RECON

Air Quality Report for the County Animal Shelter San Diego County, California

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RECON Number 9591 May 6, 2020

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- 1: CalEEMod Output Project
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Glossary of Terms

°F	degrees Fahrenheit
μg/m ³	micrograms per cubic meter
AB	Assembly Bill
ADT	average daily traffic
AQIA	Air Quality Impact Analysis
ATCM	Airborne Toxic Control Measures
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
City	City of Santee
CO	carbon monoxide
County	County of San Diego
DAS	Department of Animal Services
DPM	diesel particulate matter
HQ	hazard quotient
lbs/day	pounds per day
LEED	Leadership in Energy and Environmental Design
LLG	Linscott, Law & Greenspan
LOS	level of service
mg/kg/day	milligram/kilogram per day
NAAQS	National Ambient Air Quality Standards
NO_2	nitrogen dioxide
NOx	oxides of nitrogen
OEHHA	Office of Environmental Health Hazard Assessment
PM	particulate matter
PM_{10}	particulate matter less than 10 microns
$PM_{2.5}$	particulate matter less than 2.5 microns
ppb	parts per billion
ppm	parts per million
project	County Animal Shelter
RAQS	Regional Air Quality Strategy
REL	reference exposure level
ROG	reactive organic gas
SANDAG	San Diego Association of Governments
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SIP	State Implementation Plan
SLT	Screening Level Thresholds
SO_2	sulfur dioxide
SO_X	oxides of sulfur
TAC	toxic air contaminant
T-BACT	Best Available Control Technology for Toxics

TCM	transportation control measure
U.S. EPA	United States Environmental Protection Act
U.S.C.	United States Code
VMT	vehicle miles travelled
VOC	volatile organic compound

Executive Summary

The County Animal Shelter project (project) site is located north of Riverview Parkway and west of North Magnolia Avenue on County of San Diego- (County) owned land that lies within the boundaries of the city of Santee. The project site is currently undeveloped. The project includes the construction of an approximately 24,000-square-foot animal shelter, which would replace operations at the existing shelter in the community of Bonita (Bonita Shelter). The project would consist of four separate buildings with an internal, secure and open courtyard, an outdoor livestock area, an activity yard, a staff parking lot, and a public parking lot.

This report analyzes the air quality impacts from both construction and operation of the project. The project's consistency with the Regional Air Quality Strategy (RAQS) was evaluated to determine if the project would conflict with or obstruct implementation of the applicable air quality plan. In addition, emissions from construction and operation of the project were analyzed to determine the potential direct and cumulative air quality impacts. This report was prepared in accordance with the County's Guidelines for Determining Significance and Report Format and Content Requirements, Air Quality (County's Air Quality Guidelines). A summary of the findings is provided below.

Conformance to the Regional Air Quality Strategy

The primary goal of the San Diego Air Pollution Control District (SDAPCD) RAQS is to reduce ozone precursor emissions. The project site is located within, and is surrounded by land uses within, the City of Santee's Town Center Specific Plan Amendment area. The City of Santee land use designation and zoning of the project site is Town Center Specific Plan. The project site is intended for the development of County Public Services and would be consistent with the Town Center Specific Plan. Additionally, the project would not result in regional growth anticipated by San Diego Association of Governments' growth projections as it would replace the existing Bonita Shelter. Additionally, project emissions would not exceed the project-level significance thresholds. The project would therefore not result in an increase in emissions that are not already accounted for in the RAQS. Thus, the project would not obstruct or conflict with implementation of the RAQS. Impacts would be considered less than significant.

Conformance to Federal and State Ambient Air Quality Standards

Emissions of criteria pollutants would result from construction and operation of the project. As calculated in this analysis, project construction would not exceed the County's significance thresholds. Therefore, as project construction emissions would be well below these limits, project construction would not result in regional emissions that would exceed the National Ambient Air Quality Standards or California Ambient Air Quality Standards or contribute to existing violations.

Long-term emissions of regional air pollutants occur from operational sources. As calculated in this analysis, project operation would not exceed the County's significance thresholds. Therefore, as project operation emissions would be well below these limits, project operation would not result in regional emissions that would exceed the National Ambient Air Quality Standards or California Ambient Air Quality Standards or contribute to existing violations. Therefore, the project would result in a less than significant impact on air quality.

Cumulatively Considerable Net Increase of Criteria Pollutants

The project would not have a significant direct impact on air quality with regard to emissions of particulate matter (PM) less than 10 microns, PM less than 2.5 microns, nitrous oxides, or volatile organic compounds. However, per County guidelines, a project may still have a cumulatively considerable impact on air quality if the emissions, in combination with the emissions of concern from other proposed projects, are in excess of the screening level thresholds.

Short-term emissions associated with construction generally result in localized impacts. As calculated in this analysis, should all projects proposed within one mile of the project site be constructed simultaneously, total construction emissions would be less than the project-level Screening Level Thresholds (SLTs). It should be noted that although construction activities from cumulative projects may overlap, it is unlikely that all would occur at the same time and that the maximum daily emissions associated with each project would occur on the same day. Further, any cumulative projects would also need to comply with SDAPCD rules for dust control and construction equipment, which would further reduce the likelihood of a cumulatively considerable construction air quality impact. Therefore, project construction is not anticipated to result in a cumulatively significant impact on air quality.

Additionally, because the project would not conflict or obstruct with implementation of the RAQS, would not result in operational emissions that exceed the County's screening-level thresholds, and would not result in a cumulatively considerable net increase of carbon monoxide, cumulative impacts on air quality due to project operation would be less than significant.

Impacts to Sensitive Receptors

To assess the potential impacts to sensitive receptors screening methods provided by the County's Air Quality Guidelines were used to evaluate localized CO and DPM impacts. As the project would not result in a CO hot spot, impacts due to localized CO concentrations would be less than significant. Sensitive receptors would be exposed to concentrations of DPM due to construction exhaust emissions. However, as calculated in this analysis, the excess cancer risk would be less than the County's screening threshold of 1 in a million without implementation of Best Available Control Technology for Toxics (T-BACT), and impacts to sensitive receptors would be less than significant.

Odor Impacts

Exposure to odors associated with project construction would be short term and temporary in nature. The project does not contain land uses typically associated with emitting objectionable odors during operation. Odors may be associated with animals and animal waste; however, animals would be cared for and offices and enclosures such as cages, runs, and kennels would be readily cleaned and disinfected. Animals in the livestock area would be cleaned daily. All excrement and soiled bedding would be removed and placed in covered dumpsters. With proper animal care and facility cleaning, the proposed facility would not be a significant source of odors. Impacts related to objectionable odors would be less than significant.

1.0 Introduction

1.1 Purpose of the Report

The purpose of this analysis is to characterize existing air quality conditions at the County Animal Shelter project (project) site and in the region, identify applicable rules and regulations, analyze impacts to air quality from construction and operation of the project, and, if necessary, identify feasible measures to mitigate or minimize pollutant emissions associated with the project. This report was prepared in accordance with the County of San Diego (County) Guidelines for Determining Significance and Report Format and Content Requirements, Air Quality (County's Air Quality Guidelines; County of San Diego 2007).

1.2 Project Location and Description

The project is located north of Riverview Parkway and west of North Magnolia Avenue on County-owned land that lies within the boundaries of the city of Santee (assessor parcel number 381-050-69-00). Specifically, the project site is located within and is surrounded by land uses within the City of Santee's (City's) Town Center Specific Plan Amendment area. The Specific Plan Amendment area established the physical and design framework for the development of approximately 154 acres of County-owned land within the City's 706-acre Town Center Specific Plan area. Figure 1 shows the regional location of the project, Figure 2 shows the project location on an aerial photograph.

The County Department of Animal Services (DAS) provides animal-related law enforcement, sheltering, medical, and pet adoption services to the unincorporated areas of San Diego County. Currently, the County DAS owns and operates two animal shelter facilities in the San Diego region: one located in the community of Bonita (Bonita Shelter) and the other in the city of Carlsbad (Carlsbad Shelter). The proposed project would replace the existing Bonita Shelter located at 5821 Sweetwater Road, Bonita, California. The proposed project would be constructed to meet the County DAS current and projected needs for the County. The proposed project would provide animal services in a modern facility and would have the capacity for the transfer of all of the Bonita Shelter animals and services, including all livestock. The Carlsbad Shelter, which was redeveloped and expanded in 2005, would remain open and all other services and functions would remain unchanged.

The County proposes the construction of an approximately 24,000-square-foot animal shelter. As shown in Figure 3, the project would consist of four separate buildings with an internal, secure and open courtyard, an outdoor livestock area, an activity yard, a staff parking lot, and a public parking lot. The two parking lots would have separate driveways for ingress and egress from Riverview Parkway. The four buildings would contain medical facilities, administration areas, and boarding areas for dogs, cats, rabbits, and other small animals. Off-site improvements would include sidewalk, curb and gutter improvements along Riverview Parkway. Construction is anticipated to begin in November 2021 and end in January 2023.

Access to the project site would be from Interstate 8, State Route 52, State Route 67, and State Route 125, as well as major arterial roadways and public transportation services. The

nearest trolley station (Santee Town Center) is located approximately 1.5 miles southwest of the project site and the nearest bus stop is located at the intersection of Riverview Parkway and North Magnolia Avenue, approximately 528 feet southeast of the project site.

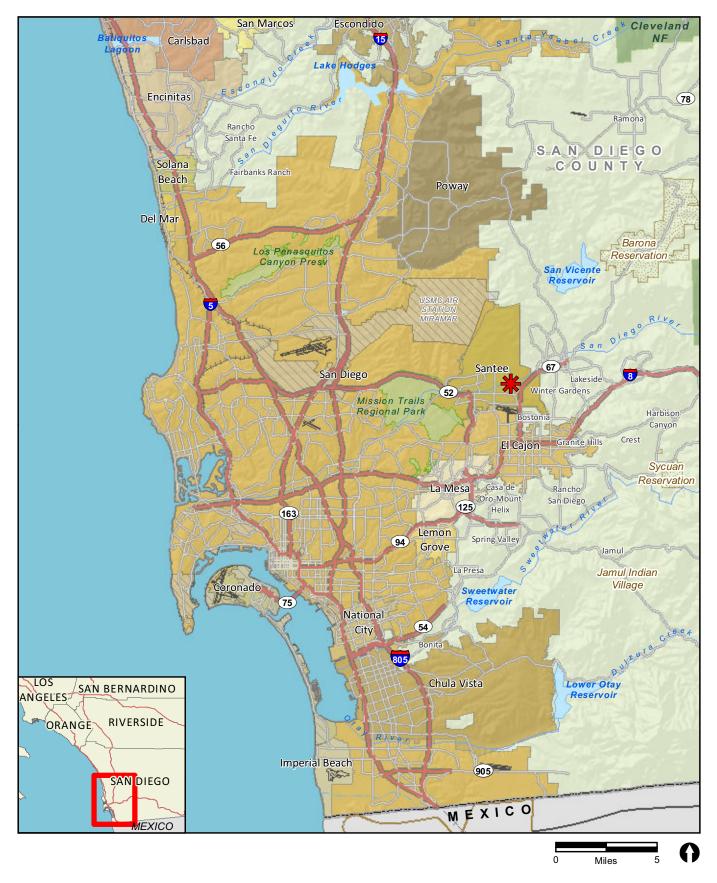
Two unsignalized vehicular driveways would be constructed along Riverview Parkway to provide access to the proposed facility and two proposed parking lots. One driveway would be accessible to the general public, while the other driveway would be accessible to staff, contractors, deliveries, and livestock drop-off. Parking would consist of 28 staff spaces and 58 public spaces.

The proposed buildings would achieve a minimum in Leadership in Energy and Environmental Design (LEED) Silver designation, while also reaching a higher level of sustainability with a zero-net energy performance. The proposed project would include "green" building elements constructed in accordance with California's Title 24 Building Energy Efficiency Standards. Other environmental design features would include, but are not limited to, photovoltaic solar panels and electric vehicle charging stations.

Development of the proposed project would include the provision of utility infrastructure, specifically storm water drains, sewer, water, electricity, natural gas, and telecommunications. The infrastructure for the proposed project would tie into the existing utility lines and would be upgraded as necessary to accommodate the proposed development.

Landscaping would consist of a mix of trees, shrubs, and ground cover and comply with County of San Diego's Landscape Ordinance and Water Efficient Landscape Design Manual. The proposed project would include bio-retention swales to reduce runoff into drainage facilities.

All current County DAS shelter hours of operation are from 9:30 a.m. to 5:30 p.m. Tuesday through Sunday and adoption hours close at 4:00 p.m. All County DAS Animal Shelters are closed to the public on Mondays and County holidays. The shelter hours for the proposed project would remain unchanged from the current shelter hours at the Carlsbad Shelter and Bonita Shelter.



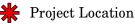




FIGURE 1 Regional Location



0 Feet 500

Project Boundary



FIGURE 2 Project Location on Aerial Photograph



0 Feet 200



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FIGURE 3 Site Plan

2.0 Existing Conditions

2.1 Existing Setting

The project is located in San Diego County, within the San Diego Air Basin (SDAB) and approximately 16 miles east of the Pacific Ocean. The eastern portion of the SDAB is surrounded by mountains to the north, east, and south. These mountains tend to restrict airflow and concentrate pollutants in the valleys and low-lying areas.

The site currently consists of an undeveloped lot with an elevated building pad. Based on reconnaissance and review of site topography, the proposed structural improvement area is generally flat at an approximate elevation of 351 feet above mean sea level.

Land uses surrounding the project site include: residential subdivisions to the southeast, east, and northeast of North Magnolia Avenue; the Edgemoor Skilled Nursing Facility to the north of the San Diego River; Las Colinas Detention and Reentry Facility to the immediate south; and undeveloped land and the San Diego River to the immediate north and west. The Santee Transit Center is approximately 3,600 feet to the southwest of the project site and provides a trolley line and bus service to the area.

2.2 Climate and Meteorology

The project area, like the rest of San Diego County, has a Mediterranean climate characterized by warm, dry summers and mild winters. The mean annual temperature for the project area is 65 degrees Fahrenheit (°F). The average annual precipitation is 12 inches, falling primarily from November to April. Winter low temperatures in the project area average about 42°F, and summer high temperatures average about 89°F. The average relative humidity is 69 percent and is based on the yearly average humidity at Lindbergh Field (Western Regional Climate Center 2020).

The dominant meteorological feature affecting the region is the Pacific High Pressure Zone, which produces the prevailing westerly to northwesterly winds. These winds tend to blow pollutants away from the coast toward the inland areas. Consequently, air quality near the coast is generally better than that which occurs at the base of the coastal mountain range.

Fluctuations in the strength and pattern of winds from the Pacific High Pressure Zone creates a temperature inversion layer (a layer in the atmosphere in which temperature increases with height) that acts as a lid to the vertical dispersion of air pollutants in the SDAB. Beneath the inversion layer pollutants become "trapped" as their ability to disperse diminishes. Sunlight reacts with air pollutants (reactive organic gas [ROG] and oxides of nitrogen [NO_X]) to create ozone (O₃). Thus, poorly dispersed pollutants along with strong sunlight results in the creation of ozone at this surface layer.

The prevailing wind pattern in the western portion of the SDAB includes a daytime onshore flow (i.e., sea breeze) and nighttime offshore flow (i.e., land breeze), which leads to pollutants being blown out to sea at night and returning to land the following day. The prevailing westerly wind pattern is sometimes interrupted by regional "Santa Ana" conditions. A Santa Ana occurs when a strong high pressure develops over the Nevada-Utah area and overcomes the prevailing westerly coastal winds, sending strong, steady, hot, dry northeasterly winds over the mountains and out to sea.

Strong Santa Ana winds tend to blow pollutants out over the ocean, producing clear days. However, at the onset or during breakdown of these conditions, or if the Santa Ana is weak, local air quality may be adversely affected. In these cases, emissions from the South Coast Air Basin to the north are blown out over the ocean, and low pressure over Baja California, Mexico, draws this pollutant-laden air mass southward. As the high pressure weakens, prevailing northwesterly winds reassert themselves and send this cloud of contamination ashore in the SDAB. When this event does occur, the combination of transported and locally produced contaminants results in air quality conditions worse than normal (California Air Resources Board [CARB] 1997).

2.3 Regulatory Setting

2.3.1 Federal Regulations

Ambient Air Quality Standards (AAQS) represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. The federal Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 (42 U.S. Code [U.S.C.] 7401) for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity. In 1971, in order to achieve the purposes of Section 109 of the CAA [42 U.S.C. 7409], the U.S. Environmental Protection Agency (U.S. EPA) developed primary and secondary National AAQS (NAAQS).

Six pollutants of primary concern were designated: ozone (O₃), carbon monoxide (CO), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), lead (Pb), and particulate matter (PM₁₀ and PM_{2.5}). The primary NAAQS "in the judgment of the Administrator, based on such criteria and allowing an adequate margin of safety, are requisite to protect the public health...." and the secondary standards "...protect the public welfare from any known or anticipated adverse effects associated with the presence of such air pollutant in the ambient air" [42 U.S.C. 7409(b)(2)]. The primary NAAQS were established, with a margin of safety, considering long-term exposure for the most sensitive groups in the general population (i.e., children, senior citizens, and people with breathing difficulties). The NAAQS are presented in Table 1 (California Air Resources Board [CARB] 2016).

If an air basin is not in either federal or state attainment for a particular pollutant, the basin is classified as non-attainment area for that pollutant. The SDAB is currently classified as a federal non-attainment area for ozone.

		Ambie	Table 1 nt Air Quality S	tandards				
	Averaging	California Stand		National Star	ndards ²			
Pollutant	Time	Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷		
Ozone ⁸	1 Hour 8 Hour	0.09 ppm (180 μg/m ³) 0.07 ppm	Ultraviolet Photometry	– 0.070 ppm	Same as Primary Standard	Ultraviolet Photometry		
D 11		(137 µg/m ³)		(137 μg/m ³)	Staffaara			
$\begin{array}{l} Respirable \\ Particulate \\ Matter \\ (PM_{10})^9 \end{array}$	24 Hour Annual Arithmetic Mean	50 μg/m ³ 20 μg/m ³	Gravimetric or Beta Attenuation	150 μg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis		
Fine Particulate	24 Hour	No Separate Sta	te Standard	$35~\mu g/m^3$	Same as Primary Standard	Inertial Separation and		
Matter (PM _{2.5}) ⁹	Annual Arithmetic Mean	12 μg/m ³	Gravimetric or Beta Attenuation	12 μg/m³	15 μg/m³	Gravimetric Analysis		
	1 Hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)	_			
Carbon Monoxide	8 Hour	9.0 ppm (10 mg/m ³)	Non-dispersive Infrared	9 ppm (10 mg/m ³)	-	Non-dispersive Infrared		
(CO)	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)	Photometry	_	-	Photometry		
Nitrogen	1 Hour	0.18 ppm (339 μg/m³)	Gas Phase	100 ppb (188 μg/m ³)	-	Gas Phase		
Dioxide (NO ₂) ¹⁰	Annual Arithmetic Mean	0.030 ppm (57 μg/m ³)	Chemi- luminescence	0.053 ppm (100 μg/m ³)	Same as Primary Standard	Chemi- luminescence		
	1 Hour	0.25 ppm (655 μg/m³)		75 ppb (196 μg/m³)	-	-		
Sulfur	3 Hour	_	Ultraviolet	_	0.5 ppm (1,300 μg/m ³)	Ultraviolet Fluorescence; Spectro-		
Dioxide (SO ₂) ¹¹	24 Hour	0.04 ppm (105 μg/m³)	Fluorescence	0.14 ppm (for certain areas) ¹¹	-	photometry (Pararosaniline		
	Annual Arithmetic Mean	_		0.030 ppm (for certain areas) ¹¹	-	Method)		
	30 Day Average	1.5 μg/m ³		_	-			
Lead ^{12,13}	Calendar Quarter	_	Atomic Absorption	1.5 μg/m ³ (for certain areas) ¹²	Same as	High Volume Sampler and Atomic		
	Rolling 3-Month Average	_		0.15 μg/m³	Primary Standard	Absorption		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 14	Beta Attenuation and Transmittance through Filter Tape			<u>.</u>		
Sulfates	24 Hour	$25~\mu\mathrm{g/m^3}$	Ion Chroma- tography	No National	Standards			
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 Chroma- tography					

Table 1 Ambient Air Quality Standards

NOTES:

ppm = parts per million; ppb = parts per billion; μg/m³ = micrograms per cubic meter; - = not applicable.
¹ California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, particulate matter (PM₁₀, PM_{2.5}, and visibility reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

 2 National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 $\mu g/m^3$ is equal to or less than one. For PM25, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

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

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

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

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

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

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

⁹ On December 14, 2012, the national annual $PM_{2.5}$ primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour $PM_{2.5}$ standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standards of 15 µg/m³. The existing 24-hour PM_{10} standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.

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

¹¹ On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

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

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

¹³ The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

¹⁴ In 1989, the CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively. SOURCE: CARB 2016.

2.3.2 State Regulations

2.3.2.1 Criteria Pollutants

The CARB has developed the California AAQS (CAAQS) and generally has set more stringent limits on the criteria pollutants than the NAAQS (see Table 1). In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

Similar to the federal CAA, the state classifies either "attainment" or "non-attainment" areas for each pollutant based on the comparison of measured data with the CAAQS. The SDAB is a non-attainment area for the state ozone standards, the state PM_{10} standard, and the state $PM_{2.5}$ standard. The California CAA, which became effective on January 1, 1989, requires all areas of the State to attain the CAAQS at the earliest practicable date. The California CAA has specific air quality management strategies that must be adopted by the agency responsible for the non-attainment area. In the case of the SDAB, the responsible agency is the San Diego Air Pollution Control District (SDAPCD; see Section 2.3.3).

2.3.2.2 Toxic Air Contaminants

The public's exposure to toxic air contaminants (TACs) is a significant public health issue in California. Diesel particulate matter (DPM) emissions have been identified as TACs. In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: Health and Safety Code Sections 39650–39674). The California Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air.

The goals of the Air Toxics "Hot Spots" Act are to collect emission data, to identify facilities having localized impacts, to ascertain health risks, to notify nearby residents of significant risks, and to reduce those significant risks to acceptable levels.

The Children's Environmental Health Protection Act, California Senate Bill 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air monitoring network, and develop any additional air toxic control measures needed to protect children's health. Locally, toxic air pollutants are regulated through the SDAPCD Regulation XII. Of particular concern statewide are DPM emissions. DPM was established as a TAC in 1998, and is estimated to represent a majority of the cancer risk from

TACs statewide (based on the statewide average). Diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB and are listed as carcinogens either under the state's Proposition 65 or under the federal Hazardous Air Pollutants program.

Following the identification of DPM as a TAC in 1998, CARB has worked on developing strategies and regulations aimed at reducing the risk from DPM. The overall strategy for achieving these reductions is found in the Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles (CARB 2000). A stated goal of the plan is to reduce the statewide cancer risk arising from exposure to DPM by 85 percent by 2020.

In April 2005, CARB published the Air Quality and Land Use Handbook: A Community Health Perspective (CARB 2005). The handbook makes recommendations directed at protecting sensitive land uses from air pollutant emissions while balancing a myriad of other land use issues (e.g., housing, transportation needs, economics, etc.). Sensitive land uses include but are not limited to, schools, hospitals, residences, resident care facilities, and day-care centers. The handbook is not regulatory or binding on local agencies and recognizes that application takes a qualitative approach. Therefore, the CARB has provided guidelines for the siting of land uses near heavily traveled roadways. Of pertinence to this study, the CARB guidelines indicate that siting new sensitive land uses within 500 feet of a freeway or urban roads with 100,000 or more vehicles/day should be avoided when possible.

As an ongoing process, CARB will continue to establish new programs and regulations for the control of DPM and other air-toxics emissions as appropriate. The continued development and implementation of these programs and policies will ensure that the public's exposure to DPM and other TACs will continue to decline.

2.3.2.3 State Implementation Plan

The State Implementation Plan (SIP) is a collection of documents that set forth the state's strategies for achieving the NAAQS. In California, the SIP is a compilation of new and previously submitted plans, programs (such as air quality management plans, monitoring, modeling, permitting, etc.), district rules, state regulations, and federal controls. The CARB is the lead agency for all purposes related to the SIP under state law. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. The CARB then forwards SIP revisions to the U.S. EPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

The SDAPCD is responsible for preparing and implementing the portion of the SIP applicable to the SDAB. The SIP plans for San Diego County specifically include the Redesignation Request and Maintenance Plan for the 1997 National Ozone Standard for San Diego County (2012), and the 2004 Revision to the California State Implementation Plan for Carbon Monoxide–Updated Maintenance Plan for Ten Federal Planning Areas.

2.3.2.4 The California Environmental Quality Act

Section 15125(d) of the California Environmental Quality Act (CEQA) Guidelines requires discussion of any inconsistencies between the project and applicable general plans and regional plans, including the applicable air quality attainment or maintenance plan (or SIP).

2.3.3 Regional Air Quality Strategy

The SDAPCD prepared the original 1991/1992 Regional Air Quality Strategy (RAQS) in response to requirements set forth in the California CAA (SDAPCD 1992). The California CAA requires areas that are designated state non-attainment areas for ozone, CO, SO₂, and NO₂ prepare and implement plans to attain the standards by the earliest practicable date. The California CAA does not provide guidance on timing or requirements for attaining the state PM₁₀ and PM_{2.5} standards. Attached as part of the RAQS are the Transportation Control Measures (TCMs) adopted by the San Diego Association of Governments (SANDAG). Updates of the RAQS and corresponding TCM are required every three years. The RAQS and TCM set forth the steps needed to accomplish attainment of NAAQS and CAAQS. The most recent update of the RAQS and TCM occurred in 2016.

2.4 Background Air Quality

Air quality at a particular location is a function of the kinds, amounts, and dispersal rates of pollutants being emitted into the air locally and throughout the basin. The major factors affecting pollutant dispersion are wind speed and direction, the vertical dispersion of pollutants (which is affected by inversions), and the local topography.

Air quality is commonly expressed as the number of days in which air pollution levels exceed state standards set by the CARB or federal standards set by the U.S. EPA. The SDAPCD maintains 11 air quality monitoring stations located throughout the greater San Diego metropolitan region. Air pollutant concentrations and meteorological information are continuously recorded at these stations. Measurements are then used by scientists to help forecast daily air pollution levels.

The El Cajon monitoring station is the closest station to the project site. The El Cajon monitoring station was temporarily located at 10537 Floyd Smith Drive, approximately two miles south of the project site. In 2016, it was moved back to the Lexington Elementary School located at 533 South First Street, approximately four miles south of the project site. The El Cajon monitoring station measures ozone, NO₂, PM₁₀, and PM_{2.5}. Table 2 provides a summary of the measurements collected at the El Cajon monitoring station. The data for 2014 and 2015 is from the Floyd Smith Drive location, and the data for 2016 through 2018 is from the Lexington Elementary School location.

Table 2 Summary of Air Quality Measurements Recorded at the El Cajon Air Quality Monitoring Station							
Pollutant/Standard	2014	2015	2016	2017	2018		
Ozone							
Federal Max 8-hr (ppm)	0.075	0.067	0.074	0.081	0.079		
Days 2015 Federal 8-hour Standard Exceeded (0.07 ppm)	2	0	1	9	2		
Days 2008 Federal 8-hour Standard Exceeded (0.075 ppm)	0	0	0	5	2		
State Max 8-hr (ppm)	0.075	0.067	0.074	0.082	0.079		
Days State 8-hour Standard Exceeded (0.07 ppm)	2	0	1	9	2		
Max. 1-hr (ppm)	0.083	0.082	0.087	0.096	0.087		
Days State 1-hour Standard Exceeded (0.09 ppm)	0	0	0	1	0		
Nitrogen Dioxide							
Max 1-hr (ppm)	0.057	0.059	0.048	0.045	0.045		
Days State 1-hour Standard Exceeded (0.18 ppm)	0	0	0	0	0		
Days Federal 1-hour Standard Exceeded (0.100 ppm)	0	0	0	0	0		
Annual Average (ppm)				0.010	0.008		
PM ₁₀ *	T	1	1	1			
Federal Max. Daily (µg/m ³)	33.0	48.0	43.0	50.0	43.0		
Measured Days Federal 24-hour Standard Exceeded (150 µg/m ³)	0	0	0	0	0		
Calculated Days Federal 24-hour Standard Exceeded (150 µg/m ³)				0.0	0.0		
Federal Annual Average (µg/m ³)	18.3	22.3	21.9	22.6	22.6		
State Max. Daily (µg/m ³)	35.3	50.3	44.1	49.4	44.7		
Measured Days State 24-hour Standard Exceeded (50 µg/m ³)	0	0	0	0	0		
Calculated Days State 24-hour Standard Exceeded (50 µg/m ³)				0.0	0.0		
State Annual Average (µg/m³)				23.0	23.0		
PM _{2.5} *							
Federal Max. Daily (µg/m ³)	13.9	24.7	23.9	31.8	26.2		
Measured Days Federal 24-hour Standard Exceeded (35 µg/m ³)	0	0	0	0	1		
Calculated Days Federal 24-hour Standard Exceeded (35 µg/m ³)				0.0	1.0		
Federal Annual Average (µg/m ³)				9.5	9.6		
State Max. Daily (µg/m ³)	13.9	24.7	31.0	35.6	42.0		
State Annual Average (µg/m ³)				9.6	10.5		

SOURCE: CARB 2020.

ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter; -- = Not available.

* Calculated days value. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

2.4.1 Ozone

Nitrogen oxides and hydrocarbons (ROG) are known as the chief "precursors" of ozone. These compounds react in the presence of sunlight to produce ozone, which is the primary air pollution problem in the SDAB. Because sunlight plays such an important role in its formation, ozone pollution—or smog—is mainly a concern during the daytime in summer months. Adverse health effects associated with ozone include breathing difficulties and lung tissue damage, The SDAB is currently designated a federal and state non-attainment area for ozone. During the past two decades, San Diego had experienced a decline in ozone levels due to emission control efforts, despite the region's growth in population and vehicle miles traveled (SDAPCD 2016).

About half of smog-forming emissions come from automobiles. Population growth in San Diego has resulted in a large increase in the number of automobiles expelling ozone-forming

pollutants while operating on area roadways. In addition, the occasional transport of smogfilled air from the South Coast Air Basin only adds to the SDAB's ozone problem. Stricter automobile emission controls, including more efficient automobile engines, have played a large role in why ozone levels have steadily decreased.

2.4.2 Carbon Monoxide

The SDAB is classified as a state attainment area and as a federal maintenance area for CO. Until 2003, no violations of the state standard for CO had been recorded in the SDAB since 1991, and no violations of the national standard had been recorded in the SDAB since 1989. The violations that took place in 2003 were likely the result of massive wildfires that occurred throughout the county. No violations of the state or federal CO standards have occurred since 2003.

Small-scale, localized concentrations of CO above the state and national standards have the potential to occur at intersections with stagnation points such as those that occur on major highways and heavily traveled and congested roadways. Localized high concentrations of CO are referred to as "CO hot spots" and are a concern at congested intersections, where automobile engines burn fuel less efficiently and their exhaust contains more CO. Adverse health effects associated with CO include chest pain in heart patients, headaches, and reduced mental alertness.

2.4.3 Particulate Matter

Particulate matter (PM) is a complex mixture of microscopic solid or liquid particles including chemicals, soot, and dust. Anthropogenic sources of direct particulate emissions include crushing or grinding operations, dust stirred up by vehicle traffic, and combustion sources such as motor vehicles, power plants, wood burning, forest fires, agricultural burning and industrial processes. Additionally, indirect emissions may be formed when aerosols react with compounds found in the atmosphere.

Health studies have shown a significant association between exposure to particulate matter and premature death in people with heart or lung diseases. Other important effects include aggravation of respiratory and cardiovascular disease, lung disease, decreased lung function, asthma attacks, and certain cardiovascular problems such as heart attacks and irregular heartbeat (U.S. EPA 2016).

As its properties vary based on the size of suspended particles, particulate matter is generally categorized as PM_{10} or $PM_{2.5}$.

2.4.3.1 Particulate Matter Less than 10 Microns

 PM_{10} , occasionally referred to as "inhalable coarse particles" has an aerodynamic diameter of about one-seventh of the diameter of a human hair. High concentrations of PM_{10} are often found near roadways, construction, mining, or agricultural operations.

2.4.3.2 Particulate Matter Less than 2.5 Microns

 $PM_{2.5}$, occasionally referred to as "inhalable fine particles" has an aerodynamic diameter of about one-thirtieth of the diameter of a human hair. $PM_{2.5}$ is the main cause of haze in many parts of the U.S. Federal standards applicable to $PM_{2.5}$ were first adopted in 1997.

2.4.4 Other Criteria Pollutants

The national and state standards for NO_2 , oxides of sulfur (SO_x), and the previous standard for lead are being met in the SDAB, and the latest pollutant trends suggest that these standards will not be exceeded in the foreseeable future. The SDAB is also in attainment of the state standards for vinyl chloride, hydrogen sulfides, sulfates, and visibility-reducing particulates.

3.0 Significance Criteria and Analysis Methodologies

3.1 County Significance Thresholds

The County has approved Guidelines for Determining Significance, Air Quality (March 19, 2007) that essentially mirror Appendix G of the CEQA Guidelines and are intended to provide consistency in the environmental analysis. Under the County's guidelines, a project will have a significant adverse environmental impact related to air quality if it would:

- 1. Conflict with or obstruct the implementation of the RAQS and/or applicable portions of the SIP.
- 2. Result in emissions that would violate any air quality standard or contribute substantially to an existing or projected air quality violation.
 - a. Result in emissions that exceed 250 pounds per day of NO_X , or 75 pounds per day of volatile organic compounds (VOCs).
 - b. Result in emissions of carbon monoxide of 550 pounds per day, and when totaled with the ambient concentrations will exceed a 1-hour concentration of 20 parts per million (ppm) or an 8-hour average of 9 ppm.
 - c. Result in emissions of $PM_{\rm 2.5}$ that exceed 55 pounds per day.
 - d. Result in emissions of PM_{10} that exceed 100 pounds per day and increase the ambient PM_{10} concentration by 5.0 micrograms per cubic meter (µg/m³) or greater at the maximum exposed individual.
- 3. Result in a cumulatively considerable net increase of any criteria pollutant for which the SDAB is non-attainment under an applicable NAAQS or CAAQS (PM_{10} , $PM_{2.5}$, or exceed quantitative thresholds for ozone precursors: NO_X and ROG; see Table 3).

- 4. Expose sensitive receptors (including, but not limited to, schools, hospitals, resident care facilities, day-care centers and project residents and employees) to substantial pollutant concentrations.
 - a. Place sensitive receptors near CO hot spots or creates CO hot spots near sensitive receptors.
 - b. Result in exposure to TACs resulting in a maximum incremental cancer risk greater than 1 in 1 million without application of best available control technology for toxics or a health hazard index greater than one would be deemed as having a potentially significant impact.
- 5. Expose considerable number of persons to objectionable odors.

The SDAPCD does not provide quantitative thresholds for determining the significance of construction or mobile source-related impacts. However, the district does specify Air Quality Impact Analysis (AQIA) trigger levels for new or modified stationary sources (SDAPCD Rules 20.1, 20.2, and 20.3). The County's Guidelines for Determining Significance, Air Quality allow the use of the SDAPCD AQIA as CEQA significance thresholds. If these incremental levels are exceeded, the district requires that an AQIA be performed for the project. Although these trigger levels do not generally apply to mobile sources, for comparative purposes, these levels are used to evaluate the increased emissions that would be discharged to the SDAB if the project were approved. The AQIA trigger levels are shown in Table 3. There is no level specified for ROG in the SDAPCD AQIA criteria. The County's threshold is based on the VOC threshold of significance from the SCAQMD. Note that the terms ROG and VOC are considered interchangeable.

Table 3 Air Quality Impact Trigger Levels							
Pollutant Emission Rate							
	Pounds/Hour	Pounds/Day	Tons/Year				
Respirable Particulate Matter (PM ₁₀)		100	15				
Fine Particulate Matter (PM _{2.5})		55^{a}	10 ^a				
Oxides of Nitrogen (NOx)	25	250	40				
Oxides of Sulfur (SO _X)	25	250	40				
Carbon Monoxide (CO)	100	550	100				
Lead and Lead Compounds		3.2	0.6				
Volatile Organic Compounds (VOCs)		$75^{ m b}$	13.7°				
SOURCE: SDAPCD, Rules 20.1, 20.2, 20.3;		-					

 ^a Based on the U.S. EPA "Proposed Rule to Implement the Fine Particle National Ambient Air Quality Standards" published September 8, 2005. Also used by the South Coast Air Quality Management District.

- ^b Threshold for VOCs based on the threshold of significance for VOCs from the South Coast Air Quality Management District for the Coachella Valley.
- ^c 13.7 tons per year threshold based on 75 pounds per day multiplied by 365 days per year and divided by 2,000 pounds per ton.

3.2 Analysis Methodologies

Air emissions were calculated using California Emissions Estimator Model (CalEEMod) 2016.3.2 (California Air Pollution Control Officers Association 2017). CalEEMod is a tool used to estimate air emissions resulting from land development projects in the state of California. The model generates air quality emission estimates from three basics sources: construction sources, area sources (e.g., landscaping equipment and natural gas heating), and mobile sources (e.g., traffic). CalEEMod provides emission estimates of NO_X, CO, SO_X, PM₁₀, PM_{2.5}, and ROG.

Inputs to CalEEMod include such items as the air basin containing the project, land uses, trip generation rates, trip lengths, duration of construction phases, construction equipment usage, grading areas, as well as other parameters. The CalEEMod output files are contained in Attachment 1 and provide the specific inputs.

3.2.1 Construction Methodology and Assumptions

Construction-related activities are temporary, short-term sources of air emissions. Sources of construction-related air emissions include:

- Fugitive dust from demolition and grading activities;
- Construction equipment exhaust;
- Construction-related trips by workers, delivery trucks, and material-hauling trucks; and
- Construction-related power consumption.

Construction-related pollutants result from dust raised during demolition and grading, emissions from construction vehicles, and chemicals used during construction. Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over paved and unpaved surfaces, demolition, excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust. Construction operations are subject to the requirements established in SDAPCD Regulation 4, Rules 52, 54, and 55.

Heavy-duty construction equipment is usually diesel powered. In general, emissions from diesel-powered equipment contain more NO_x, SO_x, and PM than gasoline-powered engines. However, diesel-powered engines generally produce less CO and less ROG than gasoline-powered engines. Standard construction equipment includes tractors/loaders/backhoes, rubber-tired dozers, excavators, graders, cranes, forklifts, rollers, paving equipment, generator sets, welders, cement and mortar mixers, and air compressors.

Primary inputs are the numbers of each piece of equipment and the length of each construction stage. Construction is anticipated to begin in November 2021 and last until January 2023. Specific construction phasing and equipment parameters are not available at this time. However, CalEEMod can estimate the required construction equipment when project-specific information is unavailable. The estimates are based on surveys, performed by the South Coast Air Quality Management District and the Sacramento Metropolitan Air Quality Management District of typical construction projects, which provide a basis for scaling equipment needs and schedule with a project's size. Air emission estimates in

CalEEMod are based on the duration of construction phases; construction equipment type, quantity, and usage; grading area; season; and ambient temperature, among other parameters. Project emissions were modeled for the following stages: site preparation, grading, building construction/architectural coatings, and paving.

For purposes of analyzing construction-related TAC emissions and their impact on sensitive receptors, the total PM₁₀ emissions from equipment exhaust for the entire project were summed and divided over the total exposure time, i.e., approximately one year, to develop an average daily emission rate. The exhaust emissions were calculated by CalEEMod, and the maximum annual DPM concentration was calculated using AERSCREEN. AERSCREEN calculates a worst-case maximum 1-hour concentration at a specific distance and specific angle from the source. The maximum 1-hour concentration is then converted to an annual concentration using a 0.08 conversion factor (U.S. EPA 1992).

Once the dispersed concentrations of diesel particulates are estimated in the surrounding air, they are used to evaluate estimated exposure to people. Exposure is evaluated by calculating the dose in milligrams per kilogram body weight per day (mg/kg/d). For residential exposure, the breathing rates are determined for specific age groups, so inhalation dose (Dose-air) is calculated for each of these age groups, 3rd trimester, 0<2, 2<9, 2<16, 16<30 and 16-70 years. The equation for dose through inhalation (Dose-air) is as follows:

Dose-air = ($C_{air} \times DBR \times A \times EF \times 10^{-6}$); Where:

Dose-air		Chronic daily intake, milligram/kilogram (mg/kg) body weight per day
$\mathrm{C}_{\mathrm{air}}$	=	Ground-level concentration of TAC to which the receptor is exposed,
		micrograms/cubic meter
DBR	=	Daily breathing rate, normalized to body weight (liters per kilogram
		body weight per day (OEHHA 2015)
А	=	Inhalation absorption factor (OEHHA recommended factor of 1)
\mathbf{EF}	=	Exposure frequency, days/year (OEHHA recommended factor of 0.96 for
		resident and 0.68 for workers)

Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home and the exposure duration divided by averaging time, to yield the excess cancer risk. The excess cancer risk is calculated separately for each age grouping and then summed to yield cancer risk for any given location. The worst-case cancer risk is calculated as follows:

Excess Cancer Risk = Dose-air \times CPF \times ASF \times ED/AT \times FAH; Where: Dose-air = Chronic daily intake, milligram/kilogram (mg/kg) body weight per day CPF = Cancer potency factor (mg/kg/day) ASF = Age sensitivity factor ED= Exposure duration (years) AT = Averaging time for lifetime cancer risk (years)

Non-Cancer risks or risks defined as chronic or acute. With respect to DPM only chronic risks are calculated and are determined by the hazard index. To calculate hazard index, DPM concentration is divided by its chronic Reference Exposure Levels (REL). Where the total equals or exceeds one, a health hazard is presumed to exist.

In this analysis, non-carcinogenic impacts are evaluated for chronic exposure inhalation exposure. Estimates of health impacts from non-carcinogenic concentrations are expressed as a hazard quotient (HQ) for individual substances, such as diesel particulate. An HQ of one or less indicates that adverse health effects are not expected to result from exposure to emissions of that substance. RELs are defined as the concentration at which no adverse health effects are anticipated. Generally, the inhalation pathway is the largest contributor to the total dose. The HQ is calculated with the flowing equation:

 $HQ = Ground-Level Concentration (\mu g/m^3)/Reference Exposure Level (\mu g/m^3)$

3.2.2 Operational Methodology and Assumptions

Mobile source emissions would originate from traffic generated by the project. Area source emissions would result from the use of natural gas, consumer products, as well as the application of architectural coatings, and landscaping activities.

Mobile source operational emission estimates are based on the trip rate, trip length, and size of each land use. Daily trip generation rates were obtained from the Transportation Impact Analysis prepared for the project, and are based on the assisted living rates from the Institute of Transportation Engineers *Trip Generation Manual* (10th ed., 2017). The project would generate 21.50 daily trips per 1,000 square feet for a total of 522 daily trips, and the average trip length would be 8.8 miles (Linscott, Law & Greenspan [LLG] 2020). Default vehicle emission factors for the soonest operational year of 2023 were used.

Area source emissions associated with the project include consumer products, natural gas used in space and water heating, architectural coatings, and landscaping equipment. Hearths (fireplaces) and woodstoves are also a source of area emissions; however, the project would not include hearths or woodstoves. Consumer products are chemically formulated products used by household and institutional consumers, including but not limited to detergents, cleaning compounds, polishes, floor finishes, disinfectants, sanitizers, and aerosol paints but do not include other paint products, furniture coatings, or architectural coatings. Emissions due to consumer products are calculated using total building area and product emission factors. Emission estimates associated with natural gas are based on the Residential Appliance Saturation Survey, which is a comprehensive energy use assessment that includes the end use for various climate zones in California.

For architectural coatings, emissions result from evaporation of solvents contained in surface coatings such as in paints and primers. Emission estimates are based on the building surface area, architectural coating emission factors, and a reapplication rate of 10 percent of area per year. Architectural coatings would comply with SDAPCD Rule 67.0.1, which limits the VOC content of paints sold within the County. Landscaping maintenance includes fuel combustion

emission from equipment such as lawn mowers, rototillers, shredders/grinders, blowers, trimmers, chain saws, and hedge trimmers as well as air compressors, generators, and pumps. Emission calculations take into account building area, equipment emission factors, and the number of operational days (summer days).

In addition, the project would be subject to California Green Building Standards Code, which requires a 20 percent increase in indoor water use efficiency. The default water consumption rates in CalEEMod do not account for this reduction. Thus, in order to demonstrate compliance with the California Green Building Standards Code, a 20 percent reduction in indoor water use was included in the water consumption calculations for the project.

As discussed in Section 1.2, the project would also include a number of green building features that would reduce energy use, water consumption, and mobile emissions including achieving LEED Silver designation and installing photovoltaic solar panels and electric vehicle charging stations. As a conservative analysis, these measures were not included in the operational emission calculations.

4.0 Project Impact Analysis

4.1 Conformance to the Regional Air Quality Strategy

4.1.1 Guidelines for the Determination of Significance

Project consistency is based on whether the project would conflict with or obstruct implementation of the RAQS and/or applicable portions of the SIP, which would lead to increases in the frequency or severity of existing air quality violations.

4.1.2 Significance of Impacts Prior to Mitigation

The RAQS is the applicable regional air quality plan that sets forth the SDAPCD's strategies for achieving the NAAQS and CAAQS. The SDAB is designated a non-attainment area for the federal and state ozone standard. Accordingly, the RAQS was developed to identify feasible emission control measures and provide expeditious progress toward attaining the standards for ozone. The two pollutants addressed in the RAQS are ROG and NO_x, which are precursors to the formation of ozone. Projected increases in motor vehicle usage, population, and growth create challenges in controlling emissions and, by extension, to maintaining and improving air quality. The RAQS was most recently adopted in 2016.

The growth projections used by the SDAPCD to develop the RAQS emissions budgets are based on the population, vehicle trends, and land use plans developed in general plans and used by SANDAG in the development of the regional transportation plans and sustainable communities strategy. As such, projects that propose development that is consistent with the growth anticipated by SANDAG's growth projections and/or the General Plan would not conflict with the RAQS. In the event that a project would propose development that is less dense than anticipated by the growth projections, the project would likewise be consistent with the RAQS. In the event a project proposes development that is greater than anticipated in the growth projections, further analysis would be warranted to determine if the project would exceed the growth projections used in the RAQS for the specific subregional area.

The project site is located within, and is surrounded by land uses within, the City's Town Center Specific Plan Amendment area. The project site land use designation and zoning is Town Center Specific Plan. The Specific Plan Amendment area established the physical and design framework for the development of approximately 154 acres of County-owned land within the City's 706-acre Town Center Specific Plan area. The project site is intended for the development of County Public Services and would be consistent with the Town Center Specific Plan. Additionally, the project would not result in regional growth anticipated by SANDAG's growth projections as it would replace the existing Bonita South. Further, as discussed in Sections 4.2 and 4.3, the project would not result in construction or operational emissions in excess of the applicable significance thresholds for all criteria pollutants. The project would, therefore, not result in an increase in emissions that are not already accounted for in the RAQS. Thus, the project would not obstruct or conflict with implementation of the RAQS. Impacts would be considered less than significant.

4.1.3 Mitigation Measures and Design Considerations

Impacts related to implementation of the RAQS and/or applicable portions of the SIP would be less than significant; therefore, no mitigation is required.

4.1.4 Conclusions

The project would not obstruct or conflict with implementation of the RAQS. Impacts would be considered **less than significant** and no mitigation would be required.

4.2 Conformance to Federal and State Ambient Air Quality Standards

4.2.1 Construction Impacts

4.2.1.1 Guidelines for the Determination of Significance

A project is determined to have a significant direct air quality impact if the project exceeds any of the following thresholds:

- 250 pounds per day (lbs/day) of NO_X or 75 lbs/day of VOC
- CO that exceeds a one-hour concentration of 20 ppm or an eight-hour average of 9 ppm, or 550 lbs/day of CO
- 55 lbs/day of PM_{2.5}
- Increases the ambient PM_{10} concentration by 5 $\mu\text{g/m}^3\,\text{or}\,\,100$ lbs/day of PM_{10}

4.2.1.2 Significance of Impacts Prior to Mitigation

Construction emissions associated with development of the project were quantified using CalEEMod. These emissions include exhaust from construction equipment, fugitive dust from vehicle trips, fugitive dust from grading, and off-site vehicle exhaust from on-road vehicles. Construction emissions were modeled using project-specific construction information when available. Where project-specific information was not available, default settings contained in CalEEMod were used to estimate construction emissions.

Construction activities would be subject to several control measures per the requirements of the County, SDAPCD rules, and CARB Airborne Toxic Control Measures (ATCM). The following required control measures have been incorporated into the calculations of construction emissions.

- Per the County's Standard Mitigation and Project Design Consideration Grading, Clearing and Watercourses Ordinance Section 87.428, the applicant shall implement one or more of the following measures during all grading activities:
 - Water actively disturbed surfaces three times a day.
 - Apply non-toxic soil stabilizers to inactive, exposed surfaces when not in use for more than 3 days. Non-toxic soil stabilizers should also be applied to any exposed surfaces immediately (i.e., less than 24 hours) following completion of grading activities if the areas would not be in use for more than 3 days following completion of grading.
 - Remove soil track-out from paved surfaces daily or more frequently as necessary.
 - \circ Minimize the track-out of soil onto paved surfaces by installation of wheel washers.
- Per SDAPCD Rule 67, the applicant shall use regulated coatings for all architectural coating activities.
 - Per CARB's ATCM 13 (California Code of Regulations Chapter 10 Section 2485), the applicant shall not allow idling time to exceed 5 minutes unless more time is required per engine manufacturers' specifications or for safety reasons.

Emissions due to project construction were calculated using the methodology and parameters discussed in Section 3.2.1. Table 4 shows the total projected construction maximum daily emission levels for each criteria pollutant. The CalEEMod output files are contained in Attachment 1.

Table 4 Summary of Worst-case Construction Emissions (pounds per day)								
			Poll	utant				
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$		
Site Preparation	4	41	22	<1	20	12		
Grading	2	25	16	<1	8	4		
Building Construction/ Architectural Coatings	5	20	20	<1	1	1		
Paving	1	11	15	<1	1	1		
Maximum Daily Emissions	5	41	22	<1	20	12		
County Screening Level Thresholds	75	250	550	250	100	55		

As shown in Table 4 maximum construction emissions would be less than the County's Screening Level Thresholds (SLTs) for all criteria pollutants, and would therefore result in a **less than significant impact**.

4.2.1.3 Mitigation Measures and Design Considerations

Impacts related to construction emissions would be less than significant; therefore, no mitigation is required.

4.2.1.4 Conclusions

The project's construction emissions would not exceed County SLTs for any pollutant. Impacts would remain **less than significant** and no mitigation would be required.

4.2.2 **Operational Impacts**

4.2.2.1 Guidelines for the Determination of Significance

Operational emissions are subject to the same significance thresholds as those described in subchapter 4.2.1.1. Operational impacts are determined to have a significant direct air quality impact if the project exceeds the County's SLTs.

4.2.2.2 Significance of Impacts Prior to Mitigation

Operational emissions associated with the project were quantified using CalEEMod and the methodology summarized in Section 3.2.2. These emissions include mobile and area sources. Daily operational emissions are summarized in Table 5. The CalEEMod output files are contained in Attachment 1.

Table 5 Summary of Project Operational Emissions (pounds per day)									
Pollutant									
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$			
Area Sources	1	<1	<1	<1	<1	<1			
Energy Sources	<1	<1	<1	<1	<1	<1			
Mobile Sources	1	3	9	<1	3	1			
Total	1	3	9	<1	3	1			
County Screening Level Thresholds	75	250	550	250	100	55			

As shown in Table 5, the project's daily operational emissions would not exceed the SLTs for any pollutant and therefore would result in a less than significant impact.

4.2.2.3 Mitigation Measures and Design Considerations

Impacts related to operational emissions would be less than significant; therefore, no mitigation is required.

4.2.2.4 Conclusions

Project operational emissions would not exceed County SLTs for any pollutant. Impacts would remain **less than significant** and no mitigation would be required.

4.3 Cumulatively Considerable Net Increase of Criteria Pollutants

4.3.1 Construction Impacts

4.3.1.1 Guidelines for the Determination of Significance

The County's guidelines state that even if direct air quality impacts from a project are less than significant, the project may still have a significant cumulative impact on air quality if the construction emissions are cumulatively considerable when viewed in combination with other reasonably foreseeable future projects within proximity of the proposed action. Projects would contribute to a cumulatively considerable net increase of pollutants if:

During the Construction Phase:

- A project that has a significant direct impact on air quality with regard to emissions of PM_{10} , $PM_{2.5}$, NO_x , and/or VOC, would also have a significant cumulatively considerable net increase.
- In the event direct impacts from a proposed project are less than significant, a project may still have a cumulatively considerable impact on air quality if the emissions of concern from the proposed project, in combination with the emissions of concern from other proposed projects or reasonably foreseeable future projects within a proximity relevant to the pollutants of concern are in excess of the SLTs.

4.3.1.2 Significance of Impacts Prior to Mitigation

As discussed in Section 4.2, the project would not have a significant direct impact on air quality with regard to emissions of PM_{10} , $PM_{2.5}$, NO_X , or VOC. However, per the above guidelines, a project may still have a cumulatively considerable impact on air quality if the emissions, in combination with the emissions of concern from other proposed projects are in excess of the SLTs.

With regard to past and present projects, the background ambient air quality, as measured at the monitoring stations maintained and operated by the SDAPCD, measures the

concentrations of pollutants from existing sources. Past and present project impacts are therefore included in the background ambient air quality data.

As part of the preparation of the project's Traffic Impact Analysis, the traffic engineer consulted with the City to develop a list of cumulative projects within the City. Of the projects in the cumulative list, five projects that are not currently under construction were identified within one mile of the project site: Cornerstone, Karl Strauss, Walker Trails, Village Run Homes, and Lantern Crest Ridge Phase II. For the purposes of determining potential cumulative construction emission impacts, CalEEMod was used to calculate the total emissions due to the simultaneous construction of these cumulative projects. The results are shown in Table 6. CalEEMod output for cumulative projects is provided in Attachment 2.

Table 6 Maximum Daily Cumulative Construction Emissions (pounds per day)						
	Pollutant					
	ROG	NOx	CO	SOx	PM_{10}	$PM_{2.5}$
Cumulative Projects	27	46	31	<1	20	12
Proposed Project	5	41	22	<1	20	12
Total	31	87	53	<1	41	24
County Screening Level Thresholds	75	250	550	250	100	55

As shown, should all projects proposed within one mile of the project site be constructed simultaneously, total construction emissions would be less than the project-level SLTs. It should be noted that although construction activities from cumulative projects may overlap, it is unlikely that all would occur at the same time and that the maximum daily emissions associated with each project would occur on the same day. This is, therefore, a conservative analysis. Further, any cumulative projects would also need to comply with SDAPCD Rules for dust control and construction equipment (see Section 4.2.1.2), which would further reduce the likelihood of a cumulatively considerable construction air quality impact. Therefore, project construction is not anticipated to result in a cumulatively significant impact on air quality.

4.3.1.3 Mitigation Measures and Design Considerations

Impacts related to cumulative construction emissions would be less than significant; therefore, no mitigation is required.

4.3.1.4 Conclusions

Cumulative impacts associated with project construction would be **less than significant**, and no mitigation would be required

4.3.2 **Operational Impacts**

4.3.2.1 Guidelines for the Determination of Significance

As with cumulative construction impacts, the County's guidelines state that the project may have a significant cumulative impact on air quality if the operational emissions are cumulatively considerable when viewed in combination with other reasonably foreseeable future projects within proximity of the proposed action. Projects would contribute to a cumulatively considerable net increase of pollutants if:

During the Operational Phase:

- A project that does not conform to the RAQS and/or has a significant direct impact on air quality with regard to operational emissions of PM₁₀, PM_{2.5}, NO_x and/or VOC, would also have a significant cumulatively considerable net increase.
- Projects that cause road intersections to operate at or below a Level of Service (LOS) E (analysis only required when the addition of peak-hour trips from the proposed project and the surrounding projects exceeds 2,000) and create a CO "hotspot" create a cumulatively considerable net increase of CO.

4.3.2.2 Significance of Impacts Prior to Mitigation

As discussed in Section 4.1.2 and 4.2.2.2, the project would not conflict with or obstruct implementation of the RAQS, and would not result in operational emissions that exceed the County's screening-level thresholds. Additionally, as discussed in Section 4.4.2, the project would not cause an intersection to operate at or below LOS E or create a CO hotspot that would result in a cumulatively considerable net increase of CO. Therefore, cumulative impacts would be less than significant.

4.3.2.3 Mitigation Measures and Design Considerations

Impacts related to cumulative operational impacts would be less than significant; therefore, no mitigation is required.

4.3.2.4 Conclusions

Cumulative impacts associated with project operation would be **less than significant**, and no mitigation would be required

4.4 Impacts to Sensitive Receptors

4.4.1 Construction Impacts

4.4.1.1 Guidelines for the Determination of Significance

The County Guidelines for Determining Significance state that CO hotspots "have been found to occur only at signalized intersections that operate at or below LOS E with peak-hour trips for that intersection exceeding 3,000 trips." CO hotspot analysis are required for projects that would site receptors within 500 feet of a signalized intersection operating at or below LOS E or cause intersections with peak-hour trips exceeding 3,000 to operate at or below LOS E.

Projects that would result in exposure to TAC resulting in a maximum incremental cancer risk greater than 1 in 1 million without application of best available control technology for toxics or a threshold of 10 in 1 million for project's implementing best emission-control technologies or a health hazard index greater than one would be considered as having a potentially significant impact.

4.4.1.2 Significance of Impacts Prior to Mitigation

Carbon Monoxide

Roadway segments and intersections are rated by a LOS standard developed as a professional industry standard to determine area traffic impacts. LOS designations range from A to F, with LOS A representing the best operating conditions (i.e., free-flow) and LOS F representing the worst operating conditions (i.e., heavily congested with high delays). For roadway segments, LOS is based on traffic volume and roadway capacity. For intersections, LOS is based on vehicle delay. The generally accepted region-wide goal is LOS D (or better).

Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. The SDAB is a CO maintenance area under the federal CAA. This means that SDAB was previously a non-attainment area and is currently implementing a 10-year plan for continuing to meet and maintain air quality standards. As a result, ambient CO levels have declined significantly.

The Traffic Impact Analysis evaluated three intersections in the study area: Mast Boulevard and North Magnolia Avenue, Riverview Parkway and North Magnolia Boulevard, and Mission Gorge Road and North Magnolia Avenue. All other intersections are outside the Traffic Impact Analysis study area and would not be impacted by the project. According to the Transportation Impact Analysis, these intersections currently operate at LOS D or better (LLG 2020). Construction-related traffic would not degrade the LOS at any study intersection to LOS E or worse. Additionally, construction trips are estimated to be well below the 3,000 vehicle trips per day used by the County as a screening level for hot spot analysis and, therefore, are not required to be analyzed. Thus, construction-related traffic is not expected to impact local intersections or cause an exceedance of the County's guidelines for assessing impacts to sensitive receptors. This impact would be less than significant.

Toxic Air Contaminants—Diesel Particulate Matter

Construction of the project would result in short-term diesel exhaust emissions from on-site heavy-duty equipment. Project construction would result in the generation of DPM emissions from the use of off-road diesel construction equipment required for site grading and earthmoving, trenching, asphalt paving, and other construction activities. Other construction-related sources of DPM include material delivery trucks and construction worker vehicles; however, these sources are minimal relative to construction equipment. Not all construction worker vehicles would be diesel-fueled and most DPM emissions associated with material delivery trucks and construction worker vehicles would occur off-site.

For the purposes of this analysis, PM_{10} exhaust emissions from CalEEMod were used to estimate the DPM emission factor due to construction and the maximum 1-hour DPM concentration was calculated using AERSCREEN. Based on the CalEEMod calculations for project construction, the project would result in a total of 0.1264 tons of PM₁₀ exhaust, which was converted to an emission rate of 0.0036 grams per second over a one-year period. While varying the number of days would affect the per day emission rate, it does not affect the resulting annual exposure effects used for the risk assessment. Based on AERSCREEN modeling results, the maximum 1-hour ground-level DPM concentration from construction activities would be 0.060 µg/m³. This was converted to an annual average concentration of $0.048 \ \mu g/m^3$ using a conversion factor of 0.08 (U.S. EPA 1992). The resulting annual concentration was used in the equations discussed in detail in Section 3.2.1. Using this methodology, it was calculated that the excess cancer risk would be 0.87 in a million. As this excess cancer risk would be less than the County's screening threshold of 1 in a million without implementation of T-BACT, impacts to sensitive receptors would be less than significant. Additionally, the HQ would be 0.0010, which is less than one. Therefore, no noncancer risks are expected and all health risks are considered less than significant. AERSCREEN and cancer risk calculations are provided in Attachment 3.

It should also be noted that all construction equipment is subject to the CARB In-Use Off-Road Diesel-Fueled Fleets Regulation. This regulation, which applies to all off-road diesel vehicles 25 horsepower or greater, limits unnecessary idling to 5 minutes, requires all construction fleets to be labeled and reported to CARB, bans Tier 0 equipment and phases out Tier 1 and 2 equipment (thereby replacing fleets with cleaner equipment), and requires that fleets comply with Best Available Control Technology requirements.

4.4.1.3 Mitigation Measures and Design Considerations

Impacts related to sensitive receptors would be less than significant; therefore, no mitigation is required.

4.4.1.4 Conclusions

Project construction would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be considered **less than significant** and no mitigation would be required.

4.4.2 **Operational Impacts**

4.4.2.1 Guidelines for the Determination of Significance

The guidelines for determination of significance are discussed in Section 4.4.1.1.

4.4.2.2 Significance of Impacts Prior to Mitigation

Carbon Monoxide

As discussed, localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and certain meteorological conditions. Following construction of the project, the project-related traffic would contribute vehicle trips on existing and future intersections. The addition of these trips could degrade the LOS of intersections to a level where a CO hot spot could occur. The County's guidelines state that intersections that are likely to result in a CO hot spot would operate at a LOS E or worse and would include peak-hour trips exceeding 3,000 vehicle trips.

The project would generate a total of 522 daily trips. Based on the Transportation Impact Analysis, the project would not result in a signalized intersection to operate at a LOS E or worse (LLG 2020); therefore, it is not anticipated to result in a CO hot spot. Therefore, localized air quality impacts to sensitive receptors would be less than significant.

Toxic Air Contaminants—Diesel Particulate Matter

Once operational, the project would not expose nearby sensitive receptors (i.e., residences) to significant concentrations of DPM. Additionally, the project is not located within 500 feet of a freeway or major roadway that carries more than 100,000 vehicles per day. Therefore, future employees and visitors to the project site would not be exposed to significant concentrations of mobile-source DPM. Therefore, localized air quality impacts to sensitive receptors would be less than significant.

4.4.2.3 Mitigation Measures and Design Considerations

Impacts related to sensitive receptors would be less than significant; therefore, no mitigation is required.

4.4.2.4 Conclusions

The project would not expose sensitive receptors to substantial pollutant concentrations. Impacts would be considered **less than significant** and no mitigation would be required.

4.5 Odor Impacts

4.5.1 Guidelines for the Determination of Significance

The State of California Health and Safety Code Sections 41700 and 41705, and SDAPCD Rule 51, commonly referred to as public nuisance law, prohibit emissions from any source whatsoever in such quantities of air contaminants or other material, which cause injury, detriment, nuisance, or annoyance to the public health or damage to property. The provisions of these regulations do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals. According to the County's Guidelines for Determining Significance, Air Quality (March 19, 2007), "Odor issues are very subjective by the nature of odors themselves and their measurements are difficult to quantify. As a result, this guideline is qualitative and each project will be reviewed on an individual basis, focusing on the existing and potential surrounding uses and location of sensitive receptors."

Every use and operation shall be conducted so that no unreasonable heat, odor, vapor, glare, vibration (displacement), dust, smoke, or other forms of air pollution subject to SDAPCD standards shall be discernible at the property line of the parcel upon which the use or operation is located.

Therefore, any unreasonable odor discernible at, on, or beyond the property line of the project will be considered a significant odor impact. This criterion includes the exposure of on-site receptors to objectionable odors, in addition to off-site receptors.

4.5.2 Significance of Impacts Prior to Mitigation

During construction, diesel equipment may generate some nuisance odors. Odors would also be generated during paving activities and during the application of architectural coatings. Sensitive receptors near the project site include residential uses; however, exposure to odors associated with project construction would be short term and temporary in nature.

The CARB Air Quality and Land Use Handbook (CARB 2005) identifies a list of the most common sources of odor complaints received by local air districts. Land uses typically considered associated with odors include wastewater treatment facilities, waste-disposal facilities, or agricultural operations. The project proposes the development of an animal shelter. Odors may be associated with animals and animal waste; however, animals would be cared for and offices and enclosures such as cages, runs, and kennels would be readily cleaned and disinfected. Similar to the existing facility, the project would also include a livestock area. Animals in the livestock area would be cleaned daily. All excrement and soiled bedding would be removed and placed in covered dumpsters. It should also be noted that the facility would be required to handle deceased animals associated with roadkill, euthanasia, and natural causes; however, all animals will be kept in a freezer until transported off-site. With proper animal care and facility cleaning, the proposed facility would not be a significant source of odors. Therefore, operation of the project is not expected to generate significant objectionable odors affecting a substantial number of people, and impacts would be less than significant.

4.5.3 Mitigation Measures and Design Considerations

Impacts related to objectionable odors would be less than significant; therefore, no mitigation is required.

4.5.4 Conclusions

Exposure to odors associated with project construction would be short-term and temporary in nature. The project does not contain land uses typically associated with emitting objectionable odors during operation, and all animal enclosures would be readily cleaned and disinfected. Impacts related to objectionable odors would be less than significant.

5.0 Summary of Recommended Project Design Features, Impacts, and Mitigation

The project's consistency with the RAQS was evaluated to determine if the project would conflict with or obstruct implementation of the applicable air quality plan. In addition, emissions from construction and operation of the project were analyzed to determine the potential direct and cumulative air quality impacts.

5.1 Conformance to the Regional Air Quality Strategy

The project site is located within, and is surrounded by land uses within the City's Town Center Specific Plan Amendment area. The City of Santee land use designation and zoning of the project site is Town Center Specific Plan. The project site is intended for the development of an animal shelter and the project would be consistent with the Specific Plan and the land use and zoning designations. Additionally, the project would not result in regional growth anticipated by SANDAG's growth projections as it would replace the existing Bonita Shelter. Additionally, project emissions would not exceed the project-level significance thresholds. The project would therefore not result in an increase in emissions that are not already accounted for in the RAQS. Thus, the project would not obstruct or conflict with implementation of the RAQS. Impacts would be considered **less than significant**.

5.2 Conformance to Federal and State Ambient Air Quality Standards

Emissions of criteria pollutants would result from construction and operation of the project. As shown in Table 4, project construction would not exceed the County's significance thresholds. Therefore, as project construction emissions would be well below these limits, project construction would not result in regional emissions that would exceed the NAAQS or CAAQS or contribute to existing violations.

Long-term emissions of regional air pollutants occur from operational sources. As shown in Table 5, project operation would not exceed the County's significance thresholds. Therefore, as project operation emissions would be well below these limits, project operation would not result in regional emissions that would exceed the NAAQS or CAAQS or contribute to existing violations. Therefore, the project would result in a **less than significant** impact.

5.3 Cumulatively Considerable Net Increase of Criteria Pollutants

The project would not have a significant direct impact on air quality with regard to emissions of PM_{10} , $PM_{2.5}$, NO_X or VOC. However, per County guidelines, a project may still have a cumulatively considerable impact on air quality if the emissions, in combination with the emissions of concern from other proposed projects are in excess of the SLTs.

Short-term emissions associated with construction generally result in localized impacts. As shown in Table 6, should all projects proposed within one mile of the project site be constructed simultaneously, total construction emissions would be less than the project-level SLTs. It should be noted that although construction activities from cumulative projects may overlap, it is unlikely that all would occur at the same time and that the maximum daily emissions associated with each project would occur on the same day. Further, any cumulative projects would also need to comply with SDAPCD Rules for dust control and construction equipment, which would further reduce the likelihood of a cumulatively considerable construction air quality impact. Therefore, project construction is not anticipated to result in a cumulatively significant impact on air quality.

Additionally, because the project would not conflict or obstruct with implementation of the RAQS, would not result in operational emissions that exceed the County's screening-level thresholds, and would not result in a cumulatively considerable net increase of CO, cumulative impacts due to project operation would be **less than significant**.

5.4 Impacts to Sensitive Receptors

To assess the potential impacts to sensitive receptors screening methods provided by the County's Air Quality Guidelines were used to evaluate localized CO and DPM impacts. As the project would not result in a CO hot spot, impacts due to localized CO concentrations would be less than significant. Sensitive receptors would be exposed to concentrations of DPM due to construction exhaust emissions. However, as calculated in this analysis, the excess cancer risk would be less than the County's screening threshold of 1 in a million without implementation of T-BACT, and impacts to sensitive receptors would be **less than significant**.

5.5 Odor Impacts

Exposure to odors associated with project construction would be short term and temporary in nature. The project does not contain land uses typically associated with emitting objectionable odors during operation. Odors may be associated with animals and animal waste; however, animals would be cared for and offices and enclosures such as cages, runs, and kennels would be readily cleaned and disinfected. Animals in the livestock area would be cleaned daily. All excrement and soiled bedding would be removed and placed in covered dumpsters. With proper animal care and facility cleaning, the proposed facility would not be a significant source of odors. Impacts related to objectionable odors would be **less than significant**.

6.0 References Cited

California Air Pollution Control Officers Association

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7.0 List of Preparers and Persons and Organizations Contacted

The following is a list of preparers, persons, and organizations involved with the air quality assessment.

RECON Environmental, Inc.

Jessica Fleming, County-approved Air Quality Consultant Michael Page, AICP, Principal Environmental Planner Morgan Weintraub, Environmental Analyst Stacey Higgins, Senior Production Specialist Frank McDermott, GIS Specialist

ATTACHMENTS

ATTACHMENT 1

CalEEMod Output – Project

9591 South County Animal Shelter

San Diego County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	24.00	1000sqft	4.73	24,000.00	0
Parking Lot	1.50	Acre	1.50	65,340.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (Ib/MWhr)	449.3	CH4 Intensity (Ib/MWhr)	0.018	N2O Intensity (Ib/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2

9591 South County Animal Shelter - San Diego County APCD Air District, Summer

Project Characteristics - Energy intensity factors updated based on SDG&E renewable procurement (449.3, 0.018, 0.004)

Land Use - 6.23 acres

Construction Phase - Architectural coatings simultaneous with last half of building construction

Architectural Coating - SDAPCD Rule 67.0.1

Vehicle Trips - 8.8 mile trip length 21.5 trips/ksf Area Coating - SDAPCD Rule 67.0.1 Energy Use -

Water And Wastewater - CalGreen requires 20% decrease in indoor water use that is not included in model (3,412,487.96 gallons)

Energy Mitigation - Zero net energy

Waste Mitigation -

Mobile Land Use Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	150
tblAreaCoating	Area_EF_Nonresidential_Interior	250	10
tblAreaCoating	Area_EF_Parking	250	100
tblConstructionPhase	NumDays	20.00	115.00
tblConstructionPhase	PhaseEndDate	12/23/2022	10/28/2022
tblConstructionPhase	PhaseStartDate	11/26/2022	5/23/2022
tblLandUse	LotAcreage	0.55	4.73
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	449.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004
tblVehicleTrips	CC_TL	7.30	8.80
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CNW_TL	7.30	8.80
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CW_TL	9.50	8.80
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	ST_TR	2.46	21.50
tblVehicleTrips	SU_TR	1.05	21.50
tblVehicleTrips	WD_TR	11.03	21.50
tblWater	IndoorWaterUseRate	4,265,609.95	3,415,487.96

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	со	SO2	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/d	day							lb/c	lay		
2021	3.9504	40.5376	21.6317	0.0395	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	3,832.256 2	3,832.256 2	1.1962	0.0000	3,862.161 2
2022	4.4247	18.5537	19.5815	0.0372	0.4466	0.8958	1.3424	0.1207	0.8477	0.9684	0.0000	3,598.217 4	3,598.217 4	0.7172	0.0000	3,614.954 6
Maximum	4.4247	40.5376	21.6317	0.0395	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	3,832.256 2	3,832.256 2	1.1962	0.0000	3,862.161 2

Mitigated Construction

	ROG	NOx	СО	SO2	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		
2021	3.9504	40.5375	21.6317	0.0395	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	3,832.256 2	3,832.256 2	1.1962	0.0000	3,862.161 2
2022	4.4247	18.5537	19.5815	0.0372	0.4466	0.8958	1.3424	0.1207	0.8477	0.9684	0.0000	3,598.217 4	3,598.217 4	0.7172	0.0000	3,614.954 6
Maximum	4.4247	40.5375	21.6317	0.0395	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	3,832.256 2	3,832.256 2	1.1962	0.0000	3,862.161 2
	ROG	NOx	со	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/d	day		
Area	0.5694	2.0000e- 005	2.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		5.5800e- 003	5.5800e- 003	1.0000e- 005		5.9500e- 003
Energy	0.0143	0.1302	0.1093	7.8000e- 004		9.8900e- 003	9.8900e- 003		9.8900e- 003	9.8900e- 003		156.1837	156.1837	2.9900e- 003	2.8600e- 003	157.1118
Mobile	0.7639	2.7799	8.7930	0.0320	2.8665	0.0238	2.8902	0.7661	0.0221	0.7882		3,253.920 2	3,253.920 2	0.1589		3,257.893 2
Total	1.3476	2.9100	8.9049	0.0328	2.8665	0.0337	2.9001	0.7661	0.0320	0.7981		3,410.109 5	3,410.109 5	0.1619	2.8600e- 003	3,415.011 0

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/d	day		
Area	0.5694	2.0000e- 005	2.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		5.5800e- 003	5.5800e- 003	1.0000e- 005		5.9500e- 003
Energy	0.0143	0.1302	0.1093	7.8000e- 004		9.8900e- 003	9.8900e- 003		9.8900e- 003	9.8900e- 003		156.1837	156.1837	2.9900e- 003	2.8600e- 003	157.1118
Mobile	0.7639	2.7799	8.7930	0.0320	2.8665	0.0238	2.8902	0.7661	0.0221	0.7882		3,253.920 2	3,253.920 2	0.1589		3,257.893 2
Total	1.3476	2.9100	8.9049	0.0328	2.8665	0.0337	2.9001	0.7661	0.0320	0.7981		3,410.109 5	3,410.109 5	0.1619	2.8600e- 003	3,415.011 0

	ROG	NOx	со	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	11/1/2021	11/12/2021	5	10	
2	Grading	Grading	11/13/2021	12/10/2021	5	20	
3	Building Construction	Building Construction	12/11/2021	10/28/2022	5	230	
4	Paving	Paving	10/29/2022	11/25/2022	5	20	
5	Architectural Coating	Architectural Coating	5/23/2022	10/28/2022	5	115	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 36,000; Non-Residential Outdoor: 12,000; Striped Parking Area: 3,920 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	35.00	15.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

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/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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/e	day							lb/d	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	0.0623	0.0405	0.4774	1.4700e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		146.5994	146.5994	4.1800e- 003		146.7040
Total	0.0623	0.0405	0.4774	1.4700e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		146.5994	146.5994	4.1800e- 003		146.7040

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/o	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

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/o	day							lb/c	lay		
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	0.0623	0.0405	0.4774	1.4700e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		146.5994	146.5994	4.1800e- 003		146.7040
Total	0.0623	0.0405	0.4774	1.4700e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		146.5994	146.5994	4.1800e- 003		146.7040

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3.3 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive 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/o	day							lb/c	day		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671		2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346		2,871.928 5	2,871.928 5	0.9288		2,895.149 5

Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive 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/o	day							lb/c	lay		
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	0.0519	0.0337	0.3979	1.2300e- 003	0.1232	8.5000e- 004	0.1241	0.0327	7.8000e- 004	0.0335		122.1661	122.1661	3.4900e- 003		122.2533
Total	0.0519	0.0337	0.3979	1.2300e- 003	0.1232	8.5000e- 004	0.1241	0.0327	7.8000e- 004	0.0335		122.1661	122.1661	3.4900e- 003		122.2533

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3.3 Grading - 2021

Mitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					6.5523	0.0000	6.5523	3.3675	0.0000	3.3675			0.0000			0.0000
Off-Road	2.2903	24.7367	15.8575	0.0296		1.1599	1.1599		1.0671	1.0671	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5
Total	2.2903	24.7367	15.8575	0.0296	6.5523	1.1599	7.7123	3.3675	1.0671	4.4346	0.0000	2,871.928 5	2,871.928 5	0.9288		2,895.149 5

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/o	day							lb/c	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	0.0519	0.0337	0.3979	1.2300e- 003	0.1232	8.5000e- 004	0.1241	0.0327	7.8000e- 004	0.0335		122.1661	122.1661	3.4900e- 003		122.2533
Total	0.0519	0.0337	0.3979	1.2300e- 003	0.1232	8.5000e- 004	0.1241	0.0327	7.8000e- 004	0.0335		122.1661	122.1661	3.4900e- 003		122.2533

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3.4 Building Construction - 2021

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/e	day							lb/c	lay		
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013		2,553.363 9	2,553.363 9	0.6160		2,568.764 3

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/o	day							lb/c	lay		
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	0.0454	1.5274	0.3893	4.0600e- 003	0.1015	3.2100e- 003	0.1048	0.0292	3.0700e- 003	0.0323		437.0279	437.0279	0.0312		437.8086
Worker	0.1211	0.0787	0.9283	2.8600e- 003	0.2875	1.9900e- 003	0.2895	0.0763	1.8300e- 003	0.0781		285.0543	285.0543	8.1400e- 003		285.2577
Total	0.1664	1.6061	1.3176	6.9200e- 003	0.3891	5.2000e- 003	0.3943	0.1055	4.9000e- 003	0.1104		722.0822	722.0822	0.0394		723.0663

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3.4 Building Construction - 2021

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/e	day							lb/d	day		
Off-Road	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3
Total	1.9009	17.4321	16.5752	0.0269		0.9586	0.9586		0.9013	0.9013	0.0000	2,553.363 9	2,553.363 9	0.6160		2,568.764 3

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			<u>.</u>		lb/o	day							lb/c	lay		
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	0.0454	1.5274	0.3893	4.0600e- 003	0.1015	3.2100e- 003	0.1048	0.0292	3.0700e- 003	0.0323		437.0279	437.0279	0.0312		437.8086
Worker	0.1211	0.0787	0.9283	2.8600e- 003	0.2875	1.9900e- 003	0.2895	0.0763	1.8300e- 003	0.0781		285.0543	285.0543	8.1400e- 003		285.2577
Total	0.1664	1.6061	1.3176	6.9200e- 003	0.3891	5.2000e- 003	0.3943	0.1055	4.9000e- 003	0.1104		722.0822	722.0822	0.0394		723.0663

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3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/e	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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/o	day							lb/c	lay		
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	0.0422	1.4435	0.3687	4.0200e- 003	0.1015	2.7600e- 003	0.1043	0.0292	2.6400e- 003	0.0319		432.9207	432.9207	0.0303		433.6774
Worker	0.1145	0.0717	0.8632	2.7500e- 003	0.2875	1.9400e- 003	0.2895	0.0763	1.7900e- 003	0.0781		274.5959	274.5959	7.4600e- 003		274.7824
Total	0.1566	1.5152	1.2319	6.7700e- 003	0.3891	4.7000e- 003	0.3938	0.1055	4.4300e- 003	0.1099		707.5166	707.5166	0.0377		708.4598

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3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	day		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

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/o	day							lb/c	lay		
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	0.0422	1.4435	0.3687	4.0200e- 003	0.1015	2.7600e- 003	0.1043	0.0292	2.6400e- 003	0.0319		432.9207	432.9207	0.0303		433.6774
Worker	0.1145	0.0717	0.8632	2.7500e- 003	0.2875	1.9400e- 003	0.2895	0.0763	1.7900e- 003	0.0781		274.5959	274.5959	7.4600e- 003		274.7824
Total	0.1566	1.5152	1.2319	6.7700e- 003	0.3891	4.7000e- 003	0.3938	0.1055	4.4300e- 003	0.1099		707.5166	707.5166	0.0377		708.4598

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3.5 Paving - 2022

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.1965					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2993	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225		2,207.660 3	2,207.660 3	0.7140		2,225.510 4

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/o	day							lb/c	lay		
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	0.0491	0.0307	0.3700	1.1800e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.7000e- 004	0.0335		117.6840	117.6840	3.2000e- 003		117.7639
Total	0.0491	0.0307	0.3700	1.1800e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.7000e- 004	0.0335		117.6840	117.6840	3.2000e- 003		117.7639

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9591 South County Animal Shelter - San Diego County APCD Air District, Summer

3.5 Paving - 2022

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	1.1028	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4
Paving	0.1965					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.2993	11.1249	14.5805	0.0228		0.5679	0.5679		0.5225	0.5225	0.0000	2,207.660 3	2,207.660 3	0.7140		2,225.510 4

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive 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/e	day							lb/c	lay		
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	0.0491	0.0307	0.3700	1.1800e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.7000e- 004	0.0335		117.6840	117.6840	3.2000e- 003		117.7639
Total	0.0491	0.0307	0.3700	1.1800e- 003	0.1232	8.3000e- 004	0.1241	0.0327	7.7000e- 004	0.0335		117.6840	117.6840	3.2000e- 003		117.7639

3.6 Architectural Coating - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Archit. Coating	2.3344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062
Total	2.5390	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817		281.4481	281.4481	0.0183		281.9062

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
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	0.0229	0.0143	0.1727	5.5000e- 004	0.0575	3.9000e- 004	0.0579	0.0153	3.6000e- 004	0.0156		54.9192	54.9192	1.4900e- 003		54.9565
Total	0.0229	0.0143	0.1727	5.5000e- 004	0.0575	3.9000e- 004	0.0579	0.0153	3.6000e- 004	0.0156		54.9192	54.9192	1.4900e- 003		54.9565

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3.6 Architectural Coating - 2022

Mitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive 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/o	day							lb/c	lay		
Archit. Coating	2.3344					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2045	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062
Total	2.5390	1.4085	1.8136	2.9700e- 003		0.0817	0.0817		0.0817	0.0817	0.0000	281.4481	281.4481	0.0183		281.9062

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/	day							lb/c	lay		
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	0.0229	0.0143	0.1727	5.5000e- 004	0.0575	3.9000e- 004	0.0579	0.0153	3.6000e- 004	0.0156		54.9192	54.9192	1.4900e- 003		54.9565
Total	0.0229	0.0143	0.1727	5.5000e- 004	0.0575	3.9000e- 004	0.0579	0.0153	3.6000e- 004	0.0156		54.9192	54.9192	1.4900e- 003		54.9565

4.0 Operational Detail - Mobile

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9591 South County Animal Shelter - San Diego County APCD Air District, Summer

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/e	day							lb/c	lay		
Mitigated	0.7639	2.7799	8.7930	0.0320	2.8665	0.0238	2.8902	0.7661	0.0221	0.7882		3,253.920 2	3,253.920 2	0.1589		3,257.893 2
Unmitigated	0.7639	2.7799	8.7930	0.0320	2.8665	0.0238	2.8902	0.7661	0.0221	0.7882		3,253.920 2	3,253.920 2	0.1589		3,257.893 2

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	516.00	516.00	516.00	1,351,957	1,351,957
Parking Lot	0.00	0.00	0.00		
Total	516.00	516.00	516.00	1,351,957	1,351,957

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
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
General Office Building	8.80	8.80	8.80	33.00	48.00	19.00	77	19	4
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

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9591 South County Animal Shelter - San Diego County APCD Air District, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Office Building	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Parking Lot	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	СО	SO2	Fugitive 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/e	day							lb/c	day		
	0.0143	0.1302	0.1093	7.8000e- 004		9.8900e- 003	9.8900e- 003		9.8900e- 003	9.8900e- 003		156.1837	156.1837	2.9900e- 003	2.8600e- 003	157.1118
NaturalGas Unmitigated	0.0143	0.1302	0.1093	7.8000e- 004		9.8900e- 003	9.8900e- 003		9.8900e- 003	9.8900e- 003		156.1837	156.1837	2.9900e- 003	2.8600e- 003	157.1118

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9591 South County Animal Shelter - San Diego County APCD Air District, Summer

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s 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/c	lay		
General Office Building	1327.56	0.0143	0.1302	0.1093	7.8000e- 004		9.8900e- 003	9.8900e- 003		9.8900e- 003	9.8900e- 003		156.1837	156.1837	2.9900e- 003	2.8600e- 003	157.1118
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
Total		0.0143	0.1302	0.1093	7.8000e- 004		9.8900e- 003	9.8900e- 003		9.8900e- 003	9.8900e- 003		156.1837	156.1837	2.9900e- 003	2.8600e- 003	157.1118

Mitigated

	NaturalGa s 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/e	day							lb/c	lay		
General Office Building	1.32756	0.0143	0.1302	0.1093	7.8000e- 004		9.8900e- 003	9.8900e- 003		9.8900e- 003	9.8900e- 003		156.1837	156.1837	2.9900e- 003	2.8600e- 003	157.1118
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
Total		0.0143	0.1302	0.1093	7.8000e- 004		9.8900e- 003	9.8900e- 003		9.8900e- 003	9.8900e- 003		156.1837	156.1837	2.9900e- 003	2.8600e- 003	157.1118

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	со	SO2	Fugitive 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/d	day							lb/c	day		
Mitigated	0.5694	2.0000e- 005	2.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		5.5800e- 003	5.5800e- 003	1.0000e- 005		5.9500e- 003
Unmitigated	0.5694	2.0000e- 005	2.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		5.5800e- 003	5.5800e- 003	1.0000e- 005		5.9500e- 003

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/e	day							lb/d	day		
Architectural Coating	0.0324					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.5367					0.0000	0.0000	1 1 1 1 1	0.0000	0.0000			0.0000	 		0.0000
Landscaping	2.4000e- 004	2.0000e- 005	2.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005	1 1 1 1 1	1.0000e- 005	1.0000e- 005		5.5800e- 003	5.5800e- 003	1.0000e- 005		5.9500e- 003
Total	0.5694	2.0000e- 005	2.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		5.5800e- 003	5.5800e- 003	1.0000e- 005		5.9500e- 003

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	со	SO2	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/d	day							lb/d	lay		
Architectural Coating	0.0324					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	0.5367					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.4000e- 004	2.0000e- 005	2.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		5.5800e- 003	5.5800e- 003	1.0000e- 005		5.9500e- 003
Total	0.5694	2.0000e- 005	2.6000e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005		5.5800e- 003	5.5800e- 003	1.0000e- 005		5.9500e- 003

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

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

9591 Cumulative Projects - San Diego County APCD Air District, Winter

9591 Cumulative Projects

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	23.78	1000sqft	2.16	23,780.00	0
Manufacturing	32.50	1000sqft	2.94	32,500.00	0
Unrefrigerated Warehouse-No Rail	45.90	1000sqft	4.59	45,900.00	0
Quality Restaurant	10.40	1000sqft	0.94	10,400.00	0
Single Family Housing	67.00	Dwelling Unit	13.00	120,600.00	192
Apartments Mid Rise	168.00	Dwelling Unit	7.00	168,000.00	480
Congregate Care (Assisted Living)	46.00	Dwelling Unit	2.00	46,000.00	132
Retirement Community	4.00	Dwelling Unit	0.80	4,000.00	11

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (Ib/MWhr)	449.3	CH4 Intensity (Ib/MWhr)	0.018	N2O Intensity (Ib/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

Project Characteristics - Energy intensity factors updated based on SDG&E renewable procurement (449.3, 0.018, 0.004)

Land Use - Walker Trails, Cornerstone, Village Run, Karl Strauss, Lantern Crest

Construction Phase - Architectural coatings simultaneous with last half of building construction

Demolition -

Architectural Coating - SDAPCD Rule 67.0.1

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblConstructionPhase	NumDays	35.00	250.00
tblConstructionPhase	PhaseEndDate	4/5/2024	12/29/2023
tblConstructionPhase	PhaseStartDate	2/17/2024	1/16/2023
tblLandUse	LotAcreage	0.55	2.16
tblLandUse	LotAcreage	0.75	2.94
tblLandUse	LotAcreage	1.05	4.59
tblLandUse	LotAcreage	0.24	0.94
tblLandUse	LotAcreage	21.75	13.00
tblLandUse	LotAcreage	4.42	7.00
tblLandUse	LotAcreage	2.88	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	449.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

2.0 Emissions Summary

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	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								
2021	4.2696	46.4503	31.3771	0.0636	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	6,159.953 0	6,159.953 0	1.9472	0.0000	6,208.632 8
2022	3.6992	38.8895	29.5042	0.0636	8.8376	1.6360	10.4736	3.6401	1.5051	5.1452	0.0000	6,158.715 7	6,158.715 7	1.9482	0.0000	6,207.421 5
2023	26.5977	19.9525	25.0773	0.0616	2.5579	0.7899	3.3478	0.6860	0.7472	1.4332	0.0000	6,099.351 4	6,099.351 4	0.7700	0.0000	6,118.6004
2024	1.0386	9.5535	14.9260	0.0238	0.1232	0.4693	0.5925	0.0327	0.4318	0.4645	0.0000	2,309.624 0	2,309.624 0	0.7165	0.0000	2,327.536 4
Maximum	26.5977	46.4503	31.3771	0.0636	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	6,159.953 0	6,159.953 0	1.9482	0.0000	6,208.632 8

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	[lb/	′day							lb/	day		
2021	4.2696	46.4503	31.3771	0.0636	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	6,159.952 9	6,159.952 9	1.9472	0.0000	6,208.632 8
2022	3.6992	38.8895	29.5042	0.0636	8.8376	1.6360	10.4736	3.6401	1.5051	5.1452	0.0000	6,158.715 7	6,158.715 7	1.9482	0.0000	6,207.421 5
2023	26.5977	19.9525	25.0773	0.0616	2.5579	0.7899	3.3478	0.6860	0.7472	1.4332	0.0000	6,099.351 4	6,099.351 4	0.7700	0.0000	6,118.6004
2024	1.0386	9.5535	14.9260	0.0238	0.1232	0.4693	0.5925	0.0327	0.4318	0.4645	0.0000	2,309.624 0	2,309.624 0	0.7165	0.0000	2,327.536 4
Maximum	26.5977	46.4503	31.3771	0.0636	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	6,159.952 9	6,159.952 9	1.9482	0.0000	6,208.632 8
	ROG	NOx	со	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

	ROG	NOx	со	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

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive 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/e	day							lb/d	lay		
Area	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184		75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.717 1	7.3450	0.6226	11,645.866 8
Energy	0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9
Mobile	4.6261	17.6323	51.9881	0.1786	16.7612	0.1417	16.9028	4.4793	0.1319	4.6113		18,180.87 10	18,180.87 10	0.9554		18,204.75 61
Total	454.9549	28.0448	614.9417	1.1653	16.7612	75.8873	92.6485	4.4793	75.8776	80.3569	7,914.943 3	23,552.80 63	31,467.74 96	8.3389	0.6594	31,872.72 98

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive 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/c	lay		
Area	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184		75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.717 1	7.3450	0.6226	11,645.866 8
Energy	0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9
Mobile	4.6261	17.6323	51.9881	0.1786	16.7612	0.1417	16.9028	4.4793	0.1319	4.6113		18,180.87 10	18,180.87 10	0.9554		18,204.75 61
Total	454.9549	28.0448	614.9417	1.1653	16.7612	75.8873	92.6485	4.4793	75.8776	80.3569	7,914.943 3	23,552.80 63	31,467.74 96	8.3389	0.6594	31,872.72 98

9591 Cumulative Projects - San Diego County APCD Air District, Winter

	ROG	NOx	со	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	11/1/2021	11/26/2021	5	20	
2	Grading	Grading	11/27/2021	1/28/2022	5	45	
3	Building Construction	Building Construction	1/29/2022	12/29/2023	5	500	
4	Paving	Paving	12/30/2023	2/16/2024	5	35	
5	Architectural Coating	Architectural Coating	1/16/2023	12/29/2023	5	250	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 685,665; Residential Outdoor: 228,555; Non-Residential Indoor: 168,870; Non-Residential Outdoor: 56,290; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

9591 Cumulative P	Projects - San Diego	County APCD A	ir District, Winter

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	226.00	49.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	45.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

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/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	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	0.0706	0.0454	0.4488	1.3800e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		137.6186	137.6186	3.9500e- 003		137.7174
Total	0.0706	0.0454	0.4488	1.3800e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		137.6186	137.6186	3.9500e- 003		137.7174

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/o	day							lb/d	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	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	0.0706	0.0454	0.4488	1.3800e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		137.6186	137.6186	3.9500e- 003		137.7174
Total	0.0706	0.0454	0.4488	1.3800e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		137.6186	137.6186	3.9500e- 003		137.7174

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.3 Grading - 2021

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/d	day							lb/c	lay		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	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	0.0785	0.0505	0.4987	1.5300e- 003	0.1643	1.1300e- 003	0.1654	0.0436	1.0500e- 003	0.0446		152.9095	152.9095	4.3900e- 003		153.0193
Total	0.0785	0.0505	0.4987	1.5300e- 003	0.1643	1.1300e- 003	0.1654	0.0436	1.0500e- 003	0.0446		152.9095	152.9095	4.3900e- 003		153.0193

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.3 Grading - 2021

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/d	day							lb/c	lay		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	lay		
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	0.0785	0.0505	0.4987	1.5300e- 003	0.1643	1.1300e- 003	0.1654	0.0436	1.0500e- 003	0.0446		152.9095	152.9095	4.3900e- 003		153.0193
Total	0.0785	0.0505	0.4987	1.5300e- 003	0.1643	1.1300e- 003	0.1654	0.0436	1.0500e- 003	0.0446		152.9095	152.9095	4.3900e- 003		153.0193

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	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	0.0743	0.0460	0.4627	1.4800e- 003	0.1643	1.1100e- 003	0.1654	0.0436	1.0200e- 003	0.0446		147.3051	147.3051	4.0200e- 003		147.4057
Total	0.0743	0.0460	0.4627	1.4800e- 003	0.1643	1.1100e- 003	0.1654	0.0436	1.0200e- 003	0.0446		147.3051	147.3051	4.0200e- 003		147.4057

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/d	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	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	0.0743	0.0460	0.4627	1.4800e- 003	0.1643	1.1100e- 003	0.1654	0.0436	1.0200e- 003	0.0446		147.3051	147.3051	4.0200e- 003		147.4057
Total	0.0743	0.0460	0.4627	1.4800e- 003	0.1643	1.1100e- 003	0.1654	0.0436	1.0200e- 003	0.0446		147.3051	147.3051	4.0200e- 003		147.4057

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	ROG	NOx	CO	SO2	Fugitive 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/c	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	0.1453	4.6995	1.3406	0.0128	0.3317	9.4000e- 003	0.3411	0.0955	8.9900e- 003	0.1045		1,377.402 8	1,377.402 8	0.1049		1,380.024 9
Worker	0.8401	0.5197	5.2285	0.0167	1.8565	0.0126	1.8691	0.4924	0.0116	0.5040		1,664.547 8	1,664.547 8	0.0455		1,665.684 0
Total	0.9854	5.2192	6.5691	0.0295	2.1883	0.0220	2.2102	0.5879	0.0205	0.6085		3,041.950 7	3,041.950 7	0.1503		3,045.708 9

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	ROG	NOx	со	SO2	Fugitive 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/c	lay		
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	0.1453	4.6995	1.3406	0.0128	0.3317	9.4000e- 003	0.3411	0.0955	8.9900e- 003	0.1045		1,377.402 8	1,377.402 8	0.1049		1,380.024 9
Worker	0.8401	0.5197	5.2285	0.0167	1.8565	0.0126	1.8691	0.4924	0.0116	0.5040		1,664.547 8	1,664.547 8	0.0455		1,665.684 0
Total	0.9854	5.2192	6.5691	0.0295	2.1883	0.0220	2.2102	0.5879	0.0205	0.6085		3,041.950 7	3,041.950 7	0.1503		3,045.708 9

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.4 Building Construction - 2023

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/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	CO	SO2	Fugitive 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/c	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	0.1122	3.6956	1.2109	0.0124	0.3317	4.6200e- 003	0.3363	0.0955	4.4100e- 003	0.0999		1,342.939 7	1,342.939 7	0.0955		1,345.326 4
Worker	0.7977	0.4745	4.8463	0.0161	1.8565	0.0123	1.8688	0.4924	0.0113	0.5038		1,600.975 4	1,600.975 4	0.0415		1,602.013 9
Total	0.9098	4.1701	6.0572	0.0285	2.1883	0.0169	2.2052	0.5879	0.0157	0.6037		2,943.915 1	2,943.915 1	0.1370		2,947.340 3

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/o	day							lb/d	day		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	CO	SO2	Fugitive 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/c	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	0.1122	3.6956	1.2109	0.0124	0.3317	4.6200e- 003	0.3363	0.0955	4.4100e- 003	0.0999		1,342.939 7	1,342.939 7	0.0955		1,345.326 4
Worker	0.7977	0.4745	4.8463	0.0161	1.8565	0.0123	1.8688	0.4924	0.0113	0.5038		1,600.975 4	1,600.975 4	0.0415		1,602.013 9
Total	0.9098	4.1701	6.0572	0.0285	2.1883	0.0169	2.2052	0.5879	0.0157	0.6037		2,943.915 1	2,943.915 1	0.1370		2,947.340 3

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/o	day							lb/c	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	lay		
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	0.0529	0.0315	0.3217	1.0700e- 003	0.1232	8.2000e- 004	0.1240	0.0327	7.5000e- 004	0.0334		106.2594	106.2594	2.7600e- 003		106.3284
Total	0.0529	0.0315	0.3217	1.0700e- 003	0.1232	8.2000e- 004	0.1240	0.0327	7.5000e- 004	0.0334		106.2594	106.2594	2.7600e- 003		106.3284

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	lay		
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	0.0529	0.0315	0.3217	1.0700e- 003	0.1232	8.2000e- 004	0.1240	0.0327	7.5000e- 004	0.0334		106.2594	106.2594	2.7600e- 003		106.3284
Total	0.0529	0.0315	0.3217	1.0700e- 003	0.1232	8.2000e- 004	0.1240	0.0327	7.5000e- 004	0.0334		106.2594	106.2594	2.7600e- 003		106.3284

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/o	day							lb/c	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	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	0.0504	0.0289	0.3003	1.0200e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		102.0768	102.0768	2.5300e- 003		102.1401
Total	0.0504	0.0289	0.3003	1.0200e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		102.0768	102.0768	2.5300e- 003		102.1401

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/c	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/d	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	0.0504	0.0289	0.3003	1.0200e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		102.0768	102.0768	2.5300e- 003		102.1401
Total	0.0504	0.0289	0.3003	1.0200e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		102.0768	102.0768	2.5300e- 003		102.1401

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive 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/d	day							lb/c	lay		
Archit. Coating	23.7646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	23.9563	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	lay		
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	0.1588	0.0945	0.9650	3.2000e- 003	0.3697	2.4500e- 003	0.3721	0.0981	2.2500e- 003	0.1003		318.7783	318.7783	8.2700e- 003		318.9851
Total	0.1588	0.0945	0.9650	3.2000e- 003	0.3697	2.4500e- 003	0.3721	0.0981	2.2500e- 003	0.1003		318.7783	318.7783	8.2700e- 003		318.9851

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive 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/d	day							lb/c	lay		
Archit. Coating	23.7646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	23.9563	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

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/o	day							lb/c	lay		
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	0.1588	0.0945	0.9650	3.2000e- 003	0.3697	2.4500e- 003	0.3721	0.0981	2.2500e- 003	0.1003		318.7783	318.7783	8.2700e- 003		318.9851
Total	0.1588	0.0945	0.9650	3.2000e- 003	0.3697	2.4500e- 003	0.3721	0.0981	2.2500e- 003	0.1003		318.7783	318.7783	8.2700e- 003		318.9851

4.0 Operational Detail - Mobile

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

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/e	day							lb/c	lay		
Mitigated	4.6261	17.6323	51.9881	0.1786	16.7612	0.1417	16.9028	4.4793	0.1319	4.6113		18,180.87 10	18,180.87 10	0.9554		18,204.75 61
Unmitigated	4.6261	17.6323	51.9881	0.1786	16.7612	0.1417	16.9028	4.4793	0.1319	4.6113		18,180.87 10	18,180.87 10	0.9554		18,204.75 61

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,117.20	1,073.52	984.48	3,117,991	3,117,991
Single Family Housing	637.84	663.97	577.54	1,807,289	1,807,289
Congregate Care (Assisted Living)	126.04	101.20	112.24	344,121	344,121
Manufacturing	124.15	48.43	20.15	287,499	287,499
Office Park	271.57	39.00	18.07	506,588	506,588
Quality Restaurant	935.48	981.34	750.46	1,086,056	1,086,056
Retirement Community	9.60	8.12	7.80	26,073	26,073
Unrefrigerated Warehouse-No Rail	77.11	77.11	77.11	225,129	225,129
Total	3,298.99	2,992.69	2,547.86	7,400,746	7,400,746

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	ie %
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
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Congregate Care (Assisted	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Manufacturing	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Office Park	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Retirement Community	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Single Family Housing	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Congregate Care (Assisted Living)	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Manufacturing	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Office Park	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Quality Restaurant	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Retirement Community	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Unrefrigerated Warehouse-No Rail	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

	ROG	NOx	со	SO2	Fugitive 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/e	day							lb/c	lay		
NaturalGas Mitigated	0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9
NaturalGas Unmitigated	0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9

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5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s 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/e	day		
Apartments Mid Rise	3419.26	0.0369	0.3151	0.1341	2.0100e- 003		0.0255	0.0255		0.0255	0.0255		402.2654	402.2654	7.7100e- 003	7.3700e- 003	404.6558
Congregate Care (Assisted Living)		0.0101	0.0863	0.0367	5.5000e- 004		6.9800e- 003	6.9800e- 003		6.9800e- 003	6.9800e- 003		110.1441	110.1441	2.1100e- 003	2.0200e- 003	110.7986
Manufacturing	1029.32	0.0111	0.1009	0.0848	6.1000e- 004		7.6700e- 003	7.6700e- 003		7.6700e- 003	7.6700e- 003		121.0959	121.0959	2.3200e- 003	2.2200e- 003	121.8155
Office Park	2106.97	0.0227	0.2066	0.1735	1.2400e- 003		0.0157	0.0157		0.0157	0.0157		247.8792	247.8792	4.7500e- 003	4.5400e- 003	249.3522
Quality Restaurant	4968.64	0.0536	0.4871	0.4092	2.9200e- 003		0.0370	0.0370		0.0370	0.0370		584.5454	584.5454	0.0112	0.0107	588.0190
Retirement Community	123.019	1.3300e- 003	0.0113	4.8200e- 003	7.0000e- 005	, 	9.2000e- 004	9.2000e- 004	,	9.2000e- 004	9.2000e- 004		14.4728	14.4728	2.8000e- 004	2.7000e- 004	14.5588
Single Family Housing	4292.94	0.0463	0.3956	0.1684	2.5300e- 003		0.0320	0.0320		0.0320	0.0320		505.0519	505.0519	9.6800e- 003	9.2600e- 003	508.0532
Unrefrigerated Warehouse-No Rail	210.008	2.2600e- 003	0.0206	0.0173	1.2000e- 004		1.5600e- 003	1.5600e- 003	r	1.5600e- 003	1.5600e- 003		24.7069	24.7069	4.7000e- 004	4.5000e- 004	24.8537
Total		0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s 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/e	day		
Apartments Mid Rise	3.41926	0.0369	0.3151	0.1341	2.0100e- 003		0.0255	0.0255		0.0255	0.0255		402.2654	402.2654	7.7100e- 003	7.3700e- 003	404.6558
Congregate Care (Assisted Living)		0.0101	0.0863	0.0367	5.5000e- 004		6.9800e- 003	6.9800e- 003	 	6.9800e- 003	6.9800e- 003		110.1441	110.1441	2.1100e- 003	2.0200e- 003	110.7986
Manufacturing	1.02932	0.0111	0.1009	0.0848	6.1000e- 004		7.6700e- 003	7.6700e- 003	 	7.6700e- 003	7.6700e- 003		121.0959	121.0959	2.3200e- 003	2.2200e- 003	121.8155
Office Park	2.10697	0.0227	0.2066	0.1735	1.2400e- 003		0.0157	0.0157	 	0.0157	0.0157		247.8792	247.8792	4.7500e- 003	4.5400e- 003	249.3522
Quality Restaurant	4.96864	0.0536	0.4871	0.4092	2.9200e- 003		0.0370	0.0370	 	0.0370	0.0370		584.5454	584.5454	0.0112	0.0107	588.0190
Retirement Community	0.123019	1.3300e- 003	0.0113	4.8200e- 003	7.0000e- 005		9.2000e- 004	9.2000e- 004		9.2000e- 004	9.2000e- 004		14.4728	14.4728	2.8000e- 004	2.7000e- 004	14.5588
Single Family Housing	4.29294	0.0463	0.3956	0.1684	2.5300e- 003		0.0320	0.0320		0.0320	0.0320		505.0519	505.0519	9.6800e- 003	9.2600e- 003	508.0532
Unrefrigerated Warehouse-No Rail	0.210008	2.2600e- 003	0.0206	0.0173	1.2000e- 004		1.5600e- 003	1.5600e- 003		1.5600e- 003	1.5600e- 003		24.7069	24.7069	4.7000e- 004	4.5000e- 004	24.8537
Total		0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9

6.0 Area Detail

6.1 Mitigation Measures Area

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

	ROG	NOx	со	SO2	Fugitive 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/e	day							lb/c	lay		
Mitigated	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184		75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.717 1	7.3450	0.6226	11,645.866 8
Unmitigated	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184	 	75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.717 1	7.3450	0.6226	11,645.866 8

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	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	3.6171					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000			
Consumer Products	9.6553					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000			
Hearth	436.1626	8.5178	538.3953	0.9754		75.4882	75.4882		75.4882	75.4882	7,914.943 3	3,319.411 8	11,234.355 0	7.3042	0.6226	11,602.485 4			
Landscaping	0.7096	0.2712	23.5296	1.2400e- 003		0.1302	0.1302		0.1302	0.1302		42.3620	42.3620	0.0408		43.3815			
Total	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184		75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.71 71	7.3450	0.6226	11,645.86 68			

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

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	3.6171					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000				
Consumer Products	9.6553					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000				
Hearth	436.1626	8.5178	538.3953	0.9754		75.4882	75.4882		75.4882	75.4882	7,914.943 3	3,319.4118	11,234.355 0	7.3042	0.6226	11,602.485 4				
Landscaping	0.7096	0.2712	23.5296	1.2400e- 003		0.1302	0.1302		0.1302	0.1302		42.3620	42.3620	0.0408		43.3815				
Total	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184		75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.71 71	7.3450	0.6226	11,645.86 68				

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

10.0 Stationary Equipment

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						
Equipment Type	Number					
11.0 Venetation						

11.0 Vegetation

ATTACHMENT 2

CalEEMod Output – Cumulative Projects

9591 Cumulative Projects - San Diego County APCD Air District, Winter

9591 Cumulative Projects

San Diego County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	23.78	1000sqft	2.16	23,780.00	0
Manufacturing	32.50	1000sqft	2.94	32,500.00	0
Unrefrigerated Warehouse-No Rail	45.90	1000sqft	4.59	45,900.00	0
Quality Restaurant	10.40	1000sqft	0.94	10,400.00	0
Single Family Housing	67.00	Dwelling Unit	13.00	120,600.00	192
Apartments Mid Rise	168.00	Dwelling Unit	7.00	168,000.00	480
Congregate Care (Assisted Living)	46.00	Dwelling Unit	2.00	46,000.00	132
Retirement Community	4.00	Dwelling Unit	0.80	4,000.00	11

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2023
Utility Company	San Diego Gas & Electric				
CO2 Intensity (Ib/MWhr)	449.3	CH4 Intensity (Ib/MWhr)	0.018	N2O Intensity (Ib/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

Project Characteristics - Energy intensity factors updated based on SDG&E renewable procurement (449.3, 0.018, 0.004)

Land Use - Walker Trails, Cornerstone, Village Run, Karl Strauss, Lantern Crest

Construction Phase - Architectural coatings simultaneous with last half of building construction

Demolition -

Architectural Coating - SDAPCD Rule 67.0.1

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	150.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblConstructionPhase	NumDays	35.00	250.00
tblConstructionPhase	PhaseEndDate	4/5/2024	12/29/2023
tblConstructionPhase	PhaseStartDate	2/17/2024	1/16/2023
tblLandUse	LotAcreage	0.55	2.16
tblLandUse	LotAcreage	0.75	2.94
tblLandUse	LotAcreage	1.05	4.59
tblLandUse	LotAcreage	0.24	0.94
tblLandUse	LotAcreage	21.75	13.00
tblLandUse	LotAcreage	4.42	7.00
tblLandUse	LotAcreage	2.88	2.00
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.018
tblProjectCharacteristics	CO2IntensityFactor	720.49	449.3
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.004

2.0 Emissions Summary

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	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							
2021	4.2696	46.4503	31.3771	0.0636	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	6,159.953 0	6,159.953 0	1.9472	0.0000	6,208.632 8				
2022	3.6992	38.8895	29.5042	0.0636	8.8376	1.6360	10.4736	3.6401	1.5051	5.1452	0.0000	6,158.715 7	6,158.715 7	1.9482	0.0000	6,207.421 5				
2023	26.5977	19.9525	25.0773	0.0616	2.5579	0.7899	3.3478	0.6860	0.7472	1.4332	0.0000	6,099.351 4	6,099.351 4	0.7700	0.0000	6,118.6004				
2024	1.0386	9.5535	14.9260	0.0238	0.1232	0.4693	0.5925	0.0327	0.4318	0.4645	0.0000	2,309.624 0	2,309.624 0	0.7165	0.0000	2,327.536 4				
Maximum	26.5977	46.4503	31.3771	0.0636	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	6,159.953 0	6,159.953 0	1.9482	0.0000	6,208.632 8				

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Tota	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Year	[lb/	′day					lb/day								
2021	4.2696	46.4503	31.3771	0.0636	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	6,159.952 9	6,159.952 9	1.9472	0.0000	6,208.632 8			
2022	3.6992	38.8895	29.5042	0.0636	8.8376	1.6360	10.4736	3.6401	1.5051	5.1452	0.0000	6,158.715 7	6,158.715 7	1.9482	0.0000	6,207.421 5			
2023	26.5977	19.9525	25.0773	0.0616	2.5579	0.7899	3.3478	0.6860	0.7472	1.4332	0.0000	6,099.351 4	6,099.351 4	0.7700	0.0000	6,118.6004			
2024	1.0386	9.5535	14.9260	0.0238	0.1232	0.4693	0.5925	0.0327	0.4318	0.4645	0.0000	2,309.624 0	2,309.624 0	0.7165	0.0000	2,327.536 4			
Maximum	26.5977	46.4503	31.3771	0.0636	18.2141	2.0455	20.2596	9.9699	1.8819	11.8517	0.0000	6,159.952 9	6,159.952 9	1.9482	0.0000	6,208.632 8			
	ROG	NOx	со	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			

	ROG	NOx	со	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

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive 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	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184		75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.717 1	7.3450	0.6226	11,645.866 8
Energy	0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9
Mobile	4.6261	17.6323	51.9881	0.1786	16.7612	0.1417	16.9028	4.4793	0.1319	4.6113		18,180.87 10	18,180.87 10	0.9554		18,204.75 61
Total	454.9549	28.0448	614.9417	1.1653	16.7612	75.8873	92.6485	4.4793	75.8776	80.3569	7,914.943 3	23,552.80 63	31,467.74 96	8.3389	0.6594	31,872.72 98

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive 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	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184		75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.717 1	7.3450	0.6226	11,645.866 8
Energy	0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9
Mobile	4.6261	17.6323	51.9881	0.1786	16.7612	0.1417	16.9028	4.4793	0.1319	4.6113		18,180.87 10	18,180.87 10	0.9554		18,204.75 61
Total	454.9549	28.0448	614.9417	1.1653	16.7612	75.8873	92.6485	4.4793	75.8776	80.3569	7,914.943 3	23,552.80 63	31,467.74 96	8.3389	0.6594	31,872.72 98

9591 Cumulative Projects - San Diego County APCD Air District, Winter

	ROG	NOx	со	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	11/1/2021	11/26/2021	5	20	
2	Grading	Grading	11/27/2021	1/28/2022	5	45	
3	Building Construction	Building Construction	1/29/2022	12/29/2023	5	500	
4	Paving	Paving	12/30/2023	2/16/2024	5	35	
5	Architectural Coating	Architectural Coating	1/16/2023	12/29/2023	5	250	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 685,665; Residential Outdoor: 228,555; Non-Residential Indoor: 168,870; Non-Residential Outdoor: 56,290; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

9591 Cumulative Press	ojects - San Diego	County APCD A	ir District, Winter

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	226.00	49.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	45.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

CalEEMod Version: CalEEMod.2016.3.2

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2021

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/d	day							lb/c	lay		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.656 9	3,685.656 9	1.1920		3,715.457 3

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	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	0.0706	0.0454	0.4488	1.3800e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		137.6186	137.6186	3.9500e- 003		137.7174
Total	0.0706	0.0454	0.4488	1.3800e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		137.6186	137.6186	3.9500e- 003		137.7174

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.2 Site Preparation - 2021

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/o	day							lb/d	day		
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.656 9	3,685.656 9	1.1920		3,715.457 3

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	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	0.0706	0.0454	0.4488	1.3800e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		137.6186	137.6186	3.9500e- 003		137.7174
Total	0.0706	0.0454	0.4488	1.3800e- 003	0.1479	1.0200e- 003	0.1489	0.0392	9.4000e- 004	0.0402		137.6186	137.6186	3.9500e- 003		137.7174

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.3 Grading - 2021

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/d	day							lb/c	lay		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.043 4	6,007.043 4	1.9428		6,055.613 4

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	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	0.0785	0.0505	0.4987	1.5300e- 003	0.1643	1.1300e- 003	0.1654	0.0436	1.0500e- 003	0.0446		152.9095	152.9095	4.3900e- 003		153.0193
Total	0.0785	0.0505	0.4987	1.5300e- 003	0.1643	1.1300e- 003	0.1654	0.0436	1.0500e- 003	0.0446		152.9095	152.9095	4.3900e- 003		153.0193

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.3 Grading - 2021

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/d	day							lb/c	lay		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.043 4	6,007.043 4	1.9428		6,055.613 4

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	lay		
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	0.0785	0.0505	0.4987	1.5300e- 003	0.1643	1.1300e- 003	0.1654	0.0436	1.0500e- 003	0.0446		152.9095	152.9095	4.3900e- 003		153.0193
Total	0.0785	0.0505	0.4987	1.5300e- 003	0.1643	1.1300e- 003	0.1654	0.0436	1.0500e- 003	0.0446		152.9095	152.9095	4.3900e- 003		153.0193

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/c	lay		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.410 5	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	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	0.0743	0.0460	0.4627	1.4800e- 003	0.1643	1.1100e- 003	0.1654	0.0436	1.0200e- 003	0.0446		147.3051	147.3051	4.0200e- 003		147.4057
Total	0.0743	0.0460	0.4627	1.4800e- 003	0.1643	1.1100e- 003	0.1654	0.0436	1.0200e- 003	0.0446		147.3051	147.3051	4.0200e- 003		147.4057

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.3 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/d	day		
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.015 8
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.410 5	6,011.410 5	1.9442		6,060.015 8

	ROG	NOx	CO	SO2	Fugitive 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/d	day							lb/c	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	0.0743	0.0460	0.4627	1.4800e- 003	0.1643	1.1100e- 003	0.1654	0.0436	1.0200e- 003	0.0446		147.3051	147.3051	4.0200e- 003		147.4057
Total	0.0743	0.0460	0.4627	1.4800e- 003	0.1643	1.1100e- 003	0.1654	0.0436	1.0200e- 003	0.0446		147.3051	147.3051	4.0200e- 003		147.4057

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/e	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	ROG	NOx	CO	SO2	Fugitive 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/c	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	0.1453	4.6995	1.3406	0.0128	0.3317	9.4000e- 003	0.3411	0.0955	8.9900e- 003	0.1045		1,377.402 8	1,377.402 8	0.1049		1,380.024 9
Worker	0.8401	0.5197	5.2285	0.0167	1.8565	0.0126	1.8691	0.4924	0.0116	0.5040		1,664.547 8	1,664.547 8	0.0455		1,665.684 0
Total	0.9854	5.2192	6.5691	0.0295	2.1883	0.0220	2.2102	0.5879	0.0205	0.6085		3,041.950 7	3,041.950 7	0.1503		3,045.708 9

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.4 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/o	day							lb/c	lay		
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

	ROG	NOx	со	SO2	Fugitive 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/c	lay		
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	0.1453	4.6995	1.3406	0.0128	0.3317	9.4000e- 003	0.3411	0.0955	8.9900e- 003	0.1045		1,377.402 8	1,377.402 8	0.1049		1,380.024 9
Worker	0.8401	0.5197	5.2285	0.0167	1.8565	0.0126	1.8691	0.4924	0.0116	0.5040		1,664.547 8	1,664.547 8	0.0455		1,665.684 0
Total	0.9854	5.2192	6.5691	0.0295	2.1883	0.0220	2.2102	0.5879	0.0205	0.6085		3,041.950 7	3,041.950 7	0.1503		3,045.708 9

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.4 Building Construction - 2023

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/d	day							lb/c	lay		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	CO	SO2	Fugitive 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/c	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	0.1122	3.6956	1.2109	0.0124	0.3317	4.6200e- 003	0.3363	0.0955	4.4100e- 003	0.0999		1,342.939 7	1,342.939 7	0.0955		1,345.326 4
Worker	0.7977	0.4745	4.8463	0.0161	1.8565	0.0123	1.8688	0.4924	0.0113	0.5038		1,600.975 4	1,600.975 4	0.0415		1,602.013 9
Total	0.9098	4.1701	6.0572	0.0285	2.1883	0.0169	2.2052	0.5879	0.0157	0.6037		2,943.915 1	2,943.915 1	0.1370		2,947.340 3

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/o	day							lb/d	day		
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

	ROG	NOx	CO	SO2	Fugitive 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/c	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	0.1122	3.6956	1.2109	0.0124	0.3317	4.6200e- 003	0.3363	0.0955	4.4100e- 003	0.0999		1,342.939 7	1,342.939 7	0.0955		1,345.326 4
Worker	0.7977	0.4745	4.8463	0.0161	1.8565	0.0123	1.8688	0.4924	0.0113	0.5038		1,600.975 4	1,600.975 4	0.0415		1,602.013 9
Total	0.9098	4.1701	6.0572	0.0285	2.1883	0.0169	2.2052	0.5879	0.0157	0.6037		2,943.915 1	2,943.915 1	0.1370		2,947.340 3

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/o	day							lb/c	day		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	lay		
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	0.0529	0.0315	0.3217	1.0700e- 003	0.1232	8.2000e- 004	0.1240	0.0327	7.5000e- 004	0.0334		106.2594	106.2594	2.7600e- 003		106.3284
Total	0.0529	0.0315	0.3217	1.0700e- 003	0.1232	8.2000e- 004	0.1240	0.0327	7.5000e- 004	0.0334		106.2594	106.2594	2.7600e- 003		106.3284

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.5 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/c	lay		
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.584 1	2,207.584 1	0.7140		2,225.433 6

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	lay		
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	0.0529	0.0315	0.3217	1.0700e- 003	0.1232	8.2000e- 004	0.1240	0.0327	7.5000e- 004	0.0334		106.2594	106.2594	2.7600e- 003		106.3284
Total	0.0529	0.0315	0.3217	1.0700e- 003	0.1232	8.2000e- 004	0.1240	0.0327	7.5000e- 004	0.0334		106.2594	106.2594	2.7600e- 003		106.3284

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive 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/o	day							lb/c	lay		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	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	0.0504	0.0289	0.3003	1.0200e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		102.0768	102.0768	2.5300e- 003		102.1401
Total	0.0504	0.0289	0.3003	1.0200e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		102.0768	102.0768	2.5300e- 003		102.1401

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive 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/d	day							lb/c	day		
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.547 2	2,207.547 2	0.7140		2,225.396 3

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/d	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	0.0504	0.0289	0.3003	1.0200e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		102.0768	102.0768	2.5300e- 003		102.1401
Total	0.0504	0.0289	0.3003	1.0200e- 003	0.1232	8.0000e- 004	0.1240	0.0327	7.4000e- 004	0.0334		102.0768	102.0768	2.5300e- 003		102.1401

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive 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/d	day							lb/c	lay		
Archit. Coating	23.7646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	23.9563	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

	ROG	NOx	CO	SO2	Fugitive 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/o	day							lb/c	lay		
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	0.1588	0.0945	0.9650	3.2000e- 003	0.3697	2.4500e- 003	0.3721	0.0981	2.2500e- 003	0.1003		318.7783	318.7783	8.2700e- 003		318.9851
Total	0.1588	0.0945	0.9650	3.2000e- 003	0.3697	2.4500e- 003	0.3721	0.0981	2.2500e- 003	0.1003		318.7783	318.7783	8.2700e- 003		318.9851

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

3.6 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	со	SO2	Fugitive 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/d	day							lb/c	lay		
Archit. Coating	23.7646					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	23.9563	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

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/o	day							lb/c	lay		
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	0.1588	0.0945	0.9650	3.2000e- 003	0.3697	2.4500e- 003	0.3721	0.0981	2.2500e- 003	0.1003		318.7783	318.7783	8.2700e- 003		318.9851
Total	0.1588	0.0945	0.9650	3.2000e- 003	0.3697	2.4500e- 003	0.3721	0.0981	2.2500e- 003	0.1003		318.7783	318.7783	8.2700e- 003		318.9851

4.0 Operational Detail - Mobile

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

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/e	day							lb/c	lay		
Mitigated	4.6261	17.6323	51.9881	0.1786	16.7612	0.1417	16.9028	4.4793	0.1319	4.6113		18,180.87 10	18,180.87 10	0.9554		18,204.75 61
Unmitigated	4.6261	17.6323	51.9881	0.1786	16.7612	0.1417	16.9028	4.4793	0.1319	4.6113		18,180.87 10	18,180.87 10	0.9554		18,204.75 61

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,117.20	1,073.52	984.48	3,117,991	3,117,991
Single Family Housing	637.84	663.97	577.54	1,807,289	1,807,289
Congregate Care (Assisted Living)	126.04	101.20	112.24	344,121	344,121
Manufacturing	124.15	48.43	20.15	287,499	287,499
Office Park	271.57	39.00	18.07	506,588	506,588
Quality Restaurant	935.48	981.34	750.46	1,086,056	1,086,056
Retirement Community	9.60	8.12	7.80	26,073	26,073
Unrefrigerated Warehouse-No Rail	77.11	77.11	77.11	225,129	225,129
Total	3,298.99	2,992.69	2,547.86	7,400,746	7,400,746

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	ie %
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
Apartments Mid Rise	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Congregate Care (Assisted	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Manufacturing	9.50	7.30	7.30	59.00	28.00	13.00	92	5	3
Office Park	9.50	7.30	7.30	33.00	48.00	19.00	82	15	3
Quality Restaurant	9.50	7.30	7.30	12.00	69.00	19.00	38	18	44
Retirement Community	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Single Family Housing	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Congregate Care (Assisted Living)	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Manufacturing	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Office Park	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Quality Restaurant	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Retirement Community	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056
Unrefrigerated Warehouse-No Rail	0.602700	0.040134	0.179939	0.104242	0.014985	0.005435	0.016642	0.024350	0.001934	0.001888	0.005938	0.000757	0.001056

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

	ROG	NOx	со	SO2	Fugitive 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/e	day							lb/c	lay		
NaturalGas Mitigated	0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9
NaturalGas Unmitigated	0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

<u>Unmitigated</u>

	NaturalGa s 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/e	day			
Apartments Mid Rise	3419.26	0.0369	0.3151	0.1341	2.0100e- 003		0.0255	0.0255		0.0255	0.0255		402.2654	402.2654	7.7100e- 003	7.3700e- 003	404.6558
Congregate Care (Assisted Living)		0.0101	0.0863	0.0367	5.5000e- 004		6.9800e- 003	6.9800e- 003	 	6.9800e- 003	6.9800e- 003		110.1441	110.1441	2.1100e- 003	2.0200e- 003	110.7986
Manufacturing	1029.32	0.0111	0.1009	0.0848	6.1000e- 004		7.6700e- 003	7.6700e- 003		7.6700e- 003	7.6700e- 003		121.0959	121.0959	2.3200e- 003	2.2200e- 003	121.8155
Office Park	2106.97	0.0227	0.2066	0.1735	1.2400e- 003		0.0157	0.0157		0.0157	0.0157		247.8792	247.8792	4.7500e- 003	4.5400e- 003	249.3522
Quality Restaurant	4968.64	0.0536	0.4871	0.4092	2.9200e- 003		0.0370	0.0370		0.0370	0.0370		584.5454	584.5454	0.0112	0.0107	588.0190
Retirement Community	123.019	1.3300e- 003	0.0113	4.8200e- 003	7.0000e- 005	, 	9.2000e- 004	9.2000e- 004	,	9.2000e- 004	9.2000e- 004		14.4728	14.4728	2.8000e- 004	2.7000e- 004	14.5588
Single Family Housing	4292.94	0.0463	0.3956	0.1684	2.5300e- 003		0.0320	0.0320		0.0320	0.0320		505.0519	505.0519	9.6800e- 003	9.2600e- 003	508.0532
Unrefrigerated Warehouse-No Rail	210.008	2.2600e- 003	0.0206	0.0173	1.2000e- 004		1.5600e- 003	1.5600e- 003	r	1.5600e- 003	1.5600e- 003		24.7069	24.7069	4.7000e- 004	4.5000e- 004	24.8537
Total		0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s 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/e	day		
Apartments Mid Rise	3.41926	0.0369	0.3151	0.1341	2.0100e- 003		0.0255	0.0255		0.0255	0.0255		402.2654	402.2654	7.7100e- 003	7.3700e- 003	404.6558
Congregate Care (Assisted Living)		0.0101	0.0863	0.0367	5.5000e- 004		6.9800e- 003	6.9800e- 003	 	6.9800e- 003	6.9800e- 003		110.1441	110.1441	2.1100e- 003	2.0200e- 003	110.7986
Manufacturing	1.02932	0.0111	0.1009	0.0848	6.1000e- 004		7.6700e- 003	7.6700e- 003	 	7.6700e- 003	7.6700e- 003		121.0959	121.0959	2.3200e- 003	2.2200e- 003	121.8155
Office Park	2.10697	0.0227	0.2066	0.1735	1.2400e- 003		0.0157	0.0157	 	0.0157	0.0157		247.8792	247.8792	4.7500e- 003	4.5400e- 003	249.3522
Quality Restaurant	4.96864	0.0536	0.4871	0.4092	2.9200e- 003		0.0370	0.0370	 	0.0370	0.0370		584.5454	584.5454	0.0112	0.0107	588.0190
Retirement Community	0.123019	1.3300e- 003	0.0113	4.8200e- 003	7.0000e- 005		9.2000e- 004	9.2000e- 004		9.2000e- 004	9.2000e- 004		14.4728	14.4728	2.8000e- 004	2.7000e- 004	14.5588
Single Family Housing	4.29294	0.0463	0.3956	0.1684	2.5300e- 003		0.0320	0.0320		0.0320	0.0320		505.0519	505.0519	9.6800e- 003	9.2600e- 003	508.0532
Unrefrigerated Warehouse-No Rail	0.210008	2.2600e- 003	0.0206	0.0173	1.2000e- 004		1.5600e- 003	1.5600e- 003		1.5600e- 003	1.5600e- 003		24.7069	24.7069	4.7000e- 004	4.5000e- 004	24.8537
Total		0.1843	1.6235	1.0287	0.0101		0.1273	0.1273		0.1273	0.1273		2,010.161 5	2,010.161 5	0.0385	0.0369	2,022.106 9

6.0 Area Detail

6.1 Mitigation Measures Area

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

	ROG	NOx	со	SO2	Fugitive 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/e	day							lb/c	lay		
Mitigated	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184		75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.717 1	7.3450	0.6226	11,645.866 8
Unmitigated	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184	 	75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.717 1	7.3450	0.6226	11,645.866 8

6.2 Area by SubCategory

<u>Unmitigated</u>

	ROG	NOx	CO	SO2	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/e	day							lb/c	lay		
Architectural Coating	3.6171					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.6553					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	436.1626	8.5178	538.3953	0.9754		75.4882	75.4882		75.4882	75.4882	7,914.943 3	3,319.411 8	11,234.355 0	7.3042	0.6226	11,602.485 4
Landscaping	0.7096	0.2712	23.5296	1.2400e- 003		0.1302	0.1302		0.1302	0.1302		42.3620	42.3620	0.0408		43.3815
Total	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184		75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.71 71	7.3450	0.6226	11,645.86 68

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

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	3.6171					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	9.6553					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	436.1626	8.5178	538.3953	0.9754		75.4882	75.4882		75.4882	75.4882	7,914.943 3	3,319.4118	11,234.355 0	7.3042	0.6226	11,602.485 4
Landscaping	0.7096	0.2712	23.5296	1.2400e- 003		0.1302	0.1302		0.1302	0.1302		42.3620	42.3620	0.0408		43.3815
Total	450.1445	8.7890	561.9249	0.9767		75.6184	75.6184		75.6184	75.6184	7,914.943 3	3,361.773 8	11,276.71 71	7.3450	0.6226	11,645.86 68

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

10.0 Stationary Equipment

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9591 Cumulative Projects - San Diego County APCD Air District, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
<u>Boilers</u>						
Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type	
User Defined Equipment						
Equipment Type	Number					
11.0 Venetation						

11.0 Vegetation

ATTACHMENT 3

$Health \ Risk \ Calculations - Construction$

Construction DPM Calculations

Annual PM Exhaust Generation Annual Tons/Year 0.12637	Pounds/year 252.74	Ibs/day 6.92E-01	lbs/hr 2.89E-02	g/day 314	sec/day 86,400	g/sec 3.64E-03
Max 1-hour concentration	6.03E-02 <mark>µg</mark>	/m ³				
Annualized average concentration (0.08)	4.83E-03 <mark>µg</mark>	/m ³				
Onsite Maximum Exposure	3rd Trimester	0<2	2<9	2<16	16<30	16-70
Cair	4.83E-03	4.83E-03	4.83E-03	4.83E-03	4.83E-03	4.83E-03
DBR	361	1090	861	745	335	290
A	1	1	1	1	1	1
EF	0.96	0.96	0.96	0.96	0.96	0.96
Dose-air	1.67E-06	5.05E-06	3.99E-06	3.45E-06	1.55E-06	1.34E-06
CPF	1.10	1.10	1.10	1.10	1.10	1.10
ASF	10	10	3	3	1	1
ED	0.25	1	1	1	1	1
AT	70	70	70	70	70	70
FAH	0.85	0.85	0.72	0.72	0.73	0.73
Risk in 1 mill	0.06	0.67	0.14	0.12	0.02	0.02
	5.00	5.00	5.00	5.00	5.00	5.00
Chronic Exposure	0.0010	0.0010	0.0010	0.0010	0.0010	0.0010
0-9	0.87	2.25				
0-30	0.87	3.25				
0-70	0.86	3.25				

AERSCREEN 11126 / AERMOD 1206 03/26/20 10:12:04 TITLE: SOUTH COUNTY ANIMAL SHELTER _____ _____ SOURCE EMISSION RATE:0.364E-02 g/s0.289E-01 lb/hrVOLUME HEIGHT:4.27 meters14.01 feet INITIAL LATERAL DIMENSION:250.00 meters820.21 feetINITIAL VERTICAL DIMENSION:100.00 meters328.08 feet RURAL OR URBAN: URBAN POPULATION: 10000 FLAGPOLE RECEPTOR HEIGHT: 0.46 meters 1.51 feet INITIAL PROBE DISTANCE = 5000. meters 16404. feet _____ BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES 25 meter receptor spacing: 538. meters - 5000. meters Zo ROUGHNESS 1-HR CONC DIST TEMPORAL SECTOR LENGTH (ug/m3) (m) PERIOD 1* 1.000 0.6033E-01 538.5 WIN * = worst case flow sector _____ _____ MIN/MAX TEMPERATURE: 250.0 / 310.0 (K) MINIMUM WIND SPEED: 0.5 m/s ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban DOMINANT CLIMATE TYPE: Average Moisture DOMINANT SEASON: Winter

ALBEDO: 0.35 BOWEN RATIO: 1.50 ROUGHNESS LENGTH: 1.000 (meters)

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR MO DY JDY HR

10 01 16 16 01

H0 U* W* DT/DZ ZICNV ZIMCH M-O LEN Z0 BOWEN ALBEDO REF WS -0.41 0.043 -9.000 0.020 -999. 21. 19.3 1.000 1.50 0.35 0.50

HT REF TA HT

10.0 310.0 2.0

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METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

YR MO DY JDY HR

10 01 16 16 01

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H0 U* W* DT/DZ ZICNV ZIMCH M-O LEN Z0 BOWEN ALBEDO REF WS -0.41 0.043 -9.000 0.020 -999. 21. 19.3 1.000 1.50 0.35 0.50

HT REF TA HT

10.0 310.0 2.0

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***************** AERSCREEN AUTOMATED DISTANCES ******************************** OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

 MAXIMUM
 MAXIMUM

 DIST
 1-HR CONC
 DIST
 1-HR CONC

 (m)
 (ug/m3)
 (m)
 (ug/m3)

 538.50
 0.6033E-01
 2775.00
 0.3076E-01

 550.00
 0.5974E-01
 2800.00
 0.3064E-01

 575.00
 0.5852E-01
 2825.00
 0.3051E-01

600.00	0.5739E-01	2850.00	0.3038E-01
625.00	0.5634E-01	2875.00	0.3026E-01
	0.5536E-01		0.3013E-01
650.00		2900.00	
675.00	0.5445E-01	2925.00	0.3001E-01
700.00	0.5359E-01	2950.00	0.2989E-01
725.00	0.5278E-01	2975.00	0.2976E-01
750.00	0.5201E-01	3000.00	0.2964E-01
775.00	0.5129E-01	3025.00	0.2952E-01
800.00	0.5060E-01	3050.00	0.2941E-01
825.00	0.4995E-01	3075.00	0.2929E-01
850.00	0.4933E-01	3100.00	0.2917E-01
875.00	0.4874E-01	3125.00	0.2906E-01
900.00	0.4817E-01	3150.00	0.2894E-01
925.00	0.4763E-01	3175.00	0.2883E-01
950.00	0.4711E-01	3200.00	0.2871E-01
975.00	0.4661E-01	3225.00	0.2860E-01
1000.00	0.4612E-01	3250.00	0.2849E-01
1025.00	0.4566E-01	3275.00	0.2838E-01
1050.00	0.4521E-01	3300.00	0.2827E-01
1075.00	0.4478E-01	3325.00	0.2816E-01
	0.4436E-01	3350.00	
1100.00			0.2805E-01
1125.00	0.4395E-01	3375.00	0.2794E-01
1150.00	0.4356E-01	3400.00	0.2784E-01
1175.00	0.4318E-01	3425.00	0.2773E-01
1200.00	0.4281E-01	3450.00	0.2763E-01
1225.00	0.4244E-01	3475.00	0.2752E-01
1250.00	0.4209E-01	3500.00	0.2742E-01
1275.00	0.4175E-01	3525.00	0.2731E-01
1300.00	0.4142E-01	3550.00	0.2721E-01
1325.00	0.4109E-01	3575.00	0.2711E-01
1350.00	0.4077E-01	3600.00	0.2701E-01
1375.00	0.4046E-01	3625.00	0.2691E-01
1400.00	0.4016E-01	3650.00	0.2681E-01
1400.00			
	0.3986E-01	3675.00	0.2671E-01
1450.00	0.3957E-01	3700.00	0.2661E-01
1475.00	0.3929E-01	3725.00	0.2652E-01
1500.00	0.3901E-01	3750.00	0.2642E-01
1525.00	0.3880E-01	3775.00	0.2633E-01
1550.00	0.3860E-01	3800.00	0.2623E-01
1575.00	0.3840E-01	3825.00	0.2614E-01
1600.00	0.3821E-01	3850.00	0.2604E-01
1625.00	0.3801E-01	3875.00	0.2595E-01
1650.00	0.3782E-01	3900.00	0.2586E-01
1675.00	0.3763E-01	3925.00	0.2577E-01
1700.00	0.3745E-01	3950.00	0.2567E-01
1725.00	0.3726E-01	3975.00	0.2558E-01
1750.00	0.3708E-01	4000.00	0.2549E-01
1775.00	0.3689E-01	4025.00	0.2541E-01
1800.00	0.3671E-01	4050.00	0.2532E-01
1825.00	0.3653E-01	4075.00	0.2523E-01
1850.00	0.3636E-01	4100.00	0.2514E-01
1875.00	0.3618E-01	4125.00	0.2505E-01
1900.00	0.3601E-01	4150.00	0.2497E-01
1925.00	0.3583E-01	4175.00	0.2488E-01
1950.00	0.3566E-01	4200.00	0.2480E-01

1075 00	0.05405.04	1005 00	
1975.00	0.3549E-01	4225.00	0.2471E-01
2000.00	0.3532E-01	4250.00	0.2463E-01
2025.00	0.3516E-01	4275.00	0.2455E-01
2050.00	0.3499E-01	4300.00	0.2446E-01
2075.00	0.3483E-01	4325.00	0.2438E-01
2100.00	0.3467E-01	4350.00	0.2430E-01
2125.00	0.3450E-01	4375.00	0.2422E-01
2150.00	0.3434E-01	4400.00	0.2414E-01
2175.00	0.3419E-01	4425.00	0.2406E-01
2200.00	0.3403E-01	4450.00	0.2398E-01
2225.00	0.3387E-01	4475.00	0.2390E-01
2250.00	0.3372E-01	4500.00	0.2382E-01
2275.00	0.3357E-01	4525.00	0.2374E-01
2300.00	0.3342E-01	4550.00	0.2366E-01
2325.00	0.3327E-01	4575.00	0.2359E-01
2350.00	0.3312E-01	4600.00	0.2351E-01
2375.00	0.3297E-01	4625.00	0.2343E-01
2400.00	0.3282E-01	4650.00	0.2336E-01
2425.00	0.3268E-01	4675.00	0.2328E-01
2450.00	0.3253E-01	4700.00	0.2321E-01
2475.00	0.3239E-01	4725.00	0.2313E-01
2500.00	0.3225E-01	4750.00	0.2306E-01
2525.00	0.3211E-01	4775.00	0.2299E-01
2550.00	0.3197E-01	4800.00	0.2291E-01
2575.00	0.3183E-01	4825.00	0.2284E-01
2600.00	0.3169E-01	4850.00	0.2277E-01
2625.00	0.3156E-01	4875.00	0.2270E-01
2650.00	0.3142E-01	4900.00	0.2263E-01
2675.00	0.3129E-01	4925.00	0.2256E-01
2700.00	0.3116E-01	4950.00	0.2249E-01
2725.00	0.3102E-01	4975.00	0.2242E-01
2750.00	0.3089E-01	5000.00	0.2235E-01

MAXIMUM SCALED SCALED SCALED SCALED 1-HOUR 3-HOUR 8-HOUR 24-HOUR ANNUAL CALCULATION CONC CONC CONC CONC PROCEDURE (ug/m3) (ug/m3) (ug/m3) (ug/m3) ------

FLAT TERRAIN 0.6033E-01 0.6033E-01 0.5430E-01 0.3620E-01 0.6033E-02

DISTANCE FROM SOURCE 538.50 meters

IMPACT AT THE AMBIENT BOUNDARY 0.6033E-01 0.6033E-01 0.5430E-01 0.3620E-01 0.6033E-02

DISTANCE FROM SOURCE 538.50 meters