

APPENDIX F
AIR QUALITY ASSESSMENT

AIR QUALITY ASSESSMENT

Tierra Norte Planned Block Development – Overlay District City of Oceanside, CA

Prepared for:

**REC Consultants
2442 Second Avenue
San Diego, CA 92101**

Prepared by:

Ldn Consulting, Inc.
**42428 Chisolm Trail
Murrieta, CA 92562**

October 8, 2021

TABLE OF CONTENTS

TABLE OF CONTENTS	II
LIST OF FIGURES	III
LIST OF TABLES	III
APPENDIX	III
LIST OF ACRONYMS	IV
EXECUTIVE SUMMARY	V
1.0 INTRODUCTION	1
1.1 PURPOSE OF THIS STUDY	1
1.2 PROJECT LOCATION	1
1.3 PROJECT DESCRIPTION	1
2.0 EXISTING ENVIRONMENTAL SETTING	5
2.1 EXISTING SETTING	5
2.2 CLIMATE AND METEOROLOGY	5
2.3 REGULATORY STANDARDS.....	6
2.3.1 FEDERAL STANDARDS AND DEFINITIONS	6
2.3.2 STATE STANDARDS AND DEFINITIONS.....	7
2.3.3 REGIONAL STANDARDS.....	9
2.4 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) SIGNIFICANCE THRESHOLDS.....	10
2.5 SDAPCD RULE 20.2 – AIR QUALITY IMPACT ASSESSMENT SCREENING THRESHOLDS	11
2.6 LOCAL AIR QUALITY.....	12
3.0 METHODOLOGY	13
3.1 CONSTRUCTION EMISSIONS CALCULATIONS.....	13
3.2 CONSTRUCTION ASSUMPTIONS.....	14
3.3 OPERATIONAL EMISSIONS.....	15
3.4 MICRO SCALE OPERATIONAL EMISSIONS	16
3.5 ODOR IMPACTS	17
4.0 FINDINGS	18
4.1 CONSTRUCTION FINDINGS	18
4.2 HEALTH RISK.....	18
4.3 OPERATIONAL FINDINGS.....	19
4.4 MICRO-SCALE OPERATIONAL FINDINGS.....	20
4.5 ODOR IMPACT FINDINGS	21
4.6 SUMMARY OF FINDINGS.....	21
5.0 REFERENCES	22
6.0 CERTIFICATIONS	23

List of Figures

FIGURE 1-A: PROJECT VICINITY MAP	2
FIGURE 1-B: PROPOSED PBD OVERLAY DISTRICT	4

List of Tables

TABLE 2.1: AMBIENT AIR QUALITY STANDARDS	8
TABLE 2.2: SAN DIEGO AIR BASIN ATTAINMENT STATUS BY POLLUTANT.....	10
TABLE 2.3: SCREENING THRESHOLD FOR CRITERIA POLLUTANTS.....	11
TABLE 2.4: THREE-YEAR AMBIENT AIR QUALITY SUMMARY NEAR THE PROJECT SITE	12
TABLE 3.1: EXPECTED CONSTRUCTION EQUIPMENT.....	15
TABLE 3.2: INTERSECTIONS LOS E OR WORSE AND DELAY	17
TABLE 4.1: EXPECTED CONSTRUCTION EMISSIONS SUMMARY (LB/DAY)	18
TABLE 4.2: EXPECTED DAILY POLLUTANT GENERATION	20

Appendix

CALEEMOD 2016.3.2 – SUMMER, WINTER, ANNUAL	24
AERSCREEN.....	133
HEALTH RISK CALCULATIONS (TIER 4 CONSTRUCTION EQUIPMENT)	139
EMFAC 2014 MODEL RUN - 2026	141
CALINE 4 MODELING	143

LIST OF ACRONYMS

Air Quality Impact Assessments (AQIA)
Assembly Bill 32 (AB32)
California Air Resource Board (CARB)
California Ambient Air Quality Standards (CAAQS)
California Environmental Quality Act (CEQA)
Carbon Dioxide (CO₂)
Cubic Yards (CY)
Diesel Particulate Matter (DPM)
Environmental Protection Agency (EPA)
EPA Office of Air Quality Planning and Standards (OAQPS)
Hazardous Air Pollutants (HAPs)
Hydrogen Sulfide (H₂S)
International Residential Code (IRC)
Level of Service (LOS)
Low Carbon Fuel Standard (LCFS)
Methane (CH₄)
National ambient air quality standards (NAAQS)
Nitrous Oxide (N₂O)
North County Transit District (NCTD)
Reactive Organic Gas (ROG)
Regional Air Quality Strategy (RAQS)
San Diego Air Basin (SDAB)
San Diego Air Pollution Control District (SDAPCD)
South Coast Air Quality Management District (SCAQMD)
Specific Plan Area (SPA)
State Implementation Plan (SIP)
Toxic Air Contaminants (TACs)
Vehicle Miles Traveled (VMT)

EXECUTIVE SUMMARY

This air quality impact study has been completed to determine air quality impacts (if any) associated with the proposed development of a 25.6 acre Project site. The Project site consists of two separate parcels located at 4617 and 4665 North River Road (APNs 157-060-17 & 157-060-40) located along the south side of North River Road, 0.5 miles east of Douglas Drive in the North Valley Neighborhood in the City of Oceanside. The project is proposing a Planned Block Development (PBD) Overlay District consisting of a medium density residential in-fill development with a dwelling unit 'cap' with a maximum allowance of 400 dwelling units for the entire district overlay. A range of housing types can be provided as part of appropriately scaled medium density developments and may include small lot single-family homes, detached condominiums, townhomes, courtyard clusters, duplex homes, and garden apartments.

Based upon this analysis, no direct or cumulative air quality impacts are expected from construction. Therefore, mitigation measures for criteria pollutants and fugitive dust from construction are not required. It should be noted that the grading contractor will be required to follow BMPs for grading and comply with all SDAPCD rules and regulations.

A diesel particulate health risk analysis was conducted, and based on diesel exhaust emission quantities, the proposed Project would create significant diesel particulate health risk impacts during construction. As a design feature, the Project will utilize Tier IV construction equipment. Based on this, the project was found to produce a less than significant diesel particulate health risk impact.

The proposed Project was analyzed for both a winter and summer operational environment. Based on the models, the Project would not create any operation air quality impacts. Therefore, no mitigation measures will be necessary.

A localized Carbon Monoxide (CO) "Hot Spot" analysis was conducted at the identified worst-case intersection (College Drive/SR-76) identified in the Project traffic study. Using the CALINE4 source modeling software, it was determined that the proposed Project would generate a less than significant CO impact at this location. Since all other intersections had fewer trips, all intersections where Project trips are added can be considered less than significant as well as related to CO impacts.

Finally, odor impacts from construction operations would be expected though would be considered a short-term event and would not be considered a significant impact.

1.0 INTRODUCTION

1.1 Purpose of this Study

The purpose of this Air Quality study is to determine potential air quality impacts (if any) that may be created by construction, area or operational emissions (short term or long term) from the proposed Project. Should impacts be determined, the intent of this study would be to recommend suitable mitigation measures to mitigate those impacts to the extent feasible.

1.2 Project Location

The proposed Tierra Norte Planned Block Development Overlay District includes two (2) separate parcels located at 4617 and 4665 North River Road (APNs 157-060-17 & 157-060-40). These properties comprise approximately 25.6 acres of land located on the south side of North River Road generally between Avenida Descanso and Calle Montecito in the North Valley Neighborhood of Oceanside.

Parcel A, the eastern parcel, is approximately 9.7 total acres in size and currently developed with a small office/warehouse facility. The facility on site has historically (dating to the 1960's) served as a packing warehouse utilized for produce shipping and storage operations. The offices were added at a later date to support administrative functions. The property remains today as a remnant agricultural support use with a small office and very limited shipping/warehousing operations.

Parcel B, the western parcel, comprises approximately 15.9 total acres with roughly 75% of the land area in agricultural cultivation. Several small warehouse buildings used primarily for agricultural storage and a single-family dwelling occupy remaining portions of the property. A general Project vicinity map is shown in Figure 1-A.

1.3 Project Description

This proposed Project seeks a Planned Block Development Plan (PBDDP) for the Overlay District. The intended purpose of the PBD Planned Block Development Overlay District (PBD Overlay District) is to permit flexibility in land-use regulation and site development standards under control of the Planning Commission and City Council where flexibility or coordinated planning for a large site or a site under multiple ownership will enhance the potential for superior urban design.

Figure 1-A: Project Vicinity Map



Source: (Google, 2020)

The PBDP establishes the land use and development standards that will regulate future residential development proposals for the property. The PBDP also presents site planning and architectural design criteria intended to promote development of a well thought-out, highly livable residential community which is compatible with the surrounding neighborhood. Detailed site layouts and residential building designs will ultimately be identified as part of future development plans specifically proposed for the property. While a comprehensive Project may be proposed for the entire Overlay Area, it is recognized that each parcel exists under separate ownership and that multiple development plans may also be considered.

The PBDP Property is currently designated as Limited Industrial (LI) by the City of Oceanside General Plan and allows a Floor Area Ratio (FAR) of 1.0 and a Max Lot Coverage of 75%. The site is 25.6 acres, but 1.8 acres are part of dedicated rights-of-way which are not included in density or site intensity calculations. So, the technical gross site area is only 23.8 acres and could accommodate a facility consisting of roughly 1,000,000 SF.

The Project proposes to establish the PBD Overlay District on this property, amend its land use designation to Medium Density - C Residential (MDC-R) and rezone the property to Medium Density Residential C (RM-C) to allow for future residential development of the site.

A medium-density residential use on this property would complement the existing residential uses located to the north and west while providing a transition from light industrial uses located to the east. Infill residential development represents an opportunity to repurpose this underutilized site by providing future housing opportunities for the Oceanside community.

A range of housing types can be provided as part of appropriately scaled medium density developments. These residential building types may include small lot single-family homes, detached condominiums, townhomes, courtyard clusters, duplex homes and garden apartments, along with various other product configurations.

The MDC-R designation establishes a density range of 15.1 – 20.9 dwelling units per acre with a potential overall development range of between 359 and 497 dwelling units. However, this PBDP institutes a dwelling unit 'cap' with a maximum allowance of only 400 dwelling units for the entire overlay district. The proposed PBDP area is shown on Figure 1-B.

Figure 1-B: Proposed PBD Overlay District



Source: (Google Earth, 2020)

2.0 EXISTING ENVIRONMENTAL SETTING

2.1 Existing Setting

Parcel A, the eastern parcel, is approximately 9.7 total acres in size and currently developed with a small office/warehouse facility. The facility on site has historically (dating to the 1960's) served as a packing warehouse utilized for produce shipping and storage operations. The offices were added at a later date to support administrative functions. The property remains today as a remnant agricultural support use with a small office and very limited shipping/warehousing operations.

Parcel B, the western parcel, comprises approximately 15.9 total acres with roughly 75% of the land area in agricultural cultivation. Several small warehouse buildings used primarily for agricultural storage and a single-family dwelling occupy remaining portions of the property. The surrounding North Valley Neighborhood presents a diversity of land uses situated between Camp Pendleton on the north and the San Luis Rey River on the south. The neighborhood area is home to a number of multi-family developments and single-family subdivisions ranging from just a few years to nearly 50 years old.

Neighborhood serving commercial uses are located nearby along the North River Road corridor at intersections with Douglas Drive, College Boulevard, and Vandegrift Boulevard. The North River Village mixed-use development and San Luis Rey Bus Transit Center (SLRBTC) are also located approximately within one (1) mile of the Overlay Area at the southeast corner of the North River Road and Vandegrift Boulevard intersection.

2.2 Climate and Meteorology

Climate within the San Diego Air Basin (SDAB) area often varies dramatically over short geographical distances with cooler temperatures on the western coast gradually warming to the east as prevailing winds from the west heats up. Most of southern California is dominated by high-pressure systems for much of the year, which keeps San Diego mostly sunny and warm. Typically, during the winter months, the high pressure system drops to the south and brings cooler, moister weather from the north. It is common for inversion layers to develop within high-pressure areas, which mostly define pressure patterns over the SDAB. These inversions are caused when a thin layer of the atmosphere increases in temperature with height. An inversion acts like a lid preventing vertical mixing of air through convective overturning.

Meteorological trends within Oceanside produce daytime highs typically ranging between 65°F in the winter to approximately 78°F in the summer with August usually being the hottest

month. Median temperatures range from approximately 55°F in the winter to approximately 70°F in the summer. The average humidity is approximately 64% in the winter and about 72% in the summer (City-Data, 2020).

2.3 Regulatory Standards

2.3.1 Federal Standards and Definitions

The Federal Air Quality Standards were developed per the requirements of The Federal Clean Air Act, which is a federal law that was passed in 1970 and further amended in 1990. This law provides the basis for the national air pollution control effort. An important element of the act included the development of national ambient air quality standards (NAAQS) for major air pollutants.

The Clean Air Act established two types of air quality standards otherwise known as primary and secondary standards. **Primary Standards** set limits for the intention of protecting public health, which includes sensitive populations such as asthmatics, children and elderly. **Secondary Standards** set limits to protect public welfare to include the protection against decreased visibility, damage to animals, crops, vegetation and buildings.

The EPA Office of Air Quality Planning and Standards (OAQPS) has set NAAQS for principal pollutants, which are called "criteria" pollutants. These pollutants are defined below:

1. **Carbon Monoxide (CO):** *is a colorless, odorless, and tasteless gas and is produced from the partial combustion of carbon-containing compounds, notably in internal-combustion engines. Carbon monoxide usually forms when there is a reduced availability of oxygen present during the combustion process. Exposure to CO near the levels of the ambient air quality standards can lead to fatigue, headaches, confusion, and dizziness. CO interferes with the blood's ability to carry oxygen.*
2. **Lead (Pb):** *is a potent neurotoxin that accumulates in soft tissues and bone over time. The major sources of lead emissions have historically been motor vehicles (such as cars and trucks) and industrial sources. Because lead is only slowly excreted, exposures to small amounts of lead from a variety of sources can accumulate to harmful levels. Effects from inhalation of lead near the level of the ambient air quality standard include impaired blood formation and nerve conduction. Lead can adversely affect the nervous, reproductive, digestive, immune, and blood-forming systems. Symptoms can include fatigue, anxiety, short-term memory loss, depression, weakness in the extremities, and learning disabilities in children.*
3. **Nitrogen Dioxide (NO₂):** *is a reactive, oxidizing gas capable of damaging cells lining the respiratory tract and is one of the nitrogen oxides emitted from high-temperature combustion, such as those occurring in trucks, cars, power plants, home heaters, and gas stoves. In the presence of other air contaminants, NO₂ is usually visible as a reddish-brown air layer over urban areas. NO₂ along with other traffic-related pollutants is associated with respiratory symptoms, respiratory illness and respiratory impairment. Studies in animals have reported biochemical, structural, and cellular changes in the lung when exposed to NO₂ above the level of the current state air quality standard. Clinical studies of human subjects suggest that NO₂*

exposure to levels near the current standard may worsen the effect of allergens in allergic asthmatics, especially in children.

4. **Particulate Matter (PM₁₀ or PM_{2.5}):** is a complex mixture of tiny particles that consists of dry solid fragments, solid cores with liquid coatings, and small droplets of liquid. These particles vary in shape, size and chemical composition, and can be made up of multiple materials such as metal, soot, soil, and dust. PM₁₀ particles are 10 microns (µm) or less and PM_{2.5} particles are 2.5 (µm) or less. These particles can contribute significantly to regional haze and reduction of visibility in California. Exposure to PM levels exceeding current air quality standards increases the risk of allergies such as asthma and respiratory illness.
5. **Ozone (O₃):** is a highly oxidative unstable gas capable of damaging the linings of the respiratory tract. This pollutant forms in the atmosphere through reactions between chemicals directly emitted from vehicles, industrial plants, and many other sources. Exposure to ozone above ambient air quality standards can lead to human health effects such as lung inflammation, tissue damage and impaired lung functioning. Ozone can also damage materials such as rubber, fabrics and plastics.
6. **Sulfur Dioxide (SO₂):** is a gaseous compound of sulfur and oxygen and is formed when sulfur-containing fuel is burned by mobile sources, such as locomotives, ships, and off-road diesel equipment. SO₂ is also emitted from several industrial processes, such as petroleum refining and metal processing. Effects from SO₂ exposures at levels near the one-hour standard include bronchoconstriction accompanied by symptoms, which may include wheezing, shortness of breath and chest tightness, especially during exercise or physical activity. Children, the elderly, and people with asthma, cardiovascular disease or chronic lung disease (such as bronchitis or emphysema) are most susceptible to these symptoms. Continued exposure at elevated levels of SO₂ results in increased incidence of pulmonary symptoms and disease, decreased pulmonary function, and increased risk of mortality.

2.3.2 State Standards and Definitions

CARB sets the laws and regulations for air quality on the state level. The California Ambient Air Quality Standards (CAAQS) is similar to the NAAQS and also restricts four additional contaminants. Table 2.1 on the following page identifies both the NAAQS and CAAQS. The additional contaminants as regulated by the CAAQS are defined below:

1. **Visibility Reducing Particles:** Particles in the Air that obstruct the visibility.
2. **Sulfates:** are salts of Sulfuric Acid. Sulfates occur as microscopic particles (aerosols) resulting from fossil fuel and biomass combustion. They increase the acidity of the atmosphere and form acid rain.
3. **Hydrogen Sulfide (H₂S):** is a colorless, toxic and flammable gas with a recognizable smell of rotten eggs or flatulence. H₂S occurs naturally in crude petroleum, natural gas, volcanic gases, and hot springs. Usually, H₂S is formed from bacterial breakdown of organic matter. Exposure to low concentrations of hydrogen sulfide may cause irritation to the eyes, nose, or throat. It may also cause difficulty in breathing for some asthmatics. Brief exposures to high concentrations of hydrogen sulfide (greater than 500 Parts per Million (ppm)) can cause a loss of consciousness and possibly death.
4. **Vinyl Chloride:** also known as chloroethene and is a toxic, carcinogenic, colorless gas with a sweet odor. It is an industrial chemical mainly used to produce its polymer, polyvinyl chloride (PVC).

Table 2.1: Ambient Air Quality Standards

Ambient Air Quality Standards							
Pollutant	Average Time	California Standards ¹		Federal Standards ²			
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷	
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	-	Same as Primary Standard	Ultraviolet Photometry	
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)			
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	20 µg/m ³		-			
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	No Separate State Standard		35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis	
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³			15 µg/m ³
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m ³)	-	Non-Dispersive Infrared Photometry	
	1 hour	20 ppm (23 mg/m ³)		35 ppm (40 mg/m ³)			
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		-			-
Nitrogen Dioxide (NO ₂) ¹⁰	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m ³) ⁸	Same as Primary Standard	Gas Phase Chemiluminescence	
	1 Hour	0.18 ppm (339 µg/m ³)		0.100 ppm ⁸ (188/ µg/m ³)			
Sulfur Dioxide (SO ₂) ¹¹	Annual Arithmetic Mean	-	Ultraviolet Fluorescence	0.030 ppm ¹⁰ (for Certain Areas)	-	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method) ⁹	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm ¹⁰ (for Certain Areas) (See Footnote 9)			
	3 Hour	-		-			0.5 ppm (1300 µg/m ³)
	1 Hour	0.25 ppm (655 µg/m ³)		75 ppb (196 µg/m ³)			-
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	-	Same as Primary Standard	High Volume Sampler and Atomic Absorption	
	Calendar Quarter	-		1.5 µg/m ³			
	Rolling 3-Month Average	-		0.15 µg/m ³			
Visibility Reducing Particles	8 Hour	See footnote 14					
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography				
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence				
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography				

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and 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 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.

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

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

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

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

7. Reference method as described by the 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 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 standard of 15 µg/m³. The existing 24-hour PM₁₀ 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 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.

11. On June 2, 2010, a new 1-hour 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.

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

13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 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 ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

Source: (California Air Resources Board, 5/4/2016)

2.3.3 Regional Standards

The State of California has 35 specific air districts, which are each responsible for ensuring that the criteria pollutants are below the NAAQS and CAAQS. Air basins that exceed either the NAAQS or the CAAQS for any criteria pollutants are designated as “non-attainment areas” for that pollutant. Currently, there are 15 non-attainment areas for the federal ozone standard and two non-attainment areas for the PM_{2.5} standard and many areas are in non-attainment for PM₁₀ as well. California therefore created the California State Implementation Plan (SIP), which is designed to provide control measures needed to attain ambient air quality standards.

The San Diego Air Pollution Control District (SDAPCD) is the government agency which regulates sources of air pollution within the County. Therefore, the SDAPCD developed a Regional Air Quality Strategy (RAQS) to provide control measures to try to achieve attainment status for state ozone standards with control measures focused on Volatile Organic Compounds (VOCs) and oxides of nitrogen (NO_x). Currently, San Diego is in “non-attainment” status for federal and state O₃ and state PM₁₀ and PM_{2.5}. An attainment plan is available for O₃. The RAQS was adopted in 1992 and has been updated as recently as 2016 which was the latest update incorporating minor changes to the prior 2009 update.

The 2016 update mostly summarizes how the 2009 update has lowered NO_x and VOCs emissions which reduces ozone and clarifies and enhances emission reductions by introducing for discussion three new VOC and four new NO_x reduction measures. NO_x and VOCs are precursors to the formation of ozone in the atmosphere. The criteria pollutant standards are generally attained when each monitor within the region has had no exceedances during the previous three calendar years. A complete listing of the current attainment status for criteria pollutants with respect to both federal and state nonattainment status by pollutants for County is shown in Table 2.2 (SDAPCD, 2019).

The RAQS is largely based on population predictions by the San Diego Association of Governments (SANDAG). Projects that produce less growth than predicted by SANDAG would generally conform to the RAQS. Projects that create more growth than projected by SANDAG may create a significant impact if the Project produces unmitigable air quality emissions or if the Project produces cumulative impacts.

Table 2.2: San Diego Air Basin Attainment Status by Pollutant

Criteria Pollutant	Federal Designation	State Designation
Ozone (8-Hour)	Nonattainment	Nonattainment
Ozone (1-Hour)	Attainment *	Nonattainment
Carbon Monoxide	Attainment	Attainment
PM10	Unclassifiable **	Nonattainment
PM2.5	Attainment	Nonattainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Lead	Attainment	Attainment
Sulfates	No Federal Standard	Attainment
Hydrogen Sulfide	No Federal Standard	Unclassified
Visibility	No Federal Standard	Unclassified
<p><i>* The federal 1-hour standard of 12 pphm was in effect from 1979 through June 15, 2005. The revoked standard is referenced here because it was employed for such a long period and because this benchmark is addressed in State Implementation Plans.</i></p> <p><i>** At the time of designation, if the available data does not support a designation of attainment or nonattainment, the area is designated as unclassifiable.</i></p> <p>(SDAPCD, 2019)</p>		

2.4 California Environmental Quality Act (CEQA) Significance Thresholds

The California Environmental Quality Act has provided a checklist to identify the significance of air quality impacts. These guidelines are found in Appendix G of the CEQA guidelines and are as follows:

AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the Project:

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

2.5 SDAPCD Rule 20.2 – Air Quality Impact Assessment Screening Thresholds

The SDAPCD has established threshold in Rule 20.2 for the preparation of Air Quality Impact Assessments (AQIA). These screening criteria can be used to demonstrate that a Project’s total emissions would not result in a significant impact as defined by CEQA. Since SDAPCD does not have AQIA threshold for emissions of Volatile Organic Compounds (VOCs), the use of the threshold for VOCs is from the South Coast Air Quality Management District for the Coachella Valley. Should emissions be found to exceed these thresholds, additional modeling is required to demonstrate that the Project’s total air quality impacts are below the state and federal ambient air quality standards. These screening thresholds for construction and daily operations are shown in Table 2.3.

Table 2.3: Screening Threshold for Criteria Pollutants

Pollutant	Total Emissions (Pounds per Day)	Total Emissions (Tons per Year)
Construction Emissions		
Respirable Particulate Matter (PM ₁₀ and PM _{2.5})	100 and 55	15
Nitrogen Oxide (NO _x)	250	40
Sulfur Oxide (SO _x)	250	40
Carbon Monoxide (CO)	550	100
Volatile Organic Compounds (VOCs)	75	40
Reactive Organic Gases (ROG) SCAQMD	75	40
Operational Emissions		
Respirable Particulate Matter (PM ₁₀ and PM _{2.5})	100 and 55	15
Nitrogen Oxide (NO _x)	250	40
Sulfur Oxide (SO _x)	250	40
Carbon Monoxide (CO)	550	100
Lead and Lead Compounds	3.2	0.6
Volatile Organic Compounds (VOCs)	75	40
Reactive Organic Gases (ROG) SCAQMD	75	40

Non-Criteria pollutants such as Hazardous Air Pollutants (HAPs) or Toxic Air Contaminants (TACs) are also regulated by the SDAPCD. Rule 1200 (Toxic Air Contaminants - New Source Review) adopted on June 12, 1996, requires evaluation of potential health risks for any new, relocated, or modified emission unit which may increase emissions of one or more toxic air contaminants. The rule requires that projects that propose to increase cancer risk between 1 and 10 in one million need to implement toxics best available control technology (T-BACT) or impose the most effective emission limitation, emission control device or control technique to reduce the cancer risk. At no time shall the Project increase the cancer risk to over 10 in one million. Projects creating cancer risks less than one in one million are not required to implement T-BACT technology. This report assumes that Volatile Organic Compounds (VOC)

and Reactive Organic Gases (ROG) are essentially the same due to the fact that emissions generated from the Project represent non-methane organic compounds.

2.6 Local Air Quality

Criteria pollutants are measured continuously throughout the San Diego Air Basin. This data is used to track ambient air quality patterns throughout the County. As mentioned earlier, this data is also used to determine attainment status when compared to the NAAQS and CAAQS. The SDAPCD is responsible for monitoring and reporting monitoring data. The District operates 10 monitoring sites, which collect data on criteria pollutants. Four additional sites collect meteorological data, which is used by the District to assist with pollutant forecasting, data analysis and characterization of pollutant transport.

SDAPCD published the five-year air quality summary for all of the monitoring stations within the San Diego basin (SDAPCD, 2020). The proposed Project is closest to the Camp Pendleton Monitoring station. Table 2.4 identifies the criteria pollutants monitored at the aforementioned station.

Table 2.4: Three-Year Ambient Air Quality Summary near the Project Site

Pollutant	Closest Recorded Ambient Monitoring Site	Averaging Time	CAAQS	NAAQS	2015	2016	2017	2018
O ³ (ppm)	Camp Pendleton Monitoring Station	1 Hour	0.09 ppm	No Standard	0.09	0.08	0.09	0.08
		8 Hour	0.070 ppm	0.070 ppm	0.08	0.07	0.08	0.07
PM ₁₀ (µg/m ³)		24 Hour	50 µg/m ³	150 µg/m ³	30	-	-	N/A
		Annual Arithmetic Mean	20 µg/m ³	No Standard	19.4	-	-	N/A
PM _{2.5} (µg/m ³)		24 Hour	No Standard -	35 µg/m ³	29.4	-	-	N/A
		Annual Arithmetic Mean	12 µg/m ³	15 µg/m ³	8.6	-	-	N/A
NO ₂ (ppm)		Annual Arithmetic Mean	0.030 ppm	0.053 ppm	0.006	0.006	0.006	0.005
		1 Hour	0.18 ppm	0.100 ppm	0.060	0.072	0.063	0.048
CO (ppm)		1 Hour	20 ppm	35 ppm	3.1	-	-	N/A
		8 Hour	9 ppm	9 ppm	2.0	-	-	N/A

Notes: Days exceeded marked with indicate no data available

3.0 METHODOLOGY

3.1 Construction Emissions Calculations

Air Quality impacts related to construction and daily operations were calculated using the latest CalEEMod 2016.3.2 air quality model, which was developed by BREEZE Software for South Coast Air Quality Management District (SCAQMD) in 2017. The construction module in CalEEMod is used to calculate the emissions associated with the construction of the Project and uses methodologies presented in the US EPA AP-42 document with emphasis on Chapter 11.9. The CalEEMod input/output model is shown in **Attachment A** to this report.

The AERSCREEN dispersion model was used to determine the concentration for air pollutants at any location near the pollutant generator. Additionally, the model will predict the maximum exposure distance and concentrations. The AERSCREEN input/output file for the proposed Project is shown in **Attachment B**. The worst case exhaust emissions generated from the Project from construction equipment was utilized and calculated within the CalEEMod model.

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 following algorithms calculate this dose for exposure through the inhalation pathways. The worst case cancer risk dose calculation is defined in Equation 1 below (OEHA, 2015).

$$\text{Equation 1} \qquad \qquad \qquad \text{Dose}_{air} = C_{air} * (BR/BW) * A * EF * (1 \times 10^{-6})$$

- Dose_{air} = Dose through inhalation (mg/kg/d)
- C_{air} = Concentration in air (µg/m³) Annual average DPM concentration in µg/m³ - AERSCREEN predicts a 1-hr concentration and is corrected to an annual average by multiplying the 1-hr average by 0.08 (US EPA, 1992)
- BR/BW = Daily breathing rate normalized to body weight (L/kg BW-day). See Table I.2 for the daily breathing rate for each age range.
- A = Inhalation absorption factor (assumed to be 1)
- EF = Exposure frequency (unitless, days/365 days)
- 1x10⁻⁶ = Milligrams to micrograms conversion (10⁻³ mg/ µg), cubic meters to liters conversion (10⁻³ m³/l)

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. As described below, the excess cancer risk is calculated separately for each age grouping and then summed to yield

cancer risk for any given location. Specific factors as modeled are shown within the Project models which is provided as **Attachment C** to this report. The worst case cancer risk calculation is defined in Equation 2 below (OEHHA, 2015).

Equation 2 RISK_{inh-res} = DOSE_{air} × CPF × ASF × ED/AT × FAH

RISK _{inh-res}	=	Residential inhalation cancer risk
DOSE _{air}	=	Daily inhalation dose (mg/kg-day)
CPF	=	Inhalation cancer potency factor (mg/kg-day ⁻¹)
ASF	=	Age sensitivity factor for a specified age group (unitless)
ED	=	Exposure duration (in years) for a specified age group
AT	=	Averaging time for lifetime cancer risk (years)
FAH	=	Fraction of time spent at home (unitless)

Office of Environmental Health Hazard Assessment OEHHA recommends that an exposure duration (residency time) of 30 years be used to estimate individual cancer risk for the Maximally Exposed Individual Resident (MEIR). OEHHA also recommends that the 30-year exposure duration be used as the basis for public notification and risk reduction audits and plans.

Exposure durations of 9-years and 70-years are also recommended to be evaluated for the MEIR to show the range of cancer risk based on residency periods. If a facility is notifying the public regarding cancer risk, the 9-and 70-year cancer risk estimates are useful for people who have resided in their current residence for periods shorter and longer than 30 years.

Non-Cancer risks or risks defined as chronic or acute are also known with respect to DPM 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. RELs are published by the Office of Environmental Health Hazard Assessment (OEHHA, 2015). Diesel Exhaust has a REL of 5 µg/m³ and targets the respiratory system.

3.2 Construction Assumptions

Project construction dates were estimated based on a construction start date in 2024 with construction ending in 2026. CalEEMod was utilized for all construction calculations and has been manually updated to reflect SDAPCD Rule 67 VOC paint standards and to include Tier 4 construction equipment. Table 3.1 shows the expected timeframes for the construction of all Project infrastructure, facilities, and improvements, as well as the expected number of pieces of equipment. Also, it should be noted that the below would be conservative in the event construction began/ended at a later date as annual code updates and fleet improvements

typically have the effect of restricting and limiting emissions on construction equipment over time.

Table 3.1: Expected Construction Equipment

Equipment Identification	Proposed Start	Proposed Complete	Quantity
Demolition	1/1/2024	2/9/2024	
Concrete/Industrial Saws			1
Rubber Tired Dozers			3
Tractors/Loaders/Backhoes			2
Site Preparation	2/10/2024	3/8/2024	
Rubber Tired Dozers			3
Tractors/Loaders/Backhoes			4
Grading	3/9/2024	5/10/2024	
Excavators			2
Graders			1
Rubber Tired Dozers			1
Scrapers			2
Tractors/Loaders/Backhoes			2
Paving	5/11/2024	6/28/2024	
Pavers			2
Paving Equipment			2
Rollers			2
Building Construction	7/1/2024	3/6/2026	
Cranes			1
Forklifts			3
Generator Sets			1
Tractors/Loaders/Backhoes			3
Welders			1
Architectural Coating	11/28/2025	3/6/2026	
Air Compressors			1
This equipment list is based upon equipment inventory within CalEEMod. The quantity and types are based upon assumptions provided by the Project applicant.			

3.3 Operational Emissions

Once construction is completed the proposed Project would generate emissions from daily operations which would include sources such as Area, Energy, Mobile, Waste and Water uses, which are also calculated within CalEEMod. Area Sources include consumer products, landscaping and architectural coatings as part of regular maintenance. The largest energy

uses would be from electricity and natural gas. Finally, mobile or transportation related emissions are calculated in CalEEMod using EMFAC 2014 rates which are built into CalEEMod. The operational model is also included in CalEEMod **Attachment A** at the end of this report.

In the EMFAC model, the emission rates are multiplied with vehicle activity data provided by the regional transportation agencies to calculate the statewide or regional emission inventories. An emission inventory is based on the emission rate (e.g., grams per pollutant emitted over a mile) and vehicle activity (e.g., miles driven per day). Area sources originate from daily onsite uses, which require either burning fuel to generate energy (i.e., natural gas or the evaporation of organic gases such as from paints (architectural coatings)).

The Project traffic engineer estimated that there will be 3,200 daily trips which were broken down within the Project traffic study which utilizes SANDAG Traffic Generation methodologies (LOS Engineering, Inc., 2021). Consumer product emissions are generated by a wide range of product categories, including air fresheners, automotive products, household cleaners, and personal care products. Emissions associated with these products primarily depend on the increased population associated with residential development. Default Consumer Product emission factors were used in the CalEEMod model. Architectural coatings would be compliant with San Diego's Rule 67.

3.4 Micro Scale Operational Emissions

Air pollutant emissions related to Project-generated traffic have the potential to create new, or worsen existing, localized air quality violations with respect to carbon monoxide (CO). These increased carbon monoxide "Hot Spots" are determined through the utilization of the Institute of Transportation Studies (ITS) Transportation Project-Level Carbon Monoxide Protocol (University of California, Davis, 1997).

In the event Project traffic adds vehicular trips to an intersection that operates at Level of Service (LOS) E or F, or the addition of project trips re-classify an intersection from an acceptable LOS to LOS E or F, and when total intersection peak-hour trips exceed 3,000 vehicles, it is recommended that projects within the County of San Diego conduct a CO "Hot Spot" analysis (County of San Diego, 2007). The City of Oceanside also suggests using the County's screening thresholds to conduct CO hot spot analyses.

The ITS Transportation Project-Level Carbon Monoxide Protocol recommends running the EMFAC model to determine emission rates for the Project year as well as conduct dispersion modeling utilizing CALINE to determine worst-case emission concentrations. The EMFAC 2014 model which is consistent with CalEEMod 2016.3.2 is provided as **Attachment D**.

The proposed Project traffic study reported that the proposed Project, combined with existing traffic, would add trips to four intersections currently experiencing LOS of E or worse although only two intersections would generate more than 3,000 vehicles per hour: (1) Shopping Center Drive/North River Road and (2) College Drive/SR-76. Both intersections have. These intersections as identified within the proposed Project traffic study are shown in Table 12 (LOS Engineering, Inc., 2021). It should be noted that the proposed Project traffic study indicated that the proposed Project would mitigate these impacts to less than significant however the LOS will remain LOS E or worse.

Table 3.2: Intersections LOS E or Worse and Delay

Intersection	Peak Hour	Number of peak-hour Vehicles	LOS
Shopping Center Drive/North River Road	AM	4094	D
	PM	4354	E
College Drive/SR-76	AM	6239	E
	PM	6976	F

Micro-Scale operations during these conditions show that the proposed Project would add trips to these intersections and would have a potential to generate CO emissions in excess of the CAAQS. For purposes of this analysis, the CAAQS would be considered the most stringent air quality standard with CO limits of 9 parts per million (PPM) for the one-hour standard and 20 PPM CO for the 8-hour standard and are used within this analysis. Additionally, the CALINE model incorporated the highest 8-hour and 1-hour air quality data as collected at the nearby monitoring stations identified in Table 2.4 above, which in 2015 was 2.0 PPM and 3.1 PPM, respectively. The CALINE model are shown in **Attachment E** to this report.

3.5 Odor Impacts

Potential onsite odor generators would only be expected during short term construction activities such as paving and possibly painting however, the odors would be considered short term and would not have a potential to create offensive odors and would therefore not be considered an impact under CEQA.

4.0 FINDINGS

4.1 Construction Findings

Construction emissions in pounds per day from the construction activities and equipment identified in Section 3.2 above is shown in Table 4.1 below. Based on these numbers, the proposed Project would not exceed City standards, and would not require mitigation. It should be noted that, as a design feature, the proposed Project construction team will utilize Tier 4 diesel construction equipment and architectural coatings would conform to SDAPCD Rule 67 as indicated by the applicant.

Table 4.1: Expected Construction Emissions Summary (lb/day)

Year	ROG	NO _x	CO	SO ₂	PM ₁₀ (Dust)	PM ₁₀ (Exhaust)	PM ₁₀ (Total)	PM _{2.5} (Dust)	PM _{2.5} (Exhaust)	PM _{2.5} (Total)
2024	1.26	5.94	33.43	0.06	18.21	0.10	18.28	9.97	0.10	10.03
2025	71.92	6.08	27.14	0.07	3.13	0.07	3.20	0.84	0.07	0.90
2026	71.88	5.99	26.71	0.06	3.13	0.07	3.20	0.84	0.06	0.90
Significance Threshold (lb/day)	75	250	550	250	-	-	100	-	-	55
SDAPCD Impact?	No	No	No	No	-	-	No	-	-	No

Given these findings, Project emissions would not exceed SDAPCD air quality standards during construction. No mitigation measures will be necessary. Given the proposed Project has no direct impacts. The proposed Project seeks to modify the zoning from LI which has a FAR of 1.0. Under this classification, a project as large as 1,000,000 SF could potentially be allowed under the General Plan. Construction emissions for a project of this size and magnitude would likely be higher. Given this, the proposed Project would generally be considered less intense with respect to construction air quality emissions.

4.2 Health Risk

Based upon the air quality modeling and assuming Tier 4 equipment, the worst-case onsite PM₁₀ from onsite construction exhaust would cumulatively produce 0.0136 tons over the construction duration (795-calendar days) or an average of 0.000179 grams/second.

Utilizing the AERSCREEN dispersion model, we find that the peak maximum 1-hr concentration is 0.235 µg/m³ during the worst-case construction period. Converting the peak 1-hr concentration to an annual concentration by multiplying it by 0.08 (US EPA, 1992) yields an

annual concentration of $0.0188 \mu\text{g}/\text{m}^3$. Therefore, utilizing the risk equation identified above in Section 3.1, the worst case inhalation cancer risk is 7.07 per million exposed at 225 meters from the geometric centroid of the Project. It should be noted again that a Project design feature would be to utilize Tier 4 diesel and would therefore be a condition to the proposed Project. Given this, the construction scenario analyzed would be considered less than significant under CEQA and would be in compliance with the City's thresholds.

There are known acute and chronic health risks associated with diesel exhaust which are considered non-cancer risks. These risks are calculated based on methods identified in Section 3.1 of this report. From this we find that the hourly concentration of $0.235 \mu\text{g}/\text{m}^3$ divided by the REL of $5 \mu\text{g}/\text{m}^3$ yields a Health Hazard Index of 0.05, which is less than one. Therefore, no non-cancer risks are expected and all health risks are considered less than significant.

Furthermore, based on review of the Project traffic study, the two closest large cumulative projects with respect to the Tierra Norte Residential Project are the 1.) Villa Stora Residential project which would construct 420 homes and 2.) North River Farms Mixed Use project would construct up to 689 homes, 25,000 SF of commercial as well as a car wash and fast food establishment.

The Project health risk screening model predicted that diesel exhaust during construction would produce the highest concentrations roughly 225 meters (0.14 miles) from the Project centroid the chances for cumulative overlap could only be expected if a nearby project being constructed simultaneously produced air quality emissions that incrementally contribute to the proposed Project air quality emissions. The nearest projects are located at least one mile away which is far enough that these projects would not increase construction emissions beyond what is calculated within this analysis. Based on this a less than significant cumulative construction impact is expected.

4.3 Operational Findings

The proposed Project could add as many as 3,200 trips per day with an average trip distance of 5.33 miles. The CALFEEMOD 2016.3.2 Model was run for both the winter and summer scenarios assuming average winter and summer temperatures.

The expected daily pollutant generation can be calculated utilizing the product of the average daily miles traveled and the expected emissions inventory calculated by CALFEEMOD 2016.3.2. Based upon these calculations, no operational impacts are expected. The daily operational pollutants calculated are shown in Table 4.2.

Table 4.2: Expected Daily Pollutant Generation

	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Summer Scenario						
Area Source Emission Estimates (Lb/Day)	11.70	7.02	35.79	0.04	0.72	0.72
Energy Emission Estimates (Lb/Day)	0.17	1.45	0.62	0.01	0.12	0.12
Mobile Emission Estimates (Lb/Day)	3.52	12.97	33.48	0.12	11.78	3.21
Total (Lb/Day)	15.39	21.44	69.89	0.18	12.62	4.05
City Screening Level Thresholds	75	250	550	250	100	55
Significant?	No	No	No	No	No	No
Winter Scenario						
Area Source Emission Estimates (Lb/Day)	11.70	7.02	35.79	0.04	0.72	0.72
Energy Emission Estimates (Lb/Day)	0.17	1.45	0.62	0.01	0.12	0.12
Mobile Emission Estimates (Lb/Day)	3.39	13.17	33.73	0.12	11.78	3.21
Total (Lb/Day)	15.26	21.64	70.14	0.17	12.62	4.05
City Screening Level Thresholds	75	250	550	250	100	55
Significant?	No	No	No	No	No	No
Daily pollutant generation assumes trip distances within CalEEMod						

4.4 Micro-Scale Operational Findings

The proposed Project traffic impact study reported that the proposed Project would add Project related traffic to two intersections operating at LOS E or worse which have more than 3,000 peak hour vehicles during cumulative buildout of the area. Based on review of the data in Table 3.2 above, the worst-case intersection or the intersection having the most vehicles (College Drive & SR-76) is expected to operation with over 6,000 vehicles during the AM and PM peak-hours.

The CALINE4 model was set up to show a typical intersection with a North, East, South and West segment extending a typical 50-meters in every direction. Peak-Hour volumes were taken from the peak-hour turning movements within the proposed Project traffic impact study (LOS Engineering, Inc., 2021) for the worst-case intersection identified and CALINE4 was accordingly updated. Sensitive receptors were assumed to be roughly 25-feet to each roadway, which represents a worst-case environment.

Table 4.4 identifies both the 1-hour emission concentration predictions and the 8-hour average after utilizing the carbon dioxide persistence factor of 0.7. Based on model output

results, the CO impacts at this intersection would be less than significant. Based on this calculation, since all other remaining intersections have lower traffic volumes, we can conclude that all other remaining intersections would also have a less than significant impact.

Table 4.3: Expected Carbon Monoxide Hot Spot Concentration Levels

Intersection	Vehicles Per Hour	Predicted Concentration PPM	
	PM	1 HR	8HR
College Drive/SR-76 AM	6239	0.1	0.07
College Drive/SR-76 PM	6976	0.1	0.07
CAAQS - Significant Thresholds?		20	9
Significant		No	No
Emission levels taken from EMFAC 2014			
Traffic Volumes obtained from Project Traffic Study (LOS Engineering, Inc., 2021)			

4.5 Odor Impact Findings

Odor impacts from construction operations would be considered short term and would not be considered an impact.

4.6 Summary of Findings

Based upon findings in this report, no construction impacts are expected assuming the Project utilizes diesel construction equipment fitted with diesel particulate filters, catalytic converters and or selective catalytic reduction technology to conform to T-BACT requirements. Furthermore, no operational impacts are expected and no mitigation requirements will be necessary.

5.0 REFERENCES

- California Air Resources Board. (5/4/2016). *www.arb.ca.gov*. Retrieved from Ambient Air Quality Standards: <http://www.arb.ca.gov/research/aaqs/aaqs2.pdf>
- City-Data. (2020). *Oceanside City Data*. Retrieved 2015, from <http://www.city-data.com/city/Oceanside-California.html>
- County of San Diego. (2007, March 19). *AQ-Guidelines*. Retrieved from <https://www.sandiegocounty.gov/content/dam/sdc/pds/ProjectPlanning/docs/AQ-Guidelines.pdf>
- Google. (2020). Retrieved 2020, from maps.google.com
- LOS Engineering, Inc. (2021). *North River Road Residential Subdivision - Draft Vehicle Miles Traveled and Local Transportation Study*.
- OEHHA. (2015). *Risk Assessment Guidelines - Guidance Manual for Preparation of Health Risk Assessments*. OEHHA. Retrieved from http://oehha.ca.gov/air/hot_spots/2015/2015GuidanceManual.pdf
- OEHHA. (February 2015). *Air Toxics Hot Spots Program - Risk Assessment Guidelines - Guidance Manual for Preparation of Health Risk Assessments*. OEHHA.
- SDAPCD. (2019). Retrieved 2018, from <https://www.sdapcd.org/content/sdc/apcd/en/air-quality-planning/attainment-status.html>
- SDAPCD. (2020). *5 year air quality summary report*. Retrieved April 14, 2016, from https://www.sandiegocounty.gov/content/dam/sdc/apcd/monitoring/5-Year_Air_Quality.pdf
- University of California, Davis for California Department of Transportation. (1997, December). *COProtocol*. Retrieved from http://www.dot.ca.gov/hq/env/air/documents/COProtocol_searchable.pdf
- US EPA. (1992). *Screening Procedures for Estimating the Air Quality Impact of Stationary Sources Revised*. US EPA. Retrieved from http://www.epa.gov/scram001/guidance/guide/EPA-454R-92-019_OCR.pdf

6.0 CERTIFICATIONS

The contents of this report represent an accurate depiction of the air quality environment and impacts within and surrounding the proposed Tierra Norte project. This report was prepared utilizing the latest emission rates and reduction methodologies.

DRAFT

Jeremy Loudon, Principal
Ldn Consulting, Inc.
(760) 473-1253
jlouden@ldnconsulting.net

Date October 8, 2021

ATTACHMENT A

CALEEMOD 2016.3.2 – Summer, Winter, Annual

Tierra Norte PBD Overlay District - San Diego County, Summer

Tierra Norte PBD Overlay District
San Diego County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	400.00	Dwelling Unit	25.60	400,000.00	1144

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2026
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	408.95	CH4 Intensity (lb/MW hr)	0.017	N2O Intensity (lb/MW hr)	0.003

1.3 User Entered Comments & Non-Default Data

Tierra Norte PBD Overlay District - San Diego County, Summer

Project Characteristics - RPS 2026

Land Use - Site Acreage

Construction Phase - CS

Demolition -

Architectural Coating - Rule 67 Paint

Vehicle Trips - ADT per Traffic Study...Trip Length per EMFAC 2014 model run for the County of San Diego for 2026

Woodstoves - Natural Gas Fireplace for 400 units

Area Coating - Rule 67 Psint

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

Tierra Norte PBD Overlay District - San Diego County, Summer

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	35.00	71.00
tblFireplaces	NumberGas	220.00	400.00
tblFireplaces	NumberNoFireplace	40.00	0.00

Tierra Norte PBD Overlay District - San Diego County, Summer

tblFireplaces	NumberWood	140.00	0.00
tblLandUse	LotAcreage	25.00	25.60
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.017
tblProjectCharacteristics	CO2IntensityFactor	720.49	408.95
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	HO_TL	7.50	5.33
tblVehicleTrips	HO_TTP	39.60	39.00
tblVehicleTrips	HS_TL	7.30	5.33
tblVehicleTrips	HS_TTP	18.80	19.00
tblVehicleTrips	HW_TL	10.80	5.33
tblVehicleTrips	HW_TTP	41.60	42.00
tblVehicleTrips	ST_TR	5.67	8.00
tblVehicleTrips	SU_TR	4.84	8.00
tblVehicleTrips	WD_TR	5.81	8.00
tblWoodstoves	NumberCatalytic	20.00	0.00
tblWoodstoves	NumberNoncatalytic	20.00	0.00

2.0 Emissions Summary

Tierra Norte PBD Overlay District - San Diego County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	3.2770	32.4113	28.1512	0.0635	18.2141	1.3365	19.4444	9.9699	1.2296	11.1018	0.0000	6,154.716 1	6,154.716 1	1.9473	0.0000	6,203.397 6
2025	73.1006	17.3287	25.7366	0.0651	3.1334	0.6009	3.7343	0.8377	0.5680	1.4057	0.0000	6,438.880 9	6,438.880 9	0.7513	0.0000	6,457.664 6
2026	73.0573	17.2456	25.3119	0.0641	3.1334	0.6002	3.7336	0.8377	0.5674	1.4051	0.0000	6,343.809 2	6,343.809 2	0.7467	0.0000	6,362.477 2
Maximum	73.1006	32.4113	28.1512	0.0651	18.2141	1.3365	19.4444	9.9699	1.2296	11.1018	0.0000	6,438.880 9	6,438.880 9	1.9473	0.0000	6,457.664 6

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	1.2647	5.9414	33.4276	0.0635	18.2141	0.1026	18.2772	9.9699	0.1025	10.0329	0.0000	6,154.716 1	6,154.716 1	1.9473	0.0000	6,203.397 6
2025	71.9199	6.0770	27.1354	0.0651	3.1334	0.0666	3.2000	0.8377	0.0650	0.9027	0.0000	6,438.880 9	6,438.880 9	0.7513	0.0000	6,457.664 6
2026	71.8766	5.9939	26.7108	0.0641	3.1334	0.0659	3.1993	0.8377	0.0644	0.9021	0.0000	6,343.809 2	6,343.809 2	0.7467	0.0000	6,362.477 2
Maximum	71.9199	6.0770	33.4276	0.0651	18.2141	0.1026	18.2772	9.9699	0.1025	10.0329	0.0000	6,438.880 9	6,438.880 9	1.9473	0.0000	6,457.664 6

Tierra Norte PBD Overlay District - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	2.93	73.11	-10.19	0.00	0.00	90.73	8.31	0.00	90.20	14.91	0.00	0.00	0.00	0.00	0.00	0.00

Tierra Norte PBD Overlay District - San Diego County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.009 2	8,530.009 2	0.2193	0.1553	8,581.768 2
Energy	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.356 2	1,854.356 2	0.0355	0.0340	1,865.375 7
Mobile	3.5225	12.9702	33.4829	0.1218	11.6867	0.0937	11.7804	3.1226	0.0871	3.2097		12,450.83 35	12,450.83 35	0.6238		12,466.42 73
Total	15.3903	21.4378	69.8938	0.1752	11.6867	0.9305	12.6173	3.1226	0.9239	4.0466	0.0000	22,835.19 88	22,835.19 88	0.8786	0.1893	22,913.57 11

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.009 2	8,530.009 2	0.2193	0.1553	8,581.768 2
Energy	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.356 2	1,854.356 2	0.0355	0.0340	1,865.375 7
Mobile	3.5225	12.9702	33.4829	0.1218	11.6867	0.0937	11.7804	3.1226	0.0871	3.2097		12,450.83 35	12,450.83 35	0.6238		12,466.42 73
Total	15.3903	21.4378	69.8938	0.1752	11.6867	0.9305	12.6173	3.1226	0.9239	4.0466	0.0000	22,835.19 88	22,835.19 88	0.8786	0.1893	22,913.57 11

Tierra Norte PBD Overlay District - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	2/9/2024	5	30	
2	Site Preparation	Site Preparation	2/10/2024	3/8/2024	5	20	
3	Grading	Grading	3/9/2024	5/10/2024	5	45	
4	Paving	Paving	5/11/2024	6/28/2024	5	35	
5	Building Construction	Building Construction	7/1/2024	3/6/2026	5	440	
6	Architectural Coating	Architectural Coating	11/28/2025	3/6/2026	5	71	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 810,000; Residential Outdoor: 270,000; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Norte PBD Overlay District - San Diego County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
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
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Tierra Norte PBD Overlay District - San Diego County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	273.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
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
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	288.00	43.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	58.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9933	0.0000	1.9933	0.3019	0.0000	0.3019			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
Total	2.2437	20.8781	19.7073	0.0388	1.9933	0.9602	2.9534	0.3019	0.8922	1.1940		3,747.4228	3,747.4228	1.0485		3,773.6345

Tierra Norte PBD Overlay District - San Diego County, Summer

3.2 Demolition - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0446	1.4347	0.5396	6.5900e-003	0.1590	2.6600e-003	0.1617	0.0436	2.5500e-003	0.0461		728.6308	728.6308	0.0647		730.2493
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	0.0441	0.0258	0.3213	1.0900e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		108.7256	108.7256	2.6900e-003		108.7928
Total	0.0887	1.4605	0.8609	7.6800e-003	0.2822	3.4600e-003	0.2857	0.0763	3.2900e-003	0.0796		837.3563	837.3563	0.0674		839.0422

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9933	0.0000	1.9933	0.3019	0.0000	0.3019			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
Total	0.4623	2.0032	23.2798	0.0388	1.9933	0.0616	2.0549	0.3019	0.0616	0.3635	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345

Tierra Norte PBD Overlay District - San Diego County, Summer

3.2 Demolition - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0446	1.4347	0.5396	6.5900e-003	0.1590	2.6600e-003	0.1617	0.0436	2.5500e-003	0.0461		728.6308	728.6308	0.0647		730.2493
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	0.0441	0.0258	0.3213	1.0900e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		108.7256	108.7256	2.6900e-003		108.7928
Total	0.0887	1.4605	0.8609	7.6800e-003	0.2822	3.4600e-003	0.2857	0.0763	3.2900e-003	0.0796		837.3563	837.3563	0.0674		839.0422

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	2.6609	27.1760	18.3356	0.0381	18.0663	1.2294	19.2956	9.9307	1.1310	11.0617		3,688.0100	3,688.0100	1.1928		3,717.8294

Tierra Norte PBD Overlay District - San Diego County, Summer

3.3 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0529	0.0309	0.3856	1.3100e-003	0.1479	9.6000e-004	0.1488	0.0392	8.9000e-004	0.0401		130.4707	130.4707	3.2300e-003		130.5514
Total	0.0529	0.0309	0.3856	1.3100e-003	0.1479	9.6000e-004	0.1488	0.0392	8.9000e-004	0.0401		130.4707	130.4707	3.2300e-003		130.5514

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	0.4656	2.0175	20.8690	0.0381	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294

Tierra Norte PBD Overlay District - San Diego County, Summer

3.3 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0529	0.0309	0.3856	1.3100e-003	0.1479	9.6000e-004	0.1488	0.0392	8.9000e-004	0.0401		130.4707	130.4707	3.2300e-003		130.5514
Total	0.0529	0.0309	0.3856	1.3100e-003	0.1479	9.6000e-004	0.1488	0.0392	8.9000e-004	0.0401		130.4707	130.4707	3.2300e-003		130.5514

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	3.2181	32.3770	27.7228	0.0621	8.6733	1.3354	10.0087	3.5965	1.2286	4.8251		6,009.7487	6,009.7487	1.9437		6,058.3405

Tierra Norte PBD Overlay District - San Diego County, Summer

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0343	0.4284	1.4500e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		144.9674	144.9674	3.5900e-003		145.0571
Total	0.0588	0.0343	0.4284	1.4500e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		144.9674	144.9674	3.5900e-003		145.0571

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	0.7616	3.3000	32.9991	0.0621	8.6733	0.1015	8.7749	3.5965	0.1015	3.6980	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405

Tierra Norte PBD Overlay District - San Diego County, Summer

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0588	0.0343	0.4284	1.4500e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		144.9674	144.9674	3.5900e-003		145.0571
Total	0.0588	0.0343	0.4284	1.4500e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		144.9674	144.9674	3.5900e-003		145.0571

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
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		2,207.5472	2,207.5472	0.7140		2,225.3963

Tierra Norte PBD Overlay District - San Diego County, Summer

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0441	0.0258	0.3213	1.0900e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		108.7256	108.7256	2.6900e-003		108.7928
Total	0.0441	0.0258	0.3213	1.0900e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		108.7256	108.7256	2.6900e-003		108.7928

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Tierra Norte PBD Overlay District - San Diego County, Summer

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0441	0.0258	0.3213	1.0900e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		108.7256	108.7256	2.6900e-003		108.7928
Total	0.0441	0.0258	0.3213	1.0900e-003	0.1232	8.0000e-004	0.1240	0.0327	7.4000e-004	0.0334		108.7256	108.7256	2.6900e-003		108.7928

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Tierra Norte PBD Overlay District - San Diego County, Summer

3.6 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0899	3.2122	0.9379	0.0111	0.2911	3.7500e-003	0.2948	0.0838	3.5800e-003	0.0874		1,201.8829	1,201.8829	0.0785			1,203.8461
Worker	0.8470	0.4944	6.1692	0.0209	2.3659	0.0154	2.3812	0.6275	0.0142	0.6417		2,087.5309	2,087.5309	0.0516			2,088.8219
Total	0.9369	3.7067	7.1071	0.0321	2.6569	0.0191	2.6761	0.7113	0.0177	0.7291		3,289.4137	3,289.4137	0.1302			3,292.6680

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.6989	2,555.6989	0.6044			2,570.8077
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.6989	2,555.6989	0.6044			2,570.8077

Tierra Norte PBD Overlay District - San Diego County, Summer

3.6 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0899	3.2122	0.9379	0.0111	0.2911	3.7500e-003	0.2948	0.0838	3.5800e-003	0.0874		1,201.8829	1,201.8829	0.0785		1,203.8461
Worker	0.8470	0.4944	6.1692	0.0209	2.3659	0.0154	2.3812	0.6275	0.0142	0.6417		2,087.5309	2,087.5309	0.0516		2,088.8219
Total	0.9369	3.7067	7.1071	0.0321	2.6569	0.0191	2.6761	0.7113	0.0177	0.7291		3,289.4137	3,289.4137	0.1302		3,292.6680

3.6 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Norte PBD Overlay District - San Diego County, Summer

3.6 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0873	3.1658	0.9196	0.0110	0.2911	3.6400e-003	0.2947	0.0838	3.4800e-003	0.0873		1,194.4883	1,194.4883	0.0778			1,196.4321
Worker	0.8081	0.4559	5.7627	0.0201	2.3659	0.0151	2.3810	0.6275	0.0139	0.6415		2,003.0735	2,003.0735	0.0477			2,004.2657
Total	0.8954	3.6217	6.6822	0.0311	2.6569	0.0188	2.6757	0.7113	0.0174	0.7288		3,197.5618	3,197.5618	0.1254			3,200.6978

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010			2,571.4981
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010			2,571.4981

Tierra Norte PBD Overlay District - San Diego County, Summer

3.6 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0873	3.1658	0.9196	0.0110	0.2911	3.6400e-003	0.2947	0.0838	3.4800e-003	0.0873		1,194.4883	1,194.4883	0.0778		1,196.4321
Worker	0.8081	0.4559	5.7627	0.0201	2.3659	0.0151	2.3810	0.6275	0.0139	0.6415		2,003.0735	2,003.0735	0.0477		2,004.2657
Total	0.8954	3.6217	6.6822	0.0311	2.6569	0.0188	2.6757	0.7113	0.0174	0.7288		3,197.5618	3,197.5618	0.1254		3,200.6978

3.6 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Norte PBD Overlay District - San Diego County, Summer

3.6 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0851	3.1209	0.9069	0.0110	0.2911	3.5400e-003	0.2946	0.0838	3.3800e-003	0.0872		1,187.5681	1,187.5681	0.0770		1,189.4932
Worker	0.7739	0.4241	5.4197	0.0194	2.3659	0.0147	2.3805	0.6275	0.0135	0.6410		1,929.6988	1,929.6988	0.0445		1,930.8103
Total	0.8590	3.5450	6.3266	0.0303	2.6569	0.0182	2.6752	0.7113	0.0169	0.7282		3,117.2669	3,117.2669	0.1215		3,120.3035

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Norte PBD Overlay District - San Diego County, Summer

3.6 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0851	3.1209	0.9069	0.0110	0.2911	3.5400e-003	0.2946	0.0838	3.3800e-003	0.0872		1,187.5681	1,187.5681	0.0770		1,189.4932
Worker	0.7739	0.4241	5.4197	0.0194	2.3659	0.0147	2.3805	0.6275	0.0135	0.6410		1,929.6988	1,929.6988	0.0445		1,930.8103
Total	0.8590	3.5450	6.3266	0.0303	2.6569	0.0182	2.6752	0.7113	0.0169	0.7282		3,117.2669	3,117.2669	0.1215		3,120.3035

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	70.5042					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	70.6751	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Norte PBD Overlay District - San Diego County, Summer

3.7 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1627	0.0918	1.1605	4.0500e-003	0.4765	3.0500e-003	0.4795	0.1264	2.8100e-003	0.1292		403.3967	403.3967	9.6000e-003		403.6369
Total	0.1627	0.0918	1.1605	4.0500e-003	0.4765	3.0500e-003	0.4795	0.1264	2.8100e-003	0.1292		403.3967	403.3967	9.6000e-003		403.6369

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	70.5042					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	70.5339	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Norte PBD Overlay District - San Diego County, Summer

3.7 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1627	0.0918	1.1605	4.0500e-003	0.4765	3.0500e-003	0.4795	0.1264	2.8100e-003	0.1292		403.3967	403.3967	9.6000e-003		403.6369
Total	0.1627	0.0918	1.1605	4.0500e-003	0.4765	3.0500e-003	0.4795	0.1264	2.8100e-003	0.1292		403.3967	403.3967	9.6000e-003		403.6369

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	70.5042					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	70.6751	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Norte PBD Overlay District - San Diego County, Summer

3.7 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1559	0.0854	1.0915	3.9000e-003	0.4765	2.9600e-003	0.4794	0.1264	2.7200e-003	0.1291		388.6199	388.6199	8.9500e-003		388.8437
Total	0.1559	0.0854	1.0915	3.9000e-003	0.4765	2.9600e-003	0.4794	0.1264	2.7200e-003	0.1291		388.6199	388.6199	8.9500e-003		388.8437

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	70.5042					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	70.5339	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Norte PBD Overlay District - San Diego County, Summer

3.7 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1559	0.0854	1.0915	3.9000e-003	0.4765	2.9600e-003	0.4794	0.1264	2.7200e-003	0.1291		388.6199	388.6199	8.9500e-003		388.8437
Total	0.1559	0.0854	1.0915	3.9000e-003	0.4765	2.9600e-003	0.4794	0.1264	2.7200e-003	0.1291		388.6199	388.6199	8.9500e-003		388.8437

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Norte PBD Overlay District - San Diego County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.5225	12.9702	33.4829	0.1218	11.6867	0.0937	11.7804	3.1226	0.0871	3.2097		12,450.83 35	12,450.83 35	0.6238		12,466.42 73
Unmitigated	3.5225	12.9702	33.4829	0.1218	11.6867	0.0937	11.7804	3.1226	0.0871	3.2097		12,450.83 35	12,450.83 35	0.6238		12,466.42 73

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	3,200.00	3,200.00	3,200.00	5,513,435	5,513,435
Total	3,200.00	3,200.00	3,200.00	5,513,435	5,513,435

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Condo/Townhouse	5.33	5.33	5.33	42.00	19.00	39.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.611343	0.038414	0.178161	0.100214	0.013382	0.005338	0.017151	0.024839	0.001931	0.001783	0.005765	0.000770	0.000908

5.0 Energy Detail

Historical Energy Use: N

Tierra Norte PBD Overlay District - San Diego County, Summer

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757
NaturalGas Unmitigated	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	15762	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757
Total		0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757

Tierra Norte PBD Overlay District - San Diego County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	15.762	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757
Total		0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.0092	8,530.0092	0.2193	0.1553	8,581.7682
Unmitigated	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.0092	8,530.0092	0.2193	0.1553	8,581.7682

Tierra Norte PBD Overlay District - San Diego County, Summer

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3715					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.5600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7765	6.6353	2.8235	0.0424		0.5365	0.5365		0.5365	0.5365	0.0000	8,470.588 2	8,470.588 2	0.1624	0.1553	8,520.924 7
Landscaping	0.9899	0.3798	32.9692	1.7400e-003		0.1829	0.1829		0.1829	0.1829		59.4209	59.4209	0.0569		60.8435
Total	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.009 2	8,530.009 2	0.2193	0.1553	8,581.768 2

Tierra Norte PBD Overlay District - San Diego County, Summer

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	1.3715					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.5600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7765	6.6353	2.8235	0.0424		0.5365	0.5365		0.5365	0.5365	0.0000	8,470.588 2	8,470.588 2	0.1624	0.1553	8,520.924 7
Landscaping	0.9899	0.3798	32.9692	1.7400e-003		0.1829	0.1829		0.1829	0.1829		59.4209	59.4209	0.0569		60.8435
Total	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.009 2	8,530.009 2	0.2193	0.1553	8,581.768 2

7.0 Water Detail

7.1 Mitigation Measures Water

- Apply Water Conservation Strategy
- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Norte PBD Overlay District - San Diego County, Summer

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

Tierra Norte PBD Overlay District - San Diego County, Winter

**Tierra Norte PBD Overlay District
San Diego County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	400.00	Dwelling Unit	25.60	400,000.00	1144

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2026
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	408.95	CH4 Intensity (lb/MW hr)	0.017	N2O Intensity (lb/MW hr)	0.003

1.3 User Entered Comments & Non-Default Data

Tierra Norte PBD Overlay District - San Diego County, Winter

Project Characteristics - RPS 2026

Land Use - Site Acreage

Construction Phase - CS

Demolition -

Architectural Coating - Rule 67 Paint

Vehicle Trips - ADT per Traffic Study...Trip Length per EMFAC 2014 model run for the County of San Diego for 2026

Woodstoves - Natural Gas Fireplace for 400 units

Area Coating - Rule 67 Psint

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

Tierra Norte PBD Overlay District - San Diego County, Winter

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	35.00	71.00
tblFireplaces	NumberGas	220.00	400.00
tblFireplaces	NumberNoFireplace	40.00	0.00

Tierra Norte PBD Overlay District - San Diego County, Winter

tblFireplaces	NumberWood	140.00	0.00
tblLandUse	LotAcreage	25.00	25.60
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.017
tblProjectCharacteristics	CO2IntensityFactor	720.49	408.95
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	HO_TL	7.50	5.33
tblVehicleTrips	HO_TTP	39.60	39.00
tblVehicleTrips	HS_TL	7.30	5.33
tblVehicleTrips	HS_TTP	18.80	19.00
tblVehicleTrips	HW_TL	10.80	5.33
tblVehicleTrips	HW_TTP	41.60	42.00
tblVehicleTrips	ST_TR	5.67	8.00
tblVehicleTrips	SU_TR	4.84	8.00
tblVehicleTrips	WD_TR	5.81	8.00
tblWoodstoves	NumberCatalytic	20.00	0.00
tblWoodstoves	NumberNoncatalytic	20.00	0.00

2.0 Emissions Summary

Tierra Norte PBD Overlay District - San Diego County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	3.2854	32.4155	28.1232	0.0634	18.2141	1.3365	19.4444	9.9699	1.2296	11.1018	0.0000	6,145.851 1	6,145.851 1	1.9471	0.0000	6,194.527 3
2025	73.2476	17.3810	25.3646	0.0633	3.1334	0.6011	3.7345	0.8377	0.5682	1.4059	0.0000	6,261.446 1	6,261.446 1	0.7519	0.0000	6,280.243 6
2026	73.2012	17.2932	24.9585	0.0624	3.1334	0.6004	3.7338	0.8377	0.5675	1.4052	0.0000	6,172.154 6	6,172.154 6	0.7473	0.0000	6,190.836 8
Maximum	73.2476	32.4155	28.1232	0.0634	18.2141	1.3365	19.4444	9.9699	1.2296	11.1018	0.0000	6,261.446 1	6,261.446 1	1.9471	0.0000	6,280.243 6

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2024	1.3912	5.9871	33.3995	0.0634	18.2141	0.1026	18.2772	9.9699	0.1025	10.0329	0.0000	6,145.851 1	6,145.851 1	1.9471	0.0000	6,194.527 3
2025	72.0669	6.1293	26.7634	0.0633	3.1334	0.0668	3.2002	0.8377	0.0651	0.9028	0.0000	6,261.446 1	6,261.446 1	0.7519	0.0000	6,280.243 6
2026	72.0205	6.0415	26.3574	0.0624	3.1334	0.0661	3.1995	0.8377	0.0645	0.9022	0.0000	6,172.154 6	6,172.154 6	0.7473	0.0000	6,190.836 8
Maximum	72.0669	6.1293	33.3995	0.0634	18.2141	0.1026	18.2772	9.9699	0.1025	10.0329	0.0000	6,261.446 1	6,261.446 1	1.9471	0.0000	6,280.243 6

Tierra Norte PBD Overlay District - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	2.84	72.93	-10.29	0.00	0.00	90.72	8.31	0.00	90.18	14.91	0.00	0.00	0.00	0.00	0.00	0.00

Tierra Norte PBD Overlay District - San Diego County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.009 2	8,530.009 2	0.2193	0.1553	8,581.768 2
Energy	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.356 2	1,854.356 2	0.0355	0.0340	1,865.375 7
Mobile	3.3913	13.1707	33.7273	0.1155	11.6867	0.0942	11.7809	3.1226	0.0876	3.2102		11,806.60 85	11,806.60 85	0.6346		11,822.47 32
Total	15.2591	21.6384	70.1381	0.1689	11.6867	0.9311	12.6178	3.1226	0.9244	4.0471	0.0000	22,190.97 38	22,190.97 38	0.8894	0.1893	22,269.61 70

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.009 2	8,530.009 2	0.2193	0.1553	8,581.768 2
Energy	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.356 2	1,854.356 2	0.0355	0.0340	1,865.375 7
Mobile	3.3913	13.1707	33.7273	0.1155	11.6867	0.0942	11.7809	3.1226	0.0876	3.2102		11,806.60 85	11,806.60 85	0.6346		11,822.47 32
Total	15.2591	21.6384	70.1381	0.1689	11.6867	0.9311	12.6178	3.1226	0.9244	4.0471	0.0000	22,190.97 38	22,190.97 38	0.8894	0.1893	22,269.61 70

Tierra Norte PBD Overlay District - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	2/9/2024	5	30	
2	Site Preparation	Site Preparation	2/10/2024	3/8/2024	5	20	
3	Grading	Grading	3/9/2024	5/10/2024	5	45	
4	Paving	Paving	5/11/2024	6/28/2024	5	35	
5	Building Construction	Building Construction	7/1/2024	3/6/2026	5	440	
6	Architectural Coating	Architectural Coating	11/28/2025	3/6/2026	5	71	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 810,000; Residential Outdoor: 270,000; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Norte PBD Overlay District - San Diego County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
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
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Tierra Norte PBD Overlay District - San Diego County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	273.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
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
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	288.00	43.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	58.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9933	0.0000	1.9933	0.3019	0.0000	0.3019			0.0000			0.0000
Off-Road	2.2437	20.8781	19.7073	0.0388		0.9602	0.9602		0.8922	0.8922		3,747.4228	3,747.4228	1.0485		3,773.6345
Total	2.2437	20.8781	19.7073	0.0388	1.9933	0.9602	2.9534	0.3019	0.8922	1.1940		3,747.4228	3,747.4228	1.0485		3,773.6345

Tierra Norte PBD Overlay District - San Diego County, Winter

3.2 Demolition - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0458	1.4399	0.5635	6.4700e-003	0.1590	2.7400e-003	0.1618	0.0436	2.6200e-003	0.0462		716.0260	716.0260	0.0664		717.6859
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	0.0963	1.4688	0.8637	7.4900e-003	0.2822	3.5400e-003	0.2858	0.0763	3.3600e-003	0.0796		818.1028	818.1028	0.0689		819.8260

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9933	0.0000	1.9933	0.3019	0.0000	0.3019			0.0000			0.0000
Off-Road	0.4623	2.0032	23.2798	0.0388		0.0616	0.0616		0.0616	0.0616	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345
Total	0.4623	2.0032	23.2798	0.0388	1.9933	0.0616	2.0549	0.3019	0.0616	0.3635	0.0000	3,747.4228	3,747.4228	1.0485		3,773.6345

Tierra Norte PBD Overlay District - San Diego County, Winter

3.2 Demolition - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0458	1.4399	0.5635	6.4700e-003	0.1590	2.7400e-003	0.1618	0.0436	2.6200e-003	0.0462		716.0260	716.0260	0.0664		717.6859
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	0.0963	1.4688	0.8637	7.4900e-003	0.2822	3.5400e-003	0.2858	0.0763	3.3600e-003	0.0796		818.1028	818.1028	0.0689		819.8260

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	2.6609	27.1760	18.3356	0.0381		1.2294	1.2294		1.1310	1.1310		3,688.0100	3,688.0100	1.1928		3,717.8294
Total	2.6609	27.1760	18.3356	0.0381	18.0663	1.2294	19.2956	9.9307	1.1310	11.0617		3,688.0100	3,688.0100	1.1928		3,717.8294

Tierra Norte PBD Overlay District - San Diego County, Winter

3.3 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0605	0.0347	0.3603	1.2300e-003	0.1479	9.6000e-004	0.1488	0.0392	8.9000e-004	0.0401		122.4922	122.4922	3.0400e-003		122.5681
Total	0.0605	0.0347	0.3603	1.2300e-003	0.1479	9.6000e-004	0.1488	0.0392	8.9000e-004	0.0401		122.4922	122.4922	3.0400e-003		122.5681

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	0.4656	2.0175	20.8690	0.0381		0.0621	0.0621		0.0621	0.0621	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294
Total	0.4656	2.0175	20.8690	0.0381	18.0663	0.0621	18.1283	9.9307	0.0621	9.9928	0.0000	3,688.0100	3,688.0100	1.1928		3,717.8294

Tierra Norte PBD Overlay District - San Diego County, Winter

3.3 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0605	0.0347	0.3603	1.2300e-003	0.1479	9.6000e-004	0.1488	0.0392	8.9000e-004	0.0401		122.4922	122.4922	3.0400e-003		122.5681
Total	0.0605	0.0347	0.3603	1.2300e-003	0.1479	9.6000e-004	0.1488	0.0392	8.9000e-004	0.0401		122.4922	122.4922	3.0400e-003		122.5681

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.2181	32.3770	27.7228	0.0621		1.3354	1.3354		1.2286	1.2286		6,009.7487	6,009.7487	1.9437		6,058.3405
Total	3.2181	32.3770	27.7228	0.0621	8.6733	1.3354	10.0087	3.5965	1.2286	4.8251		6,009.7487	6,009.7487	1.9437		6,058.3405

Tierra Norte PBD Overlay District - San Diego County, Winter

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0673	0.0385	0.4004	1.3600e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		136.1024	136.1024	3.3800e-003		136.1868
Total	0.0673	0.0385	0.4004	1.3600e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		136.1024	136.1024	3.3800e-003		136.1868

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	0.7616	3.3000	32.9991	0.0621		0.1015	0.1015		0.1015	0.1015	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405
Total	0.7616	3.3000	32.9991	0.0621	8.6733	0.1015	8.7749	3.5965	0.1015	3.6980	0.0000	6,009.7487	6,009.7487	1.9437		6,058.3405

Tierra Norte PBD Overlay District - San Diego County, Winter

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0673	0.0385	0.4004	1.3600e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		136.1024	136.1024	3.3800e-003		136.1868
Total	0.0673	0.0385	0.4004	1.3600e-003	0.1643	1.0700e-003	0.1654	0.0436	9.8000e-004	0.0446		136.1024	136.1024	3.3800e-003		136.1868

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
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		2,207.5472	2,207.5472	0.7140		2,225.3963

Tierra Norte PBD Overlay District - San Diego County, Winter

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0504	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

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.2805	1.2154	17.2957	0.0228		0.0374	0.0374		0.0374	0.0374	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Tierra Norte PBD Overlay District - San Diego County, Winter

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0504	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

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769		2,555.6989	2,555.6989	0.6044		2,570.8077

Tierra Norte PBD Overlay District - San Diego County, Winter

3.6 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0949	3.1979	1.0288	0.0108	0.2911	3.9300e-003	0.2950	0.0838	3.7600e-003	0.0876		1,171.1346	1,171.1346	0.0827		1,173.2017
Worker	0.9685	0.5545	5.7652	0.0197	2.3659	0.0154	2.3812	0.6275	0.0142	0.6417		1,959.8744	1,959.8744	0.0486		1,961.0895
Total	1.0634	3.7524	6.7941	0.0305	2.6569	0.0193	2.6763	0.7113	0.0179	0.7293		3,131.0089	3,131.0089	0.1313		3,134.2912

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

Tierra Norte PBD Overlay District - San Diego County, Winter

3.6 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0949	3.1979	1.0288	0.0108	0.2911	3.9300e-003	0.2950	0.0838	3.7600e-003	0.0876		1,171.1346	1,171.1346	0.0827			1,173.2017
Worker	0.9685	0.5545	5.7652	0.0197	2.3659	0.0154	2.3812	0.6275	0.0142	0.6417		1,959.8744	1,959.8744	0.0486			1,961.0895
Total	1.0634	3.7524	6.7941	0.0305	2.6569	0.0193	2.6763	0.7113	0.0179	0.7293		3,131.0089	3,131.0089	0.1313			3,134.2912

3.6 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010			2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010			2,571.4981

Tierra Norte PBD Overlay District - San Diego County, Winter

3.6 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0921	3.1516	1.0078	0.0108	0.2911	3.8100e-003	0.2949	0.0838	3.6400e-003	0.0874		1,164.1247	1,164.1247	0.0817			1,166.1678
Worker	0.9265	0.5112	5.3796	0.0189	2.3659	0.0151	2.3810	0.6275	0.0139	0.6415		1,880.6558	1,880.6558	0.0449			1,881.7769
Total	1.0186	3.6629	6.3874	0.0296	2.6569	0.0190	2.6759	0.7113	0.0176	0.7289		3,044.7805	3,044.7805	0.1266			3,047.9447

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010			2,571.4981
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010			2,571.4981

Tierra Norte PBD Overlay District - San Diego County, Winter

3.6 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0921	3.1516	1.0078	0.0108	0.2911	3.8100e-003	0.2949	0.0838	3.6400e-003	0.0874		1,164.1247	1,164.1247	0.0817		1,166.1678
Worker	0.9265	0.5112	5.3796	0.0189	2.3659	0.0151	2.3810	0.6275	0.0139	0.6415		1,880.6558	1,880.6558	0.0449		1,881.7769
Total	1.0186	3.6629	6.3874	0.0296	2.6569	0.0190	2.6759	0.7113	0.0176	0.7289		3,044.7805	3,044.7805	0.1266		3,047.9447

3.6 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981

Tierra Norte PBD Overlay District - San Diego County, Winter

3.6 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0897	3.1068	0.9930	0.0107	0.2911	3.6800e-003	0.2948	0.0838	3.5200e-003	0.0873		1,157.5749	1,157.5749	0.0808			1,159.5951
Worker	0.8899	0.4755	5.0539	0.0182	2.3659	0.0147	2.3805	0.6275	0.0135	0.6410		1,811.7841	1,811.7841	0.0418			1,812.8283
Total	0.9795	3.5823	6.0469	0.0289	2.6569	0.0184	2.6753	0.7113	0.0170	0.7284		2,969.3590	2,969.3590	0.1226			2,972.4234

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010			2,571.4981
Total	0.3278	2.2347	17.4603	0.0270		0.0408	0.0408		0.0408	0.0408	0.0000	2,556.4744	2,556.4744	0.6010			2,571.4981

Tierra Norte PBD Overlay District - San Diego County, Winter

3.6 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0897	3.1068	0.9930	0.0107	0.2911	3.6800e-003	0.2948	0.0838	3.5200e-003	0.0873		1,157.5749	1,157.5749	0.0808			1,159.5951
Worker	0.8899	0.4755	5.0539	0.0182	2.3659	0.0147	2.3805	0.6275	0.0135	0.6410		1,811.7841	1,811.7841	0.0418			1,812.8283
Total	0.9795	3.5823	6.0469	0.0289	2.6569	0.0184	2.6753	0.7113	0.0170	0.7284		2,969.3590	2,969.3590	0.1226			2,972.4234

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	70.5042					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154			281.8319
Total	70.6751	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154			281.8319

Tierra Norte PBD Overlay District - San Diego County, Winter

3.7 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1866	0.1030	1.0834	3.8000e-003	0.4765	3.0500e-003	0.4795	0.1264	2.8100e-003	0.1292		378.7432	378.7432	9.0300e-003		378.9690
Total	0.1866	0.1030	1.0834	3.8000e-003	0.4765	3.0500e-003	0.4795	0.1264	2.8100e-003	0.1292		378.7432	378.7432	9.0300e-003		378.9690

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	70.5042					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	70.5339	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Norte PBD Overlay District - San Diego County, Winter

3.7 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1866	0.1030	1.0834	3.8000e-003	0.4765	3.0500e-003	0.4795	0.1264	2.8100e-003	0.1292		378.7432	378.7432	9.0300e-003		378.9690
Total	0.1866	0.1030	1.0834	3.8000e-003	0.4765	3.0500e-003	0.4795	0.1264	2.8100e-003	0.1292		378.7432	378.7432	9.0300e-003		378.9690

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	70.5042					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	70.6751	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319

Tierra Norte PBD Overlay District - San Diego County, Winter

3.7 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1792	0.0958	1.0178	3.6600e-003	0.4765	2.9600e-003	0.4794	0.1264	2.7200e-003	0.1291		364.8732	364.8732	8.4100e-003		365.0835
Total	0.1792	0.0958	1.0178	3.6600e-003	0.4765	2.9600e-003	0.4794	0.1264	2.7200e-003	0.1291		364.8732	364.8732	8.4100e-003		365.0835

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	70.5042					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.0297	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319
Total	70.5339	0.1288	1.8324	2.9700e-003		3.9600e-003	3.9600e-003		3.9600e-003	3.9600e-003	0.0000	281.4481	281.4481	0.0154		281.8319

Tierra Norte PBD Overlay District - San Diego County, Winter

3.7 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1792	0.0958	1.0178	3.6600e-003	0.4765	2.9600e-003	0.4794	0.1264	2.7200e-003	0.1291		364.8732	364.8732	8.4100e-003		365.0835
Total	0.1792	0.0958	1.0178	3.6600e-003	0.4765	2.9600e-003	0.4794	0.1264	2.7200e-003	0.1291		364.8732	364.8732	8.4100e-003		365.0835

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Norte PBD Overlay District - San Diego County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.3913	13.1707	33.7273	0.1155	11.6867	0.0942	11.7809	3.1226	0.0876	3.2102		11,806.60 85	11,806.60 85	0.6346		11,822.47 32
Unmitigated	3.3913	13.1707	33.7273	0.1155	11.6867	0.0942	11.7809	3.1226	0.0876	3.2102		11,806.60 85	11,806.60 85	0.6346		11,822.47 32

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	3,200.00	3,200.00	3,200.00	5,513,435	5,513,435
Total	3,200.00	3,200.00	3,200.00	5,513,435	5,513,435

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Condo/Townhouse	5.33	5.33	5.33	42.00	19.00	39.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.611343	0.038414	0.178161	0.100214	0.013382	0.005338	0.017151	0.024839	0.001931	0.001783	0.005765	0.000770	0.000908

5.0 Energy Detail

Historical Energy Use: N

Tierra Norte PBD Overlay District - San Diego County, Winter

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757
NaturalGas Unmitigated	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	15762	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757
Total		0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757

Tierra Norte PBD Overlay District - San Diego County, Winter

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Condo/Townhouse	15.762	0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757
Total		0.1700	1.4526	0.6181	9.2700e-003		0.1174	0.1174		0.1174	0.1174		1,854.3562	1,854.3562	0.0355	0.0340	1,865.3757

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.0092	8,530.0092	0.2193	0.1553	8,581.7682
Unmitigated	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.0092	8,530.0092	0.2193	0.1553	8,581.7682

Tierra Norte PBD Overlay District - San Diego County, Winter

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.3715					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.5600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7765	6.6353	2.8235	0.0424		0.5365	0.5365		0.5365	0.5365	0.0000	8,470.588 2	8,470.588 2	0.1624	0.1553	8,520.924 7
Landscaping	0.9899	0.3798	32.9692	1.7400e-003		0.1829	0.1829		0.1829	0.1829		59.4209	59.4209	0.0569		60.8435
Total	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.009 2	8,530.009 2	0.2193	0.1553	8,581.768 2

Tierra Norte PBD Overlay District - San Diego County, 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	1.3715					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	8.5600					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.7765	6.6353	2.8235	0.0424		0.5365	0.5365		0.5365	0.5365	0.0000	8,470.588 2	8,470.588 2	0.1624	0.1553	8,520.924 7
Landscaping	0.9899	0.3798	32.9692	1.7400e-003		0.1829	0.1829		0.1829	0.1829		59.4209	59.4209	0.0569		60.8435
Total	11.6978	7.0151	35.7928	0.0441		0.7194	0.7194		0.7194	0.7194	0.0000	8,530.009 2	8,530.009 2	0.2193	0.1553	8,581.768 2

7.0 Water Detail

7.1 Mitigation Measures Water

- Apply Water Conservation Strategy
- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower

8.0 Waste Detail

8.1 Mitigation Measures Waste

Tierra Norte PBD Overlay District - San Diego County, Winter

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

Tierra Norte PBD Overlay District - San Diego County, Annual

**Tierra Norte PBD Overlay District
San Diego County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Condo/Townhouse	400.00	Dwelling Unit	25.60	400,000.00	1144

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2026
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MW hr)	408.95	CH4 Intensity (lb/MW hr)	0.017	N2O Intensity (lb/MW hr)	0.003

1.3 User Entered Comments & Non-Default Data

Tierra Norte PBD Overlay District - San Diego County, Annual

Project Characteristics - RPS 2026

Land Use - Site Acreage

Construction Phase - CS

Demolition -

Architectural Coating - Rule 67 Paint

Vehicle Trips - ADT per Traffic Study...Trip Length per EMFAC 2014 model run for the County of San Diego for 2026

Woodstoves - Natural Gas Fireplace for 400 units

Area Coating - Rule 67 Psint

Energy Use -

Construction Off-road Equipment Mitigation - Tier 4

Energy Mitigation -

Water Mitigation -

Waste Mitigation -

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblAreaCoating	Area_EF_Residential_Exterior	250	100
tblAreaCoating	Area_EF_Residential_Interior	250	100
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	5.00

Tierra Norte PBD Overlay District - San Diego County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	35.00	71.00
tblFireplaces	NumberGas	220.00	400.00
tblFireplaces	NumberNoFireplace	40.00	0.00

Tierra Norte PBD Overlay District - San Diego County, Annual

tblFireplaces	NumberWood	140.00	0.00
tblLandUse	LotAcreage	25.00	25.60
tblProjectCharacteristics	CH4IntensityFactor	0.029	0.017
tblProjectCharacteristics	CO2IntensityFactor	720.49	408.95
tblProjectCharacteristics	N2OIntensityFactor	0.006	0.003
tblVehicleTrips	HO_TL	7.50	5.33
tblVehicleTrips	HO_TTP	39.60	39.00
tblVehicleTrips	HS_TL	7.30	5.33
tblVehicleTrips	HS_TTP	18.80	19.00
tblVehicleTrips	HW_TL	10.80	5.33
tblVehicleTrips	HW_TTP	41.60	42.00
tblVehicleTrips	ST_TR	5.67	8.00
tblVehicleTrips	SU_TR	4.84	8.00
tblVehicleTrips	WD_TR	5.81	8.00
tblWoodstoves	NumberCatalytic	20.00	0.00
tblWoodstoves	NumberNoncatalytic	20.00	0.00

2.0 Emissions Summary

Tierra Norte PBD Overlay District - San Diego County, Annual

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.3135	2.6406	2.9032	6.7500e-003	0.5883	0.1068	0.6951	0.2337	0.0992	0.3330	0.0000	601.7035	601.7035	0.1211	0.0000	604.7308
2025	1.1466	2.1235	2.9643	7.5100e-003	0.3442	0.0720	0.4162	0.0923	0.0677	0.1600	0.0000	674.6533	674.6533	0.0862	0.0000	676.8079
2026	1.7171	0.4069	0.5861	1.4800e-003	0.0719	0.0141	0.0860	0.0193	0.0133	0.0326	0.0000	132.4169	132.4169	0.0159	0.0000	132.8143
Maximum	1.7171	2.6406	2.9643	7.5100e-003	0.5883	0.1068	0.6951	0.2337	0.0992	0.3330	0.0000	674.6533	674.6533	0.1211	0.0000	676.8079

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2024	0.1217	0.5665	3.2329	6.7500e-003	0.5883	8.5400e-003	0.5968	0.2337	8.4500e-003	0.2422	0.0000	601.7030	601.7030	0.1211	0.0000	604.7303
2025	1.0092	0.7757	3.1441	7.5100e-003	0.3442	7.8700e-003	0.3521	0.0923	7.6900e-003	0.1000	0.0000	674.6530	674.6530	0.0862	0.0000	676.8075
2026	1.6894	0.1425	0.6190	1.4800e-003	0.0719	1.5500e-003	0.0735	0.0193	1.5100e-003	0.0208	0.0000	132.4168	132.4168	0.0159	0.0000	132.8142
Maximum	1.6894	0.7757	3.2329	7.5100e-003	0.5883	8.5400e-003	0.5968	0.2337	8.4500e-003	0.2422	0.0000	674.6530	674.6530	0.1211	0.0000	676.8075

Tierra Norte PBD Overlay District - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	11.23	71.29	-8.40	0.00	0.00	90.69	14.61	0.00	90.21	30.94	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
9	1-1-2024	3-31-2024	0.9452	0.1176
10	4-1-2024	6-30-2024	0.6950	0.0868
11	7-1-2024	9-30-2024	0.6426	0.2368
12	10-1-2024	12-31-2024	0.6483	0.2424
13	1-1-2025	3-31-2025	0.5952	0.2328
14	4-1-2025	6-30-2025	0.5965	0.2301
15	7-1-2025	9-30-2025	0.6031	0.2326
16	10-1-2025	12-31-2025	1.4841	1.0996
17	1-1-2026	3-31-2026	2.1008	1.8122
		Highest	2.1008	1.8122

Tierra Norte PBD Overlay District - San Diego County, Annual

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9334	0.3062	3.0830	1.8900e-003		0.0385	0.0385		0.0385	0.0385	0.0000	319.9114	319.9114	0.0107	5.7800e-003	321.8998
Energy	0.0310	0.2651	0.1128	1.6900e-003		0.0214	0.0214		0.0214	0.0214	0.0000	679.7337	679.7337	0.0214	8.3600e-003	682.7603
Mobile	0.6000	2.4077	6.0330	0.0213	2.0771	0.0171	2.0941	0.5561	0.0159	0.5719	0.0000	1,971.1108	1,971.1108	0.1032	0.0000	1,973.6907
Waste						0.0000	0.0000		0.0000	0.0000	37.3503	0.0000	37.3503	2.2073	0.0000	92.5339
Water						0.0000	0.0000		0.0000	0.0000	8.2682	96.8083	105.0764	0.8532	0.0208	132.5946
Total	2.5644	2.9791	9.2288	0.0248	2.0771	0.0770	2.1540	0.5561	0.0758	0.6318	45.6185	3,067.5643	3,113.1827	3.1958	0.0349	3,203.4793

Tierra Norte PBD Overlay District - San Diego County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.9334	0.3062	3.0830	1.8900e-003		0.0385	0.0385		0.0385	0.0385	0.0000	319.9114	319.9114	0.0107	5.7800e-003	321.8998
Energy	0.0310	0.2651	0.1128	1.6900e-003		0.0214	0.0214		0.0214	0.0214	0.0000	631.4516	631.4516	0.0194	8.0100e-003	634.3224
Mobile	0.6000	2.4077	6.0330	0.0213	2.0771	0.0171	2.0941	0.5561	0.0159	0.5719	0.0000	1,971.1108	1,971.1108	0.1032	0.0000	1,973.6907
Waste						0.0000	0.0000		0.0000	0.0000	28.0128	0.0000	28.0128	1.6555	0.0000	69.4004
Water						0.0000	0.0000		0.0000	0.0000	8.2682	90.0362	98.3044	0.8530	0.0207	125.8007
Total	2.5644	2.9791	9.2288	0.0248	2.0771	0.0770	2.1540	0.5561	0.0758	0.6318	36.2809	3,012.5100	3,048.7909	2.6417	0.0345	3,125.1140

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.47	1.79	2.07	17.34	1.15	2.45

3.0 Construction Detail

Construction Phase

Tierra Norte PBD Overlay District - San Diego County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2024	2/9/2024	5	30	
2	Site Preparation	Site Preparation	2/10/2024	3/8/2024	5	20	
3	Grading	Grading	3/9/2024	5/10/2024	5	45	
4	Paving	Paving	5/11/2024	6/28/2024	5	35	
5	Building Construction	Building Construction	7/1/2024	3/6/2026	5	440	
6	Architectural Coating	Architectural Coating	11/28/2025	3/6/2026	5	71	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 810,000; Residential Outdoor: 270,000; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Tierra Norte PBD Overlay District - San Diego County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
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
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
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Tierra Norte PBD Overlay District - San Diego County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	273.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
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
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	288.00	43.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	58.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

3.2 Demolition - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0299	0.0000	0.0299	4.5300e-003	0.0000	4.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0337	0.3132	0.2956	5.8000e-004		0.0144	0.0144		0.0134	0.0134	0.0000	50.9941	50.9941	0.0143	0.0000	51.3508
Total	0.0337	0.3132	0.2956	5.8000e-004	0.0299	0.0144	0.0443	4.5300e-003	0.0134	0.0179	0.0000	50.9941	50.9941	0.0143	0.0000	51.3508

Tierra Norte PBD Overlay District - San Diego County, Annual

3.2 Demolition - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.8000e-004	0.0218	8.2500e-003	1.0000e-004	2.3400e-003	4.0000e-005	2.3800e-003	6.4000e-004	4.0000e-005	6.8000e-004	0.0000	9.8430	9.8430	8.9000e-004	0.0000	9.8653
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.3000e-004	4.5200e-003	2.0000e-005	1.8000e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4029	1.4029	3.0000e-005	0.0000	1.4038
Total	1.3500e-003	0.0223	0.0128	1.2000e-004	4.1400e-003	5.0000e-005	4.2000e-003	1.1200e-003	5.0000e-005	1.1700e-003	0.0000	11.2459	11.2459	9.2000e-004	0.0000	11.2690

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0299	0.0000	0.0299	4.5300e-003	0.0000	4.5300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9300e-003	0.0301	0.3492	5.8000e-004		9.2000e-004	9.2000e-004		9.2000e-004	9.2000e-004	0.0000	50.9940	50.9940	0.0143	0.0000	51.3507
Total	6.9300e-003	0.0301	0.3492	5.8000e-004	0.0299	9.2000e-004	0.0308	4.5300e-003	9.2000e-004	5.4500e-003	0.0000	50.9940	50.9940	0.0143	0.0000	51.3507

Tierra Norte PBD Overlay District - San Diego County, Annual

3.2 Demolition - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.8000e-004	0.0218	8.2500e-003	1.0000e-004	2.3400e-003	4.0000e-005	2.3800e-003	6.4000e-004	4.0000e-005	6.8000e-004	0.0000	9.8430	9.8430	8.9000e-004	0.0000	9.8653
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.7000e-004	4.3000e-004	4.5200e-003	2.0000e-005	1.8000e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4029	1.4029	3.0000e-005	0.0000	1.4038
Total	1.3500e-003	0.0223	0.0128	1.2000e-004	4.1400e-003	5.0000e-005	4.2000e-003	1.1200e-003	5.0000e-005	1.1700e-003	0.0000	11.2459	11.2459	9.2000e-004	0.0000	11.2690

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0266	0.2718	0.1834	3.8000e-004		0.0123	0.0123		0.0113	0.0113	0.0000	33.4571	33.4571	0.0108	0.0000	33.7276
Total	0.0266	0.2718	0.1834	3.8000e-004	0.1807	0.0123	0.1930	0.0993	0.0113	0.1106	0.0000	33.4571	33.4571	0.0108	0.0000	33.7276

Tierra Norte PBD Overlay District - San Diego County, Annual

3.3 Site Preparation - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	3.4000e-004	3.6200e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1223	1.1223	3.0000e-005	0.0000	1.1230
Total	5.3000e-004	3.4000e-004	3.6200e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1223	1.1223	3.0000e-005	0.0000	1.1230

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6600e-003	0.0202	0.2087	3.8000e-004		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	33.4570	33.4570	0.0108	0.0000	33.7275
Total	4.6600e-003	0.0202	0.2087	3.8000e-004	0.1807	6.2000e-004	0.1813	0.0993	6.2000e-004	0.0999	0.0000	33.4570	33.4570	0.0108	0.0000	33.7275

Tierra Norte PBD Overlay District - San Diego County, Annual

3.3 Site Preparation - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.3000e-004	3.4000e-004	3.6200e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1223	1.1223	3.0000e-005	0.0000	1.1230
Total	5.3000e-004	3.4000e-004	3.6200e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1223	1.1223	3.0000e-005	0.0000	1.1230

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1952	0.0000	0.1952	0.0809	0.0000	0.0809	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0724	0.7285	0.6238	1.4000e-003		0.0301	0.0301		0.0276	0.0276	0.0000	122.6689	122.6689	0.0397	0.0000	123.6608
Total	0.0724	0.7285	0.6238	1.4000e-003	0.1952	0.0301	0.2252	0.0809	0.0276	0.1086	0.0000	122.6689	122.6689	0.0397	0.0000	123.6608

Tierra Norte PBD Overlay District - San Diego County, Annual

3.4 Grading - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	8.5000e-004	9.0400e-003	3.0000e-005	3.6100e-003	2.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	2.8058	2.8058	7.0000e-005	0.0000	2.8075
Total	1.3300e-003	8.5000e-004	9.0400e-003	3.0000e-005	3.6100e-003	2.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	2.8058	2.8058	7.0000e-005	0.0000	2.8075

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1952	0.0000	0.1952	0.0809	0.0000	0.0809	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0171	0.0743	0.7425	1.4000e-003		2.2800e-003	2.2800e-003		2.2800e-003	2.2800e-003	0.0000	122.6688	122.6688	0.0397	0.0000	123.6606
Total	0.0171	0.0743	0.7425	1.4000e-003	0.1952	2.2800e-003	0.1974	0.0809	2.2800e-003	0.0832	0.0000	122.6688	122.6688	0.0397	0.0000	123.6606

Tierra Norte PBD Overlay District - San Diego County, Annual

3.4 Grading - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.3300e-003	8.5000e-004	9.0400e-003	3.0000e-005	3.6100e-003	2.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	2.8058	2.8058	7.0000e-005	0.0000	2.8075
Total	1.3300e-003	8.5000e-004	9.0400e-003	3.0000e-005	3.6100e-003	2.0000e-005	3.6300e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	2.8058	2.8058	7.0000e-005	0.0000	2.8075

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0173	0.1667	0.2560	4.0000e-004		8.2000e-003	8.2000e-003		7.5400e-003	7.5400e-003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0173	0.1667	0.2560	4.0000e-004		8.2000e-003	8.2000e-003		7.5400e-003	7.5400e-003	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298

Tierra Norte PBD Overlay District - San Diego County, Annual

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	5.0000e-004	5.2700e-003	2.0000e-005	2.1100e-003	1.0000e-005	2.1200e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.6367	1.6367	4.0000e-005	0.0000	1.6377
Total	7.8000e-004	5.0000e-004	5.2700e-003	2.0000e-005	2.1100e-003	1.0000e-005	2.1200e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.6367	1.6367	4.0000e-005	0.0000	1.6377

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.9100e-003	0.0213	0.3027	4.0000e-004		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	4.9100e-003	0.0213	0.3027	4.0000e-004		6.5000e-004	6.5000e-004		6.5000e-004	6.5000e-004	0.0000	35.0464	35.0464	0.0113	0.0000	35.3298

Tierra Norte PBD Overlay District - San Diego County, Annual

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.8000e-004	5.0000e-004	5.2700e-003	2.0000e-005	2.1100e-003	1.0000e-005	2.1200e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.6367	1.6367	4.0000e-005	0.0000	1.6377
Total	7.8000e-004	5.0000e-004	5.2700e-003	2.0000e-005	2.1100e-003	1.0000e-005	2.1200e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.6367	1.6367	4.0000e-005	0.0000	1.6377

3.6 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0971	0.8873	1.0670	1.7800e-003		0.0405	0.0405		0.0381	0.0381	0.0000	153.0204	153.0204	0.0362	0.0000	153.9250
Total	0.0971	0.8873	1.0670	1.7800e-003		0.0405	0.0405		0.0381	0.0381	0.0000	153.0204	153.0204	0.0362	0.0000	153.9250

Tierra Norte PBD Overlay District - San Diego County, Annual

3.6 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	6.0700e-003	0.2133	0.0649	7.3000e-004	0.0188	2.5000e-004	0.0191	5.4400e-003	2.4000e-004	5.6800e-003	0.0000	71.1886	71.1886	4.8100e-003	0.0000	71.3088
Worker	0.0564	0.0360	0.3818	1.3100e-003	0.1524	1.0200e-003	0.1534	0.0405	9.3000e-004	0.0414	0.0000	118.5173	118.5173	2.9400e-003	0.0000	118.5907
Total	0.0624	0.2493	0.4468	2.0400e-003	0.1713	1.2700e-003	0.1725	0.0459	1.1700e-003	0.0471	0.0000	189.7058	189.7058	7.7500e-003	0.0000	189.8995

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0216	0.1475	1.1524	1.7800e-003		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	153.0202	153.0202	0.0362	0.0000	153.9249
Total	0.0216	0.1475	1.1524	1.7800e-003		2.6900e-003	2.6900e-003		2.6900e-003	2.6900e-003	0.0000	153.0202	153.0202	0.0362	0.0000	153.9249

Tierra Norte PBD Overlay District - San Diego County, Annual

3.6 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	6.0700e-003	0.2133	0.0649	7.3000e-004	0.0188	2.5000e-004	0.0191	5.4400e-003	2.4000e-004	5.6800e-003	0.0000	71.1886	71.1886	4.8100e-003	0.0000	71.3088
Worker	0.0564	0.0360	0.3818	1.3100e-003	0.1524	1.0200e-003	0.1534	0.0405	9.3000e-004	0.0414	0.0000	118.5173	118.5173	2.9400e-003	0.0000	118.5907
Total	0.0624	0.2493	0.4468	2.0400e-003	0.1713	1.2700e-003	0.1725	0.0459	1.1700e-003	0.0471	0.0000	189.7058	189.7058	7.7500e-003	0.0000	189.8995

3.6 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335

Tierra Norte PBD Overlay District - San Diego County, Annual

3.6 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	0.0117	0.4157	0.1258	1.4200e-003	0.0373	4.8000e-004	0.0377	0.0108	4.6000e-004	0.0112	0.0000	139.9029	139.9029	9.4100e-003	0.0000	140.1382
Worker	0.1064	0.0656	0.7047	2.4900e-003	0.3014	1.9800e-003	0.3034	0.0801	1.8200e-003	0.0819	0.0000	224.8674	224.8674	5.3600e-003	0.0000	225.0014
Total	0.1181	0.4813	0.8305	3.9100e-003	0.3386	2.4600e-003	0.3411	0.0908	2.2800e-003	0.0931	0.0000	364.7703	364.7703	0.0148	0.0000	365.1396

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0428	0.2916	2.2786	3.5200e-003		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	0.0428	0.2916	2.2786	3.5200e-003		5.3200e-003	5.3200e-003		5.3200e-003	5.3200e-003	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331

Tierra Norte PBD Overlay District - San Diego County, Annual

3.6 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	0.0117	0.4157	0.1258	1.4200e-003	0.0373	4.8000e-004	0.0377	0.0108	4.6000e-004	0.0112	0.0000	139.9029	139.9029	9.4100e-003	0.0000	140.1382
Worker	0.1064	0.0656	0.7047	2.4900e-003	0.3014	1.9800e-003	0.3034	0.0801	1.8200e-003	0.0819	0.0000	224.8674	224.8674	5.3600e-003	0.0000	225.0014
Total	0.1181	0.4813	0.8305	3.9100e-003	0.3386	2.4600e-003	0.3411	0.0908	2.2800e-003	0.0931	0.0000	364.7703	364.7703	0.0148	0.0000	365.1396

3.6 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0321	0.2930	0.3780	6.3000e-004		0.0124	0.0124		0.0117	0.0117	0.0000	54.5011	54.5011	0.0128	0.0000	54.8214
Total	0.0321	0.2930	0.3780	6.3000e-004		0.0124	0.0124		0.0117	0.0117	0.0000	54.5011	54.5011	0.0128	0.0000	54.8214

Tierra Norte PBD Overlay District - San Diego County, Annual

3.6 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	2.0400e-003	0.0738	0.0223	2.5000e-004	6.7100e-003	8.0000e-005	6.7900e-003	1.9400e-003	8.0000e-005	2.0200e-003	0.0000	25.0490	25.0490	1.6800e-003	0.0000	25.0910
Worker	0.0184	0.0110	0.1193	4.3000e-004	0.0543	3.4000e-004	0.0546	0.0144	3.2000e-004	0.0147	0.0000	39.0104	39.0104	9.0000e-004	0.0000	39.0329
Total	0.0204	0.0848	0.1416	6.8000e-004	0.0610	4.2000e-004	0.0614	0.0164	4.0000e-004	0.0168	0.0000	64.0594	64.0594	2.5800e-003	0.0000	64.1238

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.7000e-003	0.0525	0.4103	6.3000e-004		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	54.5010	54.5010	0.0128	0.0000	54.8213
Total	7.7000e-003	0.0525	0.4103	6.3000e-004		9.6000e-004	9.6000e-004		9.6000e-004	9.6000e-004	0.0000	54.5010	54.5010	0.0128	0.0000	54.8213

Tierra Norte PBD Overlay District - San Diego County, Annual

3.6 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	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	2.0400e-003	0.0738	0.0223	2.5000e-004	6.7100e-003	8.0000e-005	6.7900e-003	1.9400e-003	8.0000e-005	2.0200e-003	0.0000	25.0490	25.0490	1.6800e-003	0.0000	25.0910
Worker	0.0184	0.0110	0.1193	4.3000e-004	0.0543	3.4000e-004	0.0546	0.0144	3.2000e-004	0.0147	0.0000	39.0104	39.0104	9.0000e-004	0.0000	39.0329
Total	0.0204	0.0848	0.1416	6.8000e-004	0.0610	4.2000e-004	0.0614	0.0164	4.0000e-004	0.0168	0.0000	64.0594	64.0594	2.5800e-003	0.0000	64.1238

3.7 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8461					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0500e-003	0.0138	0.0217	4.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	3.0639	3.0639	1.7000e-004	0.0000	3.0681
Total	0.8481	0.0138	0.0217	4.0000e-005		6.2000e-004	6.2000e-004		6.2000e-004	6.2000e-004	0.0000	3.0639	3.0639	1.7000e-004	0.0000	3.0681

Tierra Norte PBD Overlay District - San Diego County, Annual

3.7 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9700e-003	1.2200e-003	0.0131	5.0000e-005	5.5800e-003	4.0000e-005	5.6200e-003	1.4800e-003	3.0000e-005	1.5200e-003	0.0000	4.1642	4.1642	1.0000e-004	0.0000	4.1667
Total	1.9700e-003	1.2200e-003	0.0131	5.0000e-005	5.5800e-003	4.0000e-005	5.6200e-003	1.4800e-003	3.0000e-005	1.5200e-003	0.0000	4.1642	4.1642	1.0000e-004	0.0000	4.1667

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8461					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6000e-004	1.5500e-003	0.0220	4.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	3.0639	3.0639	1.7000e-004	0.0000	3.0681
Total	0.8464	1.5500e-003	0.0220	4.0000e-005		5.0000e-005	5.0000e-005		5.0000e-005	5.0000e-005	0.0000	3.0639	3.0639	1.7000e-004	0.0000	3.0681

Tierra Norte PBD Overlay District - San Diego County, Annual

3.7 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9700e-003	1.2200e-003	0.0131	5.0000e-005	5.5800e-003	4.0000e-005	5.6200e-003	1.4800e-003	3.0000e-005	1.5200e-003	0.0000	4.1642	4.1642	1.0000e-004	0.0000	4.1667
Total	1.9700e-003	1.2200e-003	0.0131	5.0000e-005	5.5800e-003	4.0000e-005	5.6200e-003	1.4800e-003	3.0000e-005	1.5200e-003	0.0000	4.1642	4.1642	1.0000e-004	0.0000	4.1667

3.7 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6569					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.0200e-003	0.0269	0.0425	7.0000e-005		1.2100e-003	1.2100e-003		1.2100e-003	1.2100e-003	0.0000	6.0002	6.0002	3.3000e-004	0.0000	6.0083
Total	1.6609	0.0269	0.0425	7.0000e-005		1.2100e-003	1.2100e-003		1.2100e-003	1.2100e-003	0.0000	6.0002	6.0002	3.3000e-004	0.0000	6.0083

Tierra Norte PBD Overlay District - San Diego County, Annual

3.7 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-003	2.2100e-003	0.0240	9.0000e-005	0.0109	7.0000e-005	0.0110	2.9000e-003	6.0000e-005	2.9700e-003	0.0000	7.8563	7.8563	1.8000e-004	0.0000	7.8608
Total	3.7000e-003	2.2100e-003	0.0240	9.0000e-005	0.0109	7.0000e-005	0.0110	2.9000e-003	6.0000e-005	2.9700e-003	0.0000	7.8563	7.8563	1.8000e-004	0.0000	7.8608

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6569					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.0000e-004	3.0300e-003	0.0431	7.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	6.0001	6.0001	3.3000e-004	0.0000	6.0083
Total	1.6576	3.0300e-003	0.0431	7.0000e-005		9.0000e-005	9.0000e-005		9.0000e-005	9.0000e-005	0.0000	6.0001	6.0001	3.3000e-004	0.0000	6.0083

Tierra Norte PBD Overlay District - San Diego County, Annual

3.7 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-003	2.2100e-003	0.0240	9.0000e-005	0.0109	7.0000e-005	0.0110	2.9000e-003	6.0000e-005	2.9700e-003	0.0000	7.8563	7.8563	1.8000e-004	0.0000	7.8608
Total	3.7000e-003	2.2100e-003	0.0240	9.0000e-005	0.0109	7.0000e-005	0.0110	2.9000e-003	6.0000e-005	2.9700e-003	0.0000	7.8563	7.8563	1.8000e-004	0.0000	7.8608

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Tierra Norte PBD Overlay District - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6000	2.4077	6.0330	0.0213	2.0771	0.0171	2.0941	0.5561	0.0159	0.5719	0.0000	1,971.1108	1,971.1108	0.1032	0.0000	1,973.6907
Unmitigated	0.6000	2.4077	6.0330	0.0213	2.0771	0.0171	2.0941	0.5561	0.0159	0.5719	0.0000	1,971.1108	1,971.1108	0.1032	0.0000	1,973.6907

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Condo/Townhouse	3,200.00	3,200.00	3200.00	5,513,435	5,513,435
Total	3,200.00	3,200.00	3,200.00	5,513,435	5,513,435

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	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
Condo/Townhouse	5.33	5.33	5.33	42.00	19.00	39.00	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Condo/Townhouse	0.611343	0.038414	0.178161	0.100214	0.013382	0.005338	0.017151	0.024839	0.001931	0.001783	0.005765	0.000770	0.000908

5.0 Energy Detail

Historical Energy Use: N

Tierra Norte PBD Overlay District - San Diego County, Annual

5.1 Mitigation Measures Energy

Install High Efficiency Lighting

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	324.4421	324.4421	0.0135	2.3800e-003	325.4885
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	372.7243	372.7243	0.0155	2.7300e-003	373.9264
NaturalGas Mitigated	0.0310	0.2651	0.1128	1.6900e-003		0.0214	0.0214		0.0214	0.0214	0.0000	307.0095	307.0095	5.8800e-003	5.6300e-003	308.8339
NaturalGas Unmitigated	0.0310	0.2651	0.1128	1.6900e-003		0.0214	0.0214		0.0214	0.0214	0.0000	307.0095	307.0095	5.8800e-003	5.6300e-003	308.8339

Tierra Norte PBD Overlay District - San Diego County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	5.75314e+006	0.0310	0.2651	0.1128	1.6900e-003		0.0214	0.0214		0.0214	0.0214	0.0000	307.0095	307.0095	5.8800e-003	5.6300e-003	308.8339
Total		0.0310	0.2651	0.1128	1.6900e-003		0.0214	0.0214		0.0214	0.0214	0.0000	307.0095	307.0095	5.8800e-003	5.6300e-003	308.8339

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Condo/Townhouse	5.75314e+006	0.0310	0.2651	0.1128	1.6900e-003		0.0214	0.0214		0.0214	0.0214	0.0000	307.0095	307.0095	5.8800e-003	5.6300e-003	308.8339
Total		0.0310	0.2651	0.1128	1.6900e-003		0.0214	0.0214		0.0214	0.0214	0.0000	307.0095	307.0095	5.8800e-003	5.6300e-003	308.8339

Tierra Norte PBD Overlay District - San Diego County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	2.00933e+006	372.7243	0.0155	2.7300e-003	373.9264
Total		372.7243	0.0155	2.7300e-003	373.9264

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Condo/Townhouse	1.74905e+006	324.4421	0.0135	2.3800e-003	325.4885
Total		324.4421	0.0135	2.3800e-003	325.4885

6.0 Area Detail

6.1 Mitigation Measures Area

Tierra Norte PBD Overlay District - San Diego County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.9334	0.3062	3.0830	1.8900e-003		0.0385	0.0385		0.0385	0.0385	0.0000	319.9114	319.9114	0.0107	5.7800e-003	321.8998
Unmitigated	1.9334	0.3062	3.0830	1.8900e-003		0.0385	0.0385		0.0385	0.0385	0.0000	319.9114	319.9114	0.0107	5.7800e-003	321.8998

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2503					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5622					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0318	0.2721	0.1158	1.7400e-003		0.0220	0.0220		0.0220	0.0220	0.0000	315.0599	315.0599	6.0400e-003	5.7800e-003	316.9322
Landscaping	0.0891	0.0342	2.9672	1.6000e-004		0.0165	0.0165		0.0165	0.0165	0.0000	4.8515	4.8515	4.6500e-003	0.0000	4.9677
Total	1.9334	0.3062	3.0830	1.9000e-003		0.0385	0.0385		0.0385	0.0385	0.0000	319.9114	319.9114	0.0107	5.7800e-003	321.8998

Tierra Norte PBD Overlay District - San Diego County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.2503					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.5622					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0318	0.2721	0.1158	1.7400e-003		0.0220	0.0220		0.0220	0.0220	0.0000	315.0599	315.0599	6.0400e-003	5.7800e-003	316.9322
Landscaping	0.0891	0.0342	2.9672	1.6000e-004		0.0165	0.0165		0.0165	0.0165	0.0000	4.8515	4.8515	4.6500e-003	0.0000	4.9677
Total	1.9334	0.3062	3.0830	1.9000e-003		0.0385	0.0385		0.0385	0.0385	0.0000	319.9114	319.9114	0.0107	5.7800e-003	321.8998

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

Install Low Flow Bathroom Faucet

Install Low Flow Kitchen Faucet

Install Low Flow Toilet

Install Low Flow Shower

Tierra Norte PBD Overlay District - San Diego County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	98.3044	0.8530	0.0207	125.8007
Unmitigated	105.0764	0.8532	0.0208	132.5946

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	26.0616 / 16.4301	105.0764	0.8532	0.0208	132.5946
Total		105.0764	0.8532	0.0208	132.5946

Tierra Norte PBD Overlay District - San Diego County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Condo/Townhouse	26.0616 / 13.1441	98.3044	0.8530	0.0207	125.8007
Total		98.3044	0.8530	0.0207	125.8007

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Tierra Norte PBD Overlay District - San Diego County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	28.0128	1.6555	0.0000	69.4004
Unmitigated	37.3503	2.2073	0.0000	92.5339

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	184	37.3503	2.2073	0.0000	92.5339
Total		37.3503	2.2073	0.0000	92.5339

Tierra Norte PBD Overlay District - San Diego County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Condo/Townhouse	138	28.0128	1.6555	0.0000	69.4004
Total		28.0128	1.6555	0.0000	69.4004

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

Tierra Norte PBD Overlay District - San Diego County, Annual

ATTACHMENT B

AERSCREEN

TITLE: Tierra Norte 400 Unit Residential

***** AREA PARAMETERS *****

SOURCE EMISSION RATE:	0.179E-03 g/s	0.142E-02 lb/hr
AREA EMISSION RATE:	0.173E-08 g/(s-m2)	0.137E-07 lb/(hr-m2)
AREA HEIGHT:	3.00 meters	9.84 feet
AREA SOURCE LONG SIDE:	321.87 meters	1056.00 feet
AREA SOURCE SHORT SIDE:	321.87 meters	1056.00 feet
INITIAL VERTICAL DIMENSION:	1.00 meters	3.28 feet
RURAL OR URBAN:	RURAL	
INITIAL PROBE DISTANCE =	5000. meters	16404. feet

***** BUILDING DOWNWASH PARAMETERS *****

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

***** FLOW SECTOR ANALYSIS *****

25 meter receptor spacing: 1. meters - 5000. meters

MAXIMUM IMPACT RECEPTOR

Zo SECTOR	SURFACE ROUGHNESS	1-HR CONC (ug/m3)	RADIAL (deg)	DIST (m)	TEMPORAL PERIOD
1*	1.000	0.2337	45	225.0	WIN

* = worst case diagonal

***** MAKEMET METEOROLOGY PARAMETERS *****

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 01 1 01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF WS
-1.16	0.043	-9.000	0.020	-999.	21.	5.4	1.000	1.50	0.35	0.50	

HT	REF TA	HT
10.0	250.0	2.0

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

YR MO DY JDY HR

-- -- -- -- --
10 01 01 1 01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF WS
-1.16	0.043	-9.000	0.020	-999.	21.	5.4	1.000	1.50	0.35	0.50	

HT	REF TA	HT
10.0	250.0	2.0

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

DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
1.00	0.1372	2525.00	0.2211E-01
25.00	0.1495	2550.00	0.2184E-01
50.01	0.1623	2575.00	0.2157E-01
75.00	0.1742	2600.00	0.2132E-01
100.00	0.1856	2625.00	0.2107E-01
125.00	0.1965	2650.00	0.2082E-01
150.01	0.2069	2675.00	0.2058E-01
174.99	0.2169	2700.00	0.2034E-01
200.00	0.2266	2725.01	0.2011E-01
225.00	0.2337	2749.99	0.1989E-01
250.00	0.2333	2775.00	0.1967E-01
274.99	0.2186	2800.00	0.1945E-01
300.00	0.2028	2825.00	0.1924E-01
325.00	0.1887	2849.99	0.1903E-01
350.00	0.1765	2875.00	0.1882E-01
375.01	0.1658	2900.00	0.1862E-01
400.00	0.1564	2925.00	0.1842E-01
425.00	0.1479	2950.01	0.1822E-01
450.00	0.1398	2975.00	0.1803E-01
475.01	0.1326	3000.00	0.1784E-01
500.00	0.1261	3025.00	0.1765E-01
525.00	0.1203	3050.00	0.1747E-01
550.00	0.1150	3075.00	0.1729E-01
575.01	0.1101	3100.00	0.1711E-01
599.99	0.1057	3125.00	0.1694E-01
625.00	0.1016	3150.00	0.1677E-01
650.00	0.9779E-01	3174.99	0.1661E-01
675.00	0.9428E-01	3200.00	0.1644E-01
699.99	0.9100E-01	3225.00	0.1628E-01
725.00	0.8794E-01	3250.00	0.1612E-01
750.00	0.8503E-01	3274.99	0.1597E-01
775.00	0.8233E-01	3300.00	0.1582E-01
800.01	0.7978E-01	3325.00	0.1567E-01
825.00	0.7738E-01	3350.00	0.1552E-01
850.00	0.7510E-01	3375.01	0.1538E-01
875.00	0.7293E-01	3400.00	0.1523E-01
900.01	0.7087E-01	3425.00	0.1509E-01
924.99	0.6893E-01	3450.00	0.1495E-01

950.00	0.6708E-01	3475.01	0.1482E-01
975.00	0.6530E-01	3499.99	0.1468E-01
1000.00	0.6362E-01	3525.00	0.1455E-01
1024.99	0.6202E-01	3550.00	0.1442E-01
1050.00	0.6046E-01	3575.00	0.1429E-01
1075.00	0.5898E-01	3600.00	0.1416E-01
1100.00	0.5757E-01	3625.00	0.1404E-01
1125.01	0.5621E-01	3650.00	0.1391E-01
1150.00	0.5490E-01	3675.00	0.1379E-01
1175.00	0.5364E-01	3700.00	0.1367E-01
1200.00	0.5245E-01	3725.00	0.1355E-01
1225.01	0.5129E-01	3750.00	0.1344E-01
1250.00	0.5018E-01	3775.00	0.1332E-01
1275.00	0.4910E-01	3800.00	0.1321E-01
1300.00	0.4806E-01	3825.00	0.1310E-01
1325.01	0.4707E-01	3850.00	0.1299E-01
1349.99	0.4612E-01	3875.00	0.1288E-01
1375.00	0.4519E-01	3900.00	0.1278E-01
1400.00	0.4428E-01	3925.00	0.1267E-01
1425.00	0.4341E-01	3950.00	0.1257E-01
1449.99	0.4257E-01	3975.00	0.1247E-01
1475.00	0.4177E-01	4000.00	0.1237E-01
1500.00	0.4098E-01	4025.00	0.1227E-01
1525.00	0.4022E-01	4050.00	0.1217E-01
1550.01	0.3948E-01	4075.00	0.1208E-01
1575.00	0.3877E-01	4100.00	0.1198E-01
1600.00	0.3807E-01	4125.00	0.1189E-01
1625.00	0.3740E-01	4150.00	0.1180E-01
1650.01	0.3675E-01	4175.00	0.1171E-01
1674.99	0.3611E-01	4200.00	0.1162E-01
1700.00	0.3550E-01	4225.01	0.1153E-01
1725.00	0.3490E-01	4249.99	0.1144E-01
1750.00	0.3432E-01	4275.00	0.1136E-01
1774.99	0.3376E-01	4300.00	0.1127E-01
1800.00	0.3321E-01	4325.00	0.1119E-01
1825.00	0.3268E-01	4349.99	0.1111E-01
1850.00	0.3216E-01	4375.00	0.1102E-01
1875.01	0.3166E-01	4400.01	0.1094E-01
1900.00	0.3117E-01	4425.00	0.1086E-01
1925.01	0.3069E-01	4450.00	0.1078E-01
1950.01	0.3022E-01	4475.00	0.1070E-01
1975.01	0.2976E-01	4500.00	0.1063E-01
1999.99	0.2932E-01	4525.00	0.1055E-01
2025.00	0.2890E-01	4550.00	0.1048E-01
2050.00	0.2847E-01	4575.00	0.1040E-01
2075.00	0.2806E-01	4600.00	0.1033E-01
2099.99	0.2766E-01	4625.00	0.1025E-01
2125.00	0.2727E-01	4650.00	0.1018E-01
2150.00	0.2689E-01	4675.00	0.1011E-01
2175.00	0.2652E-01	4700.00	0.1004E-01

2200.00	0.2615E-01	4725.00	0.9973E-02
2225.00	0.2579E-01	4750.00	0.9904E-02
2250.00	0.2545E-01	4775.00	0.9836E-02
2275.00	0.2511E-01	4800.00	0.9770E-02
2300.01	0.2478E-01	4825.00	0.9704E-02
2325.00	0.2445E-01	4850.00	0.9639E-02
2350.00	0.2414E-01	4875.00	0.9575E-02
2375.00	0.2383E-01	4900.00	0.9511E-02
2400.01	0.2353E-01	4925.00	0.9447E-02
2424.99	0.2323E-01	4950.00	0.9385E-02
2450.00	0.2294E-01	4975.00	0.9323E-02
2475.00	0.2266E-01	5000.00	0.9262E-02
2500.00	0.2238E-01		

 ***** AERSCREEN MAXIMUM IMPACT SUMMARY *****

3-hour, 8-hour, and 24-hour scaled concentrations are equal to the 1-hour concentration as referenced in SCREENING PROCEDURES FOR ESTIMATING THE AIR QUALITY IMPACT OF STATIONARY SOURCES, REVISED (Section 4.5.4)
 Report number EPA-454/R-92-019
http://www.epa.gov/scram001/guidance_permit.htm
 under Screening Guidance

CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	0.2354	0.2354	0.2354	0.2354	N/A
DISTANCE FROM SOURCE	233.01 meters				
IMPACT AT THE AMBIENT BOUNDARY	0.1372	0.1372	0.1372	0.1372	N/A
DISTANCE FROM SOURCE	1.00 meters				

ATTACHMENT C

Health Risk Calculations (Tier 4 Construction Equipment)

**Air Quality Health Risk Calculations (Worst-Case)
Tierra Norte (Tier 4)**

From CalEE Annual Output	Emission per day (Ton/Total Construction Duration)	0.0136				
	Construction Start	1/1/2024				
	Construction Complete	3/6/2026				
	Days	795				
	Construction Emission per day (lb/day)	0.034213836				
	Annual Duration (Days)	365				
	Annualized Emission Rate (Grams/Second)	0.000179385				
	Project Site Size (Acres)	25.6				
	Project Site Size (meters^2)	103599.5244				
	Length of Smalles Side (meters)	321.8688				
Used as an input to AERSCREEN	Emission Rate over Grading Area(g/s-m^2)	1.73E-09				
From AERSCREEN*0.08	Concentration Annual (Ug/M^3)	0.0188				
Duration	Days	Days to years				
	795	2.178082192				
Age (Years)	3rd Trimester (0.25)	0-2	2-9	2-16	16-30	16-70
Cair (annual) - From F15	0.0188	0.0188	0.0188	0.0188	0.0188	0.0188
Breathing Rate per agegroup BR/BW (Page 5-25)	361	1090	861	745	335	290
A (Default is 1)	1	1	1	1	1	1
Exposure Frequency = EF (days/365days)	0.96	0.96	0.96	0.96	0.96	0.96
10^-6 Microgram to Milligram / liters to m3	0.000001	0.000001	0.000001	0.000001	0.000001	0.000001
Dose-inh	0.00000652	0.00001967	0.00001554	0.00001345	0.00000605	0.00000523
Construction Days	795	2.178082192				
potency factor for Diesel	1.1	1.1	1.1	1.1	1.1	1.1
Age Sensitivity Factor	10	10	3	3	1	1
ED	0.25	2.178082192	2.178082192	2.178082192	2.178082192	2.178082192
AT	70	70	70	70	70	70
FAH	0.85	0.85	0.72	0.72	0.73	0.73
Risk for Each Age Group	2.17565E-07	5.72326E-06	1.14883E-06	9.9405E-07	1.51066E-07	1.30773E-07
Risk per million Exposed	0.217565417	5.723259203	1.148827689	0.99404951	0.151065627	0.13077323
Cancer Risk Per Million 9-years	7.09					
Cancer Risk Per Million 30-years	7.09					
Cancer Risk Per Million 70-years	7.07					

ATTACHMENT D

EMFAC 2014 Model Run - 2026

EMFAC2014 (v1.0.7) Emission Rates

Region Type: County

Region: San Diego

Calendar Year: 2026

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for VMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HTSK and RUNLS, g/vehicle/day for IDLEX, RESTL and DIURN

Region	CalYr	VehClass	MdIYr	Speed	Fuel	Population	VMT	Trips
San Diego	2026	HHDT	Aggregatec	Aggregatec	GAS	167.5957326	21749.52304	3353.255417
San Diego	2026	HHDT	Aggregatec	Aggregatec	DSL	15645.91165	2135078.651	0
San Diego	2026	LDA	Aggregatec	Aggregatec	GAS	1451654.062	47518288.54	9191060.676
San Diego	2026	LDA	Aggregatec	Aggregatec	DSL	18622.51166	616981.99	117205.7083
San Diego	2026	LDA	Aggregatec	Aggregatec	ELEC	121062.083	4949434.022	785628.5789
San Diego	2026	LDT1	Aggregatec	Aggregatec	GAS	110115.5939	3331644.121	666437.355
San Diego	2026	LDT1	Aggregatec	Aggregatec	DSL	124.8114255	2633.841787	613.970893
San Diego	2026	LDT1	Aggregatec	Aggregatec	ELEC	42.69926559	1352.096485	259.1206316
San Diego	2026	LDT2	Aggregatec	Aggregatec	GAS	452771.2683	15436548.86	2865498.527
San Diego	2026	LDT2	Aggregatec	Aggregatec	DSL	970.5635469	33713.91312	6177.316206
San Diego	2026	LHDT1	Aggregatec	Aggregatec	GAS	16314.81646	444554.2917	243066.4562
San Diego	2026	LHDT1	Aggregatec	Aggregatec	DSL	23051.92533	717478.8991	289964.2213
San Diego	2026	LHDT2	Aggregatec	Aggregatec	GAS	4046.175021	138815.0608	60281.97901
San Diego	2026	LHDT2	Aggregatec	Aggregatec	DSL	9116.703082	324679.087	114676.656
San Diego	2026	MCV	Aggregatec	Aggregatec	GAS	71325.57419	500602.409	142636.8833
San Diego	2026	MDV	Aggregatec	Aggregatec	GAS	268481.0435	8489901.386	1669638.038
San Diego	2026	MDV	Aggregatec	Aggregatec	DSL	6019.410703	211944.3776	38351.37966
San Diego	2026	MH	Aggregatec	Aggregatec	GAS	8321.649313	61737.13592	832.4977973
San Diego	2026	MH	Aggregatec	Aggregatec	DSL	2245.347186	17146.85063	224.5347186
San Diego	2026	MHDT	Aggregatec	Aggregatec	GAS	3171.174025	164145.6455	63448.8499
San Diego	2026	MHDT	Aggregatec	Aggregatec	DSL	26576.49204	1325120.363	0
San Diego	2026	OBUS	Aggregatec	Aggregatec	GAS	1755.939329	93481.56971	35132.8341
San Diego	2026	OBUS	Aggregatec	Aggregatec	DSL	980.0428572	74167.93587	0
San Diego	2026	SBUS	Aggregatec	Aggregatec	GAS	460.1745622	20767.56101	1840.698249
San Diego	2026	SBUS	Aggregatec	Aggregatec	DSL	1216.407802	46089.03739	0
San Diego	2026	UBUS	Aggregatec	Aggregatec	GAS	483.1218265	64703.68329	1932.487306
San Diego	2026	UBUS	Aggregatec	Aggregatec	DSL	673.1632845	90155.61205	2692.653138
							Total VMT	Total Trips
Total							86832916.46	16300954.68
VMT/Trip							5.326860799	

ATTACHMENT E

CALINE 4 Modeling

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 1

JOB: College Drive and SR-76 AM
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 300. (M)
 BRG= WORST CASE VD= 0.0 CM/S
 CLAS= 7 (G) VS= 0.0 CM/S
 MIXH= 1000. M AMB= 3.1 PPM
 SIGTH= 5. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* X1	* Y1	* X2	* Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. west section	* -150	* 0	* 0	* 0	* AG	1166	0.8	0.0	10.1
B. east section	* -150	* 0	* 0	* 0	* AG	2454	0.8	0.0	10.1
C. south sectio	* 0	* -150	* 0	* 0	* AG	1262	0.8	0.0	10.1
D. north sectio	* 0	* 150	* 0	* 0	* AG	1804	0.8	0.0	10.1

III. RECEPTOR LOCATIONS

RECEPTOR	* X	* Y	* Z
1. Recpt 1	* 15	* 15	* 1.8
2. Recpt 2	* -15	* 15	* 1.8
3. Recpt 3	* -15	* -15	* 1.8
4. Recpt 4	* 15	* -15	* 1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* BRG (DEG)	* PRED CONC (PPM)	* CONC (PPM)	* A	* B	* C	* D
1. Recpt 1	* 259.	* 3.3	* 0.1	0.1	0.0	0.1	0.1
2. Recpt 2	* 169.	* 3.3	* 0.0	0.1	0.1	0.0	0.0
3. Recpt 3	* 11.	* 3.3	* 0.0	0.1	0.0	0.1	0.1

4. Recpt 4 * 281. * 3.3 * 0.1 0.1 0.0 0.0



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
 JUNE 1989 VERSION
 PAGE 1

JOB: College Drive and SR-76 PM
 RUN: Hour 1 (WORST CASE ANGLE)
 POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= 0.5 M/S Z0= 100. CM ALT= 300. (M)
 BRG= WORST CASE VD= 0.0 CM/S
 CLAS= 7 (G) VS= 0.0 CM/S
 MIXH= 1000. M AMB= 3.1 PPM
 SIGTH= 5. DEGREES TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	* X1	* Y1	* X2	* Y2	* TYPE	VPH	EF (G/MI)	H (M)	W (M)
A. west section	* -150	* 0	* 0	* 0	* AG	1166	0.8	0.0	10.1
B. east section	* -150	* 0	* 0	* 0	* AG	1928	0.8	0.0	10.1
C. south sectio	* 0	* -150	* 0	* 0	* AG	1262	0.8	0.0	10.1
D. north sectio	* 0	* 150	* 0	* 0	* AG	1804	0.8	0.0	10.1

III. RECEPTOR LOCATIONS

RECEPTOR	* X	* Y	* Z
1. Recpt 1	* 15	* 15	* 1.8
2. Recpt 2	* -15	* 15	* 1.8
3. Recpt 3	* -15	* -15	* 1.8
4. Recpt 4	* 15	* -15	* 1.8

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	* BRG (DEG)	* PRED CONC (PPM)	* A	* B	* C	* D
1. Recpt 1	* 259.	* 3.3	* 0.1	* 0.1	* 0.0	* 0.1
2. Recpt 2	* 169.	* 3.3	* 0.0	* 0.1	* 0.1	* 0.0
3. Recpt 3	* 11.	* 3.3	* 0.0	* 0.1	* 0.0	* 0.1

4. Recpt 4 * 281. * 3.3 * 0.1 0.1 0.0 0.0

