01	1	06	-1.7	0.054	-9.000	-9.000	-999.	30.	7.8	0.32	1.00	1.00	0.90	208.	9.1	277.0	5.5
07	01	01	1	07	-1.7	0.054	-9.000	-9.000	-999.	30.	7.8	0.32	1.00	1.00	0.90	156.	9.1	277.5	5.5
07	01	01	1	08	-1.7	0.054	-9.000	-9.000	-999.	30.	7.8	0.32	1.00	0.52	0.90	60.	9.1	277.5	5.5
07	01	01	1	09	34.6	0.390	0.621	0.005	241.	585.	-149.6	0.32	1.00	0.31	3.10	264.	9.1	282.5	5.5
07	01	01	1	10	78.0	0.267	1.066	0.005	541.	341.	-21.3	0.32	1.00	0.24	1.80	242.	9.1	289.2	5.5
07	01	01	1	11	112.9	0.612	1.395	0.019	839.	1149.	-176.9	0.32	1.00	0.21	4.90	82.	9.1	290.4	5.5
07	01	01	1	12	130.3	0.615	1.611	0.020	1120.	1158.	-155.8	0.32	1.00	0.20	4.90	74.	9.1	290.9	5.5
07	01	01	1	13	128.2	0.671	1.662	0.015	1250.	1315.	-204.9	0.32	1.00	0.20	5.40	59.	9.1	290.9	5.5
07	01	01	1	14	107.5	0.712	1.575	0.007	1267.	1439.	-292.1	0.32	1.00	0.22	5.80	58.	9.1	291.4	5.5
07	01	01	1	15	68.1	0.602	1.356	0.021	1277.	1137.	-279.3	0.32	1.00	0.25	4.90	40.	9.1	291.4	5.5
07	01	01	1	16	18.1	0.438	0.872	0.021	1278.	724.	-405.7	0.32	1.00	0.34	3.60	312.	9.1	292.0	5.5
07	01	01	1	17	-25.8	0.263	-9.000	-9.000	-999.	353.	61.6	0.32	1.00	0.63	2.70	342.	9.1	290.9	5.5
07	01	01	1	18	-4.9	0.077	-9.000	-9.000	-999.	114.	8.1	0.32	1.00	1.00	1.30	256.	9.1	289.2	5.5
07	01	01	1	19	-4.9	0.077	-9.000	-9.000	-999.	52.	8.1	0.32	1.00	1.00	1.30	191.	9.1	289.9	5.5
07	01	01	1	20	-4.9	0.077	-9.000	-9.000	-999.	52.	8.1	0.32	1.00	1.00	1.30	197.	9.1	289.9	5.5
07	01	01	1	21	-4.9	0.077	-9.000	-9.000	-999.	52.	8.1	0.32	1.00	1.00	1.30	190.	9.1	289.9	5.5
07	01	01	1	22	-2.4	0.054	-9.000	-9.000	-999.	30.	5.6	0.32	1.00	1.00	0.90	188.	9.1	289.2	5.5
07	01	01	1	23	-9.5	0.107	-9.000	-9.000	-999.	84.	11.3	0.32	1.00	1.00	1.80	162.	9.1	289.9	5.5
07	01	01	1	24	-9.5	0.107	-9.000	-9.000	-999.	84.	11.3	0.32	1.00	1.00	1.80	42.	9.1	289.2	5.5

First hour of profile data

YR	MO	DY	HR	HEIGHT	F	WDIR	WSPD	AMB_TMP	sigmaA	sigmaW	sigmaV
07	01	01	01	5.5	0	-999.	-99.00	279.9	99.0	-99.00	-99.00

                            *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP:
UNMITIGA ***
                                INCLUDING SOURCE(S):   VOL3   , VOL4   , VOL5   , VOL6   ,
VOL7   ,
                VOL8   , VOL9   , VOL10   , VOL11   , VOL12   , VOL13   , VOL14   ,
VOL15   ,
                VOL16   , VOL17   , VOL18   , VOL19   , VOL20   , VOL21   , VOL22   ,
VOL23   ,
                VOL24   , VOL25   , VOL1   , VOL2   , AREA1   ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                   ** CONC OF PM_2.5   IN MICROGRAMS/M**3   **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC
(YYMMDDHH)
 -
- - - - - - - - -
        473813.12   3770772.61   1.53970m (08010624)   473890.79   3770715.17   2.31153m
(11010824)
        474193.26   3770710.36   0.66831m (08022024)   474201.58   3769929.23   0.40266m
(08121824)
        473829.05   3770011.13   0.51853 (08112824)

                            *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP:
MITIGATE ***
                                INCLUDING SOURCE(S):   AREA2   , VOL26   , VOL27   , VOL28   ,
VOL29   ,
                VOL30   , VOL31   , VOL32   , VOL33   , VOL34   , VOL35   , VOL36   ,
VOL37   ,
                VOL38   , VOL39   , VOL40   , VOL41   , VOL42   , VOL43   , VOL44   ,
VOL45   ,
                VOL46   , VOL47   , VOL48   , VOL49   , VOL50   ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                   ** CONC OF PM_2.5   IN MICROGRAMS/M**3   **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M) Y-COORD (M)   CONC
(YYMMDDHH)
 -
- - - - - - - - -
        473813.12   3770772.61   1.13062m (08010624)   473890.79   3770715.17   1.85779m
(11010824)
        474193.26   3770710.36   0.56273m (11020124)   474201.58   3769929.23   0.37529m
(08121824)
        473829.05   3770011.13   0.46470 (08112824)

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF PM_2.5   IN MICROGRAMS/M**3   **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZHILL, ZFLAG)	NETWORK OF TYPE	GRID-ID
UNMITIGA HIGH	1ST HIGH VALUE IS	2.31153m	ON 11010824:	AT (473890.79, 3770715.17, 306.00, 306.00, 2.00)	DC	
MITIGATE HIGH	1ST HIGH VALUE IS	1.85779m	ON 11010824:	AT (473890.79, 3770715.17, 306.00, 306.00, 2.00)	DC	

 *** RECEPTOR TYPES: GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR

 *** Message Summary : AERMOD Model Execution ***

  --------- Summary of Total Messages --------

 A Total of   0 Fatal Error Message(s)
 A Total of   0 Warning Message(s)
 A Total of   1086 Informational Message(s)

 A Total of   43824 Hours Were Processed

 A Total of   37 Calm Hours Identified

 A Total of   1049 Missing Hours Identified (2.39 Percent)

    ******** FATAL ERROR MESSAGES ********
              *** NONE ***

    ********   WARNING MESSAGES   ********
              *** NONE ***

    ****
    *** AERMOD Finishes Successfully ***
    ****

CO