Air Quality Technical Report

Santee Cannabis Business Ordinance

June 2022

Prepared for:



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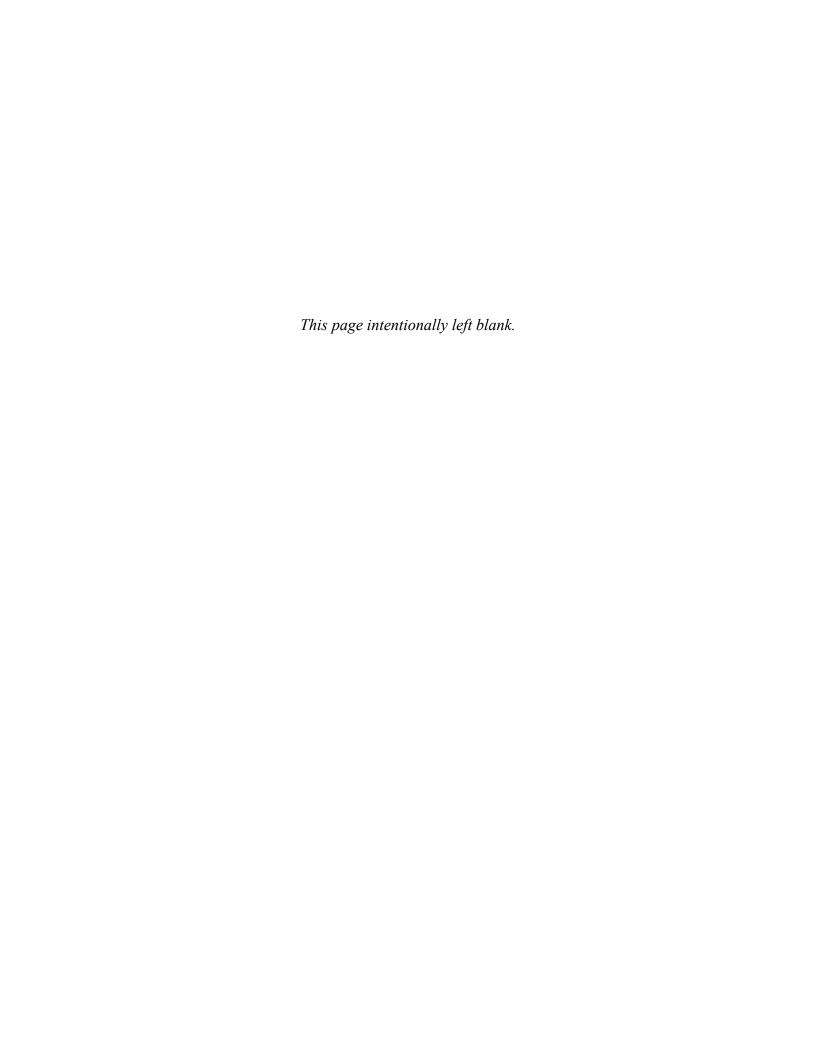


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Appendix A. Air Quality Data

Acronyms and Abbreviations

μg/m³ micrograms per cubic meter

°C degrees Celsius °F degrees Fahrenheit

Air Quality and Land Use Handbook Air Quality and Land Use Handbook: A Community

Health Perspective

AUMA Control, Tax, and Regulate the Adult Use of Marijuana Act

CAA Clean Air Act

CAAQS California Ambient Air Quality Standards
CalEEMod California Emissions Estimator Model
CARB California Air Resources Board
CEQA California Environmental Quality Act

City City of Santee
CO carbon monoxide
County County of San Diego
DPM diesel particulate matter

Hot Spots Act Air Toxics Hot Spots Information and Assessment Act

LOS level of service

MAUCRSA Medicinal and Adult-Use of Cannabis Regulation and

Safety Act

mg/m³ micrograms per cubic meter

NA not applicable

NAAQS National Ambient Air Quality Standards

NO nitric oxide
NO₂ nitrogen dioxide
NO_x nitrogen oxides

 O_3 ozone

Ordinance or project Santee Cannabis Business Ordinance

PCE perchloroethylene PM particulate matter

PM₁₀ respirable particulate matter PM_{2.5} fine particulate matter ppb parts per billion ppm parts per million

RAQS Regional Air Quality Strategy

SANDAG San Diego Association of Governments
SCAQMD South Coast Air Quality Management District

SDAB San Diego Air Basin

SDAPCD San Diego Air Pollution Control District

SIP State Implementation Plan

SO₂ sulfur dioxide

TAC toxic air contaminant

Tanner Act Toxic Air Contaminant Identification and Control Act

USEPA U.S. Environmental Protection Agency

VOC volatile organic compound

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Executive Summary

This air quality evaluation was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) to assess if significant air quality impacts are likely to occur in conjunction with implementation of the proposed Santee Cannabis Ordinance (Ordinance or project). The project does not propose any specific new development; however, it would allow cannabis facilities to be permitted in the City of Santee (City), consistent with the Ordinance. Specifically, this report evaluates the project's potential to:

- Result in a conflict with or obstruct implementation of the San Diego Air Pollution Control District (SDAPCD) Regional Air Quality Strategy (RAQS) or the State Implementation Plan (SIP)
- Contribute substantially to an existing or projected air quality violation, or 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
- Expose on- or off-site sensitive receptors to substantial carbon monoxide (CO) concentrations, or expose new on-site sensitive receptors to existing off-site sources of toxic air contaminants (TACs)
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

The air quality evaluation concludes that implementation of the project would not conflict with or obstruct the implementation of the applicable SDAPCD air quality plans. Emissions associated with construction of the project would be temporary and would not exceed the SDAPCD screening level thresholds for criteria pollutants. The increase in operational air pollutant emissions associated with the project would also not exceed the screening level thresholds established by the SDAPCD. Based on a review of the study area roadway conditions, the project would not result in a CO hotspot. In addition, based on the types of land uses proposed in the project, impacts associated with the exposure of sensitive receptors to TACs and odors would be less than significant. Therefore, the project would not result in a significant impact related to air quality, and no mitigation would be required.

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Section 1 Project Description

The City of Santee (City) proposes a comprehensive Santee Cannabis Business Ordinance (Ordinance or project) amending the City's Municipal Code to regulate cannabis land uses consistent with the Medicinal and Adult-Use of Cannabis Regulation and Safety Act (MAUCRSA) and the Control, Tax, and Regulate the Adult Use of Marijuana Act (AUMA). The Ordinance would implement the provisions of the MAUCRSA to accommodate the needs of people with medical illnesses who need cannabis for medicinal purposes as recommended by their healthcare providers and to provide access to those resources. It would also provide access to adult-use cannabis for people aged 21 and over as authorized by the AUMA while imposing sensible regulations on the use of land to protect City residents, neighborhoods, and businesses from disproportionately negative impacts. The Ordinance would regulate the commercial cultivation, processing, manufacturing, testing, sale, delivery, and distribution of cannabis and cannabis products in a responsible manner to protect the health, safety, and welfare of the residents of the City and to enforce rules and regulations consistent with state law and in a fair and equitable manner.

Cannabis facilities would not be located within 900 feet of sensitive receptors, including kindergarten through 12th grade schools, commercial daycare centers, youth centers, religious locations, or parks. It is anticipated that certain types of cannabis facilities would only be allowed in the Light Industrial (IL), General Industrial (IG), and General Commercial (GC) zones in the City, subject to the City's siting requirements (see Figure 1, Areas Allowing Cannabis Facilities by Zone).

The project does not propose any specific new development; however, it would allow cannabis facilities to be permitted in the City, consistent with the Ordinance. The project does not propose any specific new development; however, it would allow cannabis facilities to be permitted in the City, consistent with the Ordinance. For this analysis, a realistic, worst-case scenario was developed to evaluate the project's impacts. A total of 20 facilities—retail (two locations total), microbusiness with retail (two locations total), microbusiness without retail (two locations total), manufacturing (four locations total), testing (four locations total), and distribution (six locations total)—were assumed to be permitted by the Ordinance. At this time, the specific locations of the retail, microbusiness, manufacturing, testing, and distribution sites are not known, although they would occur in the Light Industrial (IL), General Industrial (IG), and General Commercial (GC) zones. The anticipated proposed land use square footage and allowed zones permitted by the Ordinance are identified in Table 1, Cannabis Facilities Assumptions.

Table 1. Cannabis Facilities Assumptions

Land Use Type	Allowed Zones	Square Footage per Facility	Proposed Santee Facilities	Total Square Footage per Land Use Type
Storefront Retail + Delivery	GC, IL, IG	5,000	2	10,000
Microbusiness with Retail (includes retail, distribution, and manufacturing – no cultivation)	GC, IL, IG	10,000	2	20,000
Microbusiness without Retail (includes cultivation, manufacturing, and distribution)	IL, IG	15,000	2	30,000
Manufacturing	IL, IG	3,000	4	12,000
Testing	IL, IG	2,500	4	10,000
Distribution	IL, IG	2,000	6	12,000
Total	_	_	20	94,000

Notes: GC = General Commercial; IG = General Industrial; IL = Light Industrial

¹ Definition of a microbusiness includes a maximum cultivation canopy of 10,000 square feet.

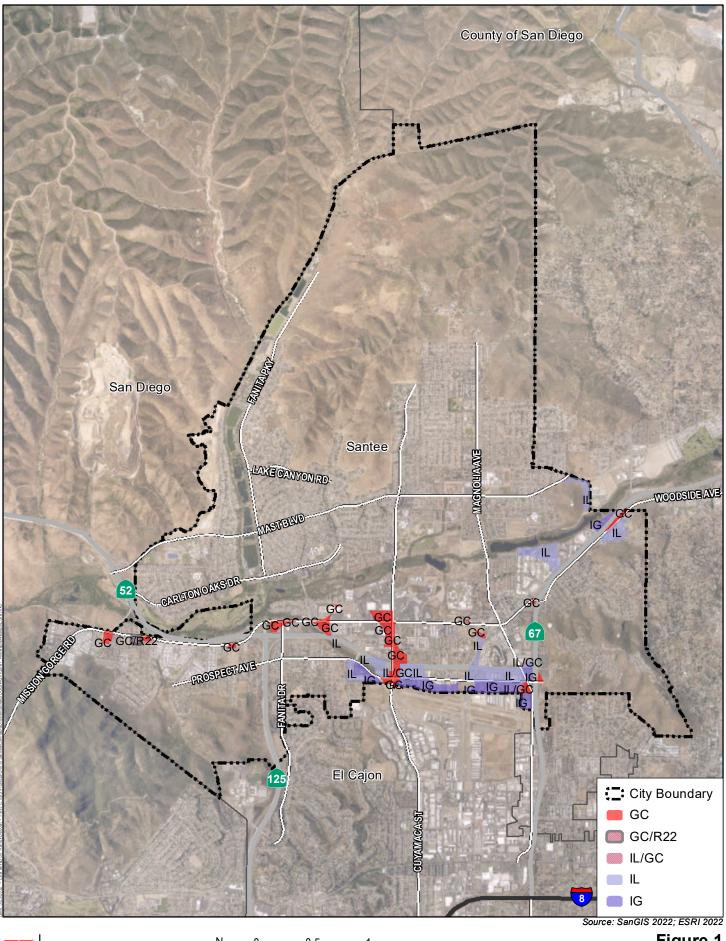


Figure 1

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Section 2 Existing Conditions

The following sections summarize meteorological conditions of the City and the surrounding area and pollutants of concern for this analysis.

2.1 Climate and Meteorology

Regional climate and local meteorological conditions influence ambient air quality. The City is in the San Diego Air Basin (SDAB). This high-pressure cell typically creates a pattern of late-night and early morning low clouds, hazy afternoon sunshine, daytime onshore breezes, and little temperature variation year-round. The climatic classification for San Diego County (County) is a Mediterranean climate, with warm, dry summers and mild, wet winters (County of San Diego 2007). Meteorological data in the City and the surrounding area are gathered at the El Cajon station, approximately 2.9 miles southeast of the City boundary (WRCC 2022). In the City and the surrounding area, the normal daily maximum temperature is 78 degrees Fahrenheit (°F) in August, and the normal daily minimum temperature is 52°F in December. The normal precipitation in the project area and the surrounding area is approximately 12 inches annually, occurring primarily from November through March.

The high-pressure cell creates subsidence inversions, also known as temperature inversions, which occur during the warmer months as descending air associated with the Pacific high-pressure cell encounters cool marine air. The boundary between the two layers of air creates a temperature inversion that traps pollutants. In addition, the region experiences daytime onshore flow and nighttime offshore flow, which leads to emissions being blown out to sea at night and returning to land the following day. Under certain conditions, this atmospheric oscillation results in the offshore transportation of air and pollutants from the Los Angeles region to the County, which typically results in higher ozone (O₃) concentrations being measured in the San Diego region (County of San Diego 2007).

2.2 Air Pollutants

Historically, air quality laws and regulations have divided air pollutants into two broad categories: criteria air pollutants and toxic air contaminants (TACs). Criteria air pollutants are a group of common air pollutants regulated by the federal and state governments by means of ambient standards based on criteria regarding health and environmental effects of pollution. TACs are pollutants with the potential to cause significant adverse health effects. Unlike the air quality standards for criterial pollutants to protect health and the environment, in California, the California Air Resources Board (CARB) identifies exposure thresholds for TACs that indicate levels below which no significant adverse health effects are anticipated from exposure to the identified substance. However, no thresholds are specified for TACs found to have no safe exposure level or where insufficient data is available to identify an exposure threshold (CARB 2022a).

2.2.1 Criteria Air Pollutants

The criteria air pollutants pertinent to the analysis in this report are carbon monoxide (CO), nitrogen oxides (NO_x), O₃, particulate matter (PM), and sulfur dioxide (SO₂). The following describes the health effects for each of these criteria air pollutants. Emissions from lead typically result from industrial processes such as ore and metals processing and leaded aviation gasoline (USEPA 2021a). These sources are not proposed as part of the project; therefore, lead emissions are not included in this analysis.

Carbon Monoxide (CO). CO is a colorless, odorless, poisonous gas produced by combustion processes, primarily mobile sources. When CO gets into the body, it combines with chemicals in the blood and prevents blood from providing oxygen to cells, tissues, and organs. Because the body requires oxygen for energy, high-level exposure to CO can cause serious health effects, including death (USEPA 2021b).

Nitrogen Oxides (NO_x). NO_x is a general term pertaining to compounds including nitric oxide (NO), nitrogen dioxide (NO₂), and other oxides of nitrogen. NO_x is produced from burning fuels, including gasoline, diesel, and coal. NO_x reacts with volatile organic compounds (VOCs) to form ground-level O_3 (smog). NO_x is linked to a number of adverse respiratory systems effects (USEPA 2021c).

Ozone (O₃). Ground-level O₃ is not emitted directly into the air but is formed by chemical reactions of "precursor" pollutants (NO_x and VOCs) in the presence of sunlight. Major emissions sources include NO_x and VOC emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents. O₃ can trigger a variety of health problems, particularly for sensitive receptors, including children, older adults, and people of all ages who have lung diseases, such as asthma (USEPA 2021d).

Particulate Matter (PM₁₀ and PM_{2.5}). PM includes dust, metals, organic compounds, and other tiny particles of solid materials that are released into and move around in the air. Particulates are produced by many sources, including the burning of diesel fuels by trucks and buses, industrial processes, and fires. Particulate pollution can cause nose and throat irritation and heart and lung problems. PM is measured in microns, which are one millionth of a meter in length (or one thousandth of a millimeter). PM₁₀ is small (i.e., respirable) particulate matter measuring no more than 10 microns in diameter, while PM_{2.5} is fine particulate matter measuring no more than 2.5 microns in diameter (USEPA 2022).

Sulfur Dioxide (SO₂). SO₂ is formed primarily by the combustion of sulfur-containing fossil fuels, especially at power plants and industrial facilities. SO₂ is linked to a number of adverse effects on the respiratory system (USEPA 2022).

2.2.2 Toxic Air Contaminants

The two primary emissions of concern regarding health effects for land development projects are CO and diesel particulate matter (DPM). The health effects of CO are described previously. DPM is a mixture of exhaust particles and gases that is produced when an engine burns diesel fuel. Compounds found in diesel exhaust are carcinogenic. Some short-term (acute) effects of diesel exhaust exposure include eye, nose, throat, and lung irritation and headaches and dizziness. Long-term exposure is linked to increased risk of cardiovascular, cardiopulmonary, and respiratory disease and lung cancer (OSHA 2013).

2.3 Regulatory Framework

The following sections summarize applicable federal, state, regional, and local regulations related to air quality.

2.3.1 Federal

The following federal regulations are applicable to the analysis of the project.

2.3.1.1 Clean Air Act

The Clean Air Act (CAA) of 1970 is the comprehensive federal law that regulates air emissions from stationary and mobile sources. The CAA authorizes the U.S. Environmental Protection Agency (USEPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and welfare and to regulate emissions of hazardous air pollutants. Current NAAQS are listed in Table 2, State and Federal Ambient Air Quality Standards. The USEPA classifies air basins (or portions of air basins) as being "attainment," "non-attainment," or "unclassified" for each criteria air pollutant based on whether or not the NAAQS have been achieved. If an area is designated as unclassified, it is because inadequate air quality data was available as a basis for a non-attainment or attainment designation. The USEPA classifies the SDAB as attainment for the federal CO, NO₂, lead, PM_{2.5}, and SO₂ standards. It is unclassifiable for PM₁₀ with respect to federal air quality standards. The SDAB is classified as moderate non-attainment for O₃. Table 3, County of San Diego Attainment Status, lists the attainment status of the County for criteria air pollutants.

Table 2. State and Federal Ambient Air Quality Standards

		State Standards ^a	Federal Standards ^b		
Pollutant	Averaging Time	Concentration	Primary ^{c, d}	Secondary ^{c, e}	
	1-hour	0.09 ppm (180 μg/m³)	_	Cama as primary	
O ₃ f	8-hour	0.070 ppm (137 μg/m³)	0.070 ppm (137 μg/m³)	Same as primary standards	
	24-hour	50 μg/m ³	150 μg/m ³	Como ao primary	
PM ₁₀ ⁹	Annual arithmetic mean	20 μg/m³	_	Same as primary standards	
PM _{2.5} g	24-hour	_	35 μg/m³	Same as primary standards	
F IVI2.59	Annual arithmetic mean	12 μg/m³	12 μg/m³	15 μg/m³	
CO	8-hour	9 ppm (10 mg/m ³)	9 ppm (10 mg/m ³)	None	
	1-hour	20 ppm (23 mg/m ³)	35 ppm (40 mg/m ³)	None	
NO_2^h	Annual arithmetic mean	0.030 ppm (57 μg/m³)	0.053 ppm (100 μg/m³)	Same as primary standard	
	1-hour	0.18 ppm (470 mg/m ³)	100 ppb (188 μg/m ³)	Stanuaru	
	Annual arithmetic mean	_	0.030 ppm (for certain areas)	_	
SO ₂ i	24-hour	0.04 ppm (105 μg/m³)	0.14 ppm (for certain areas)	_	
	3-hour	_		0.5 ppm (1300 μg/m ³)	
	1-hour	0.25 ppm (655 μg/m ³)	75 ppb (196 μg/m³)	_	
	30-day average	1.5 μg/m³	_		
Lead ^{j, k}	Calendar quarter	_	1.5 μg/m³ (for certain areas)	Same as primary	
	Rolling 3-month average ⁹	_	0.15 μg/m ³	standard	
Visibility-reducing particles ⁱ	8-hour	See note I	No federal standards		
Sulfates	24-hour	25 μg/m³	No federal standards		
Hydrogen sulfide	1-hour	0.03 ppm (42 μg/m³)	No federa	al standards	
Vinyl chloride ^j	24-hour	0.01 ppm (26 μg/m³)	No federal standards		

Source: CARB 2016.

Notes: μ g/m³ = micrograms per cubic meter; CO = carbon monoxide; mg/m³ = micrograms per cubic meter; NO₂ = nitrogen dioxide; O₃ = ozone; PM₁₀ = respirable particulate matter; PM₂₅ = fine particulate matter; ppb = parts per billion; ppm = parts per million; SO₂ = sulfur dioxide

State standards for O₃, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, PM_{2.5}, and visibility-reducing particles are values that are not to be exceeded. The standards for sulfates, lead, hydrogen sulfide, and vinyl chloride standards are not to be equaled or exceeded. California Ambient Air Quality Standards (CAAQS) are listed in the Table of Standards in California Code of Regulations, Title 17, Section 70200.

Federal standards (other than O₃, PM, and those based on annual averages) are not to be exceeded more than once per year. The O₃ standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over 3 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 1. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact the USEPA for further clarification and current national policies.

^c Concentration is first expressed in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25 degrees Celsius (°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.

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

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

- f On October 1, 2015, the federal 8-hour O₃ 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 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 were also retained. The form of the annual primary and secondary standards is the annual mean averaged over 3 years.
- To attain the 1-hour federal 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 ppb. State standards are in units of ppm. To directly compare the national 1-hour standard to the state standards, the units can be converted from ppb to ppm. In this case, the federal standard of 100 ppb is identical to 0.100 ppm.
- 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 federal 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 federal standards (24-hour and annual) remain in effect until 1 year after an area is designated for the 2010 standards, except that in areas designated non-attainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
 - Note that the 1-hour federal standard is in units of ppb. State standards are in units of ppm. To directly compare the 1-hour federal standard to the state standard, the units can be converted to ppm. In this case, the federal standard of 75 ppb is identical to 0.075 ppm.
- ^j CARB had identified lead and vinyl chloride as TACs with no determined threshold level of exposure for adverse health effects. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
- The federal 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 1 year after an area is designated for the 2008 standard, except that in areas designated non-attainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
- In 1989, CARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe Air Basin 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.

Table 3. County of San Diego Attainment Status

Pollutant	Averaging Time	State Standards	Federal Standards	
0	1-hour	Non attainment	No federal standard	
O ₃	8-hour	Non-attainment	Non-attainment	
DM	Annual arithmetic mean	Non attainment	No federal standard	
PM ₁₀	24-hour	Non-attainment	Unclassifieda	
DM	Annual arithmetic mean	Non-attainment	Attainment	
PM _{2.5}	24-hour	No state standard	- Attainment	
CO	8-hour	Attainment	Attainment	
CO	1-hour	Attainment		
NO.	Annual arithmetic mean	No state standard	Attainment	
NO ₂	1-hour	Attainment	No federal standard	
	Calendar quarter	No state standard	Attainment	
Lead	30-day average	Attainment	No federal standard	
	Rolling 3-month average	No state standard	Attainment	
	Annual arithmetic mean	No state standard	Attainment	
SO ₂	24-hour	Attainment	Attainment	
	1-hour	Attainment	No federal standard	
Sulfates	24-hour	Attainment	No federal standard	
Hydrogen sulfide	1-hour	Unclassified	No federal standard	
Visibility-reducing particulates	8-hour (10:00 a.m. to 6:00 p.m. [PT])	Unclassified	No federal standard	

Source: SDAPCD 2022.

Notes: CO = carbon monoxide; NO_2 = nitrogen dioxide; O_3 = ozone; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; SO_2 = sulfur dioxide

[&]quot;Unclassified" indicates data is not sufficient for determining attainment or non-attainment.

The CAA requires states to develop a plan to attain and maintain the NAAQS in all areas of the country and a specific plan to attain the standards for each area designated as non-attainment for the NAAQS. These plans, known as State Implementation Plans (SIPs), are developed by state and local air quality management agencies and submitted to the USEPA for approval. SIPs include strategies and control measures to attain the NAAQS by deadlines established by the CAA. SIPs are modified periodically to reflect the latest emissions inventories, plans, and rules and regulations of air basins as reported by the agencies with jurisdiction over them.

2.3.2 State

The following state regulations are applicable to the analysis of the project.

2.3.2.1 California Ambient Air Quality Standards

CARB is part of the California Environmental Protection Agency and is responsible for the coordination and administration of both federal and state air pollution control programs in California. The CAA allows states to adopt ambient air quality standards and other regulations provided that they are at least as stringent as federal standards. California has adopted ambient standards, the California Ambient Air Quality Standards (CAAQS), that are equal to or stricter than the federal standards for six criteria air pollutants. The CAAQS are listed in the Table of Standards in the California Code of Regulations, Title 17, Section 70200, and are provided in Table 2. Similar to the CAA, areas have been designated as attainment, non-attainment, or unclassified with respect to the state ambient air quality standards. The SDAB is non-attainment with the CAAQS for O₃, PM₁₀, and PM_{2.5}. The SDAB is designated as an attainment area for the state CO, NO, SO₂, lead, and sulfates standards. Hydrogen sulfide and visibility-reducing particles are unclassified in the SDAB.

2.3.2.2 Air Quality and Land Use Handbook: A Community Health Perspective

CARB has also developed the Air Quality and Land Use Handbook: A Community Health Perspective (Air Quality and Land Use Handbook) to provide guidance on land use compatibility with sources of TACs (CARB 2005). These sources include freeways and high-traffic roads, commercial distribution centers, rail yards, refineries, dry cleaners, gasoline stations, and industrial facilities. The handbook is not a law or adopted policy but offers advisory recommendations for the siting of sensitive receptors near uses associated with TACs. The handbook indicates that land use agencies have to balance a number of other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues.

2.3.2.3 Toxic Air Contaminant Regulations

California regulates TACs primarily through the Toxic Air Contaminant Identification and Control Act of 1983 (Assembly Bill 1807, Tanner Act) and the Air Toxics Hot Spots Information and Assessment Act of 1987 (Assembly Bill 2588, Hot Spots Act). The Tanner Act sets forth a formal

procedure for CARB to designate substances as TACs. This includes research, public participation, and scientific peer review before CARB designates a substance as a TAC. To date, CARB has designated nearly 200 compounds as TACs. The majority of estimated health risks from TACs can be attributed to a relatively small number of compounds, the most important being PM from dieselfueled engines (i.e., DPM).

2.3.3 Regional

The following regional plans and regulations are applicable to the analysis of the project. The SDAPCD has jurisdiction over air quality programs in the SDAB. State and local government projects, as well as projects proposed by the private sector, are subject to the SDAPCD requirements if the sources are regulated by the SDAPCD.

2.3.3.1 Regional Air Quality Strategy

CARB requires air districts to attempt, achieve, and maintain the state ambient air quality standards by the earliest practicable date. To this end, districts are required to develop plans for attaining the CAAQS. A Regional Air Quality Strategy (RAQS) was initially adopted by the SDAPCD in 1992 and has generally been updated on a triennial basis in accordance with state requirements. The SDAPCD most recently adopted the 2016 Revision of the RAQS for the County (SDAPCD 2016). The RAQS was developed pursuant to California CAA requirements and identifies feasible emissions control measures to provide progress toward attaining the state O₃ standard in the SDAB. The pollutants addressed are VOCs and NO_x, which are precursors to the photochemical formation of O₃ (the primary component of smog). The RAQS control measures focus on emissions sources under the SDAPCD's authority, specifically stationary emissions sources (such as power plants and manufacturing and industrial facilities) and some area-wide sources (such as water heaters, architectural coatings, and consumer products). However, the emissions inventories and projections in the RAQS reflect the impact of all emissions sources and control measures, including those under the jurisdiction of CARB (on-road and off-road motor vehicles) and the USEPA (aircraft, ships, and trains). Thus, while legal authority to control various pollution sources is divided among agencies, the SDAPCD is responsible for reflecting federal, state, and local measures in a single plan to achieve state O₃ standards in the SDAB.

2.3.3.2 State Implementation Plan

The CAA requires plans that identify how non-attainment areas will attain and/or maintain the NAAQS. The CAA requires the USEPA to review each plan and any plan revisions and to approve the plan/revisions if consistent with the CAA. Key elements of these plans include emissions inventories, emissions control strategies and rules, air quality data analyses, modeling, air quality progress, and attainment or maintenance demonstrations. Individual district plans are submitted to CARB as part of the SIP. As mentioned previously, the SDAB is currently designated as a non-attainment area for the 8-hour O₃ NAAQS. The SDAPCD adopted its Ozone Attainment Plan in October 2020.

2.3.3.3 Measures to Reduce Particulate Matter in the County of San Diego

Neither the RAQS nor the SIP address emissions of PM in the SDAB. In December 2005, the SDAPCD prepared a report titled Measures to Reduce Particulate Matter in San Diego County. The report identifies existing federal, state, and local measures to control particulates in the SDAB and outlines potential measures for PM control that the SDAPCD may further evaluate for future rule adoption. The report does not outline a plan for ambient air quality standards compliance that the project would need to implement or demonstrate compliance with. As such, the report is not discussed further in this analysis.

2.3.3.4 San Diego Air Pollution Control District Rules

The SDAPCD is also responsible for establishing and enforcing local air quality rules and regulations that address the requirements of federal and state air quality laws. Development projects in the County may be subject to the following SDAPCD Rules (as well as others):

- Rule 51, Nuisance: Prohibits emissions that cause injury, detriment, nuisance, or annoyance to any considerable number of people or to the public; or that endanger the comfort, repose, health, or safety of any such people or the public; or that cause injury or damage to business or property
- Rule 52, Particulate Matter: Establishes limits to the discharge of any PM from non-stationary sources
- Rule 54, Dust and Fumes: Establishes limits to the amount of dust or fume discharged into the atmosphere in any 1 hour
- Rule 55, Fugitive Dust Control: Sets restrictions on visible fugitive dust from construction and demolition projects
- Rule 67, Architectural Coatings: Establishes limits to the VOC content for coatings applied in the SDAPCD

In addition, Rule 1200 applies to any new, relocated, or modified emissions unit that may increase emissions of one or more TAC. Rule 1210 implements the public notification and risk reduction requirements of the state Hot Spots Act and requires facilities to reduce risks to acceptable levels within 5 years.

2.3.4 Local

2.3.4.1 Santee General Plan

The Santee General Plan includes various goals, objectives, and policies that would improve air quality conditions through land use siting and compatibility in the City, including the following policies from the Land Use Element (City of Santee 2003):

- **Policy 4.3:** The City should locate new neighborhood commercial uses along major roadways in consolidated centers that utilize common access and parking for commercial uses, discourage the introduction of strip commercial uses and require adequate pedestrian links to residential areas.
- **Policy 5.3:** The City shall ensure that industrial development creates no significant off-site impacts related to access and circulation, noise, dust, odors, visual features and hazardous materials, that cannot be adequately mitigated.
- **Policy 6.2:** The City should promote the use of innovative site planning to avoid on-site hazards and minimize risk levels.
- **Policy 8.4**: The City should consider the adjacent land use compatibility guide chart to assist in an initial determination of overall land use compatibility for adjacent land uses.

2.3.4.2 Sustainable Santee Plan: The City's Roadmap to Greenhouse Gas Reductions

The City adopted the Sustainable Santee Plan: The City's Roadmap to Greenhouse Gas Reductions in January 2020. The Sustainable Santee Plan provides greenhouse gas emissions reduction goals and strategies focused on reducing resource consumption, improving alternative modes of transportation, and reducing overall emissions throughout the City. The Sustainable Santee Plan presents the following goals that would provide air quality co-benefits by reducing vehicle trips and natural gas consumption (City of Santee 2020):

- Goal 1: Increase Energy Efficiency in Existing Residential Units
- Goal 2: Increase Energy Efficiency in New Residential Units
- Goal 3: Increase Energy Efficiency in Existing Commercial Units
- Goal 4: Increase Energy Efficiency in New Commercial Units
- Goal 6: Decrease Greenhouse Gas Emissions through Reducing Vehicle Miles Traveled
- Goal 7: Increase Use of Electric Vehicles
- Goal 8: Improve Traffic Flow
- Goal 10: Decrease Greenhouse Gas Emissions through Increasing Clean Energy Use

2.4 Existing Air Quality

The following sections describe ambient air quality in the project area and surrounding area.

2.4.1 Air Quality Monitoring Data

The closest air quality monitoring station to the City is the El Cajon station, located at 533 First Street in El Cajon approximately 2.9 miles southeast of the City boundary. This station monitors ambient O₃, NO₂, PM₁₀, and PM_{2.5} concentrations. Table 4, Air Quality Monitoring Data, presents a summary of the highest pollutant concentrations monitored during the 3 most recent years (2018 through 2020) for which the SDAPCD has reported data for these stations. No CO data is available

from any monitoring site in the SDAB after 2012, and no data is available for SO₂ after 2013. However, with one exception for CO during the firestorms of October 2003, the SDAB has not violated the state or federal standards for CO or SO₂ in the last 20 years (SDAPCD 2017).

Table 4. Air Quality Monitoring Data

Pollutant	2018	2019	2020					
O ₃								
Maximum 1-hour concentration (ppm)	0.087	0.094	0.094					
Days above 1-hour state standard (>0.09 ppm)	0	0	0					
Maximum 8-hour concentration (ppm)	0.079	0.074	0.083					
Days above 8-hour state standard (>0.07 ppm)	3	2	14					
Days above 8-hour federal standard (>0.075 ppm)	3	2	14					
	PM ₁₀							
Peak 24-hour concentration (μg/m³)	43	38	_					
Days above state standard (>50 μg/m³)	0	0	_					
Days above federal standard (>150 μg/m³)	0	0	_					
	PM _{2.5}							
Peak 24-hour concentration (μg/m³)	36.2	23.8	38.2					
Days above federal standard (>35 μg/m³)	0	0	2					
NO ₂								
Peak 1-hour concentration (ppm)	0.045	0.039	0.045					
Days above state 1-hour standard (0.18 ppm)	0	0	0					
Days above 24-hour federal standard (>0.14 ppm)	0	0	0					

Source: CARB 2022b.

Notes: $\mu g/m^3$ = micrograms per cubic meter; CO = carbon monoxide; NO₂ = nitrogen dioxide; O₃ = ozone; PM₁₀ = respirable particulate matter; PM_{2.5} = fine particulate matter; ppm = parts per million; SO₂ = sulfur dioxide

As shown in Table 4, the 1-hour O₃ concentration did not exceed the state standard between 2018 and 2020. The 8-hour O₃ concentration exceeded both the state and federal standards in 2018, 2019, and 2020. The daily PM₁₀ concentration did not exceed the state or federal standard in 2018 or 2019. No data was available for this pollutant concentration in 2020. The federal 24-hour PM_{2.5} standard was violated for 2 days in 2020 but was not exceeded in 2018 or 2019. Neither the state nor federal standards for NO₂ were exceeded from 2018 through 2020.

Section 3 Methods and Significance Criteria

The methods and significance criteria applicable to each analysis issue are described in this section.

3.1 Methods

This section describes the methods used for each issue topic.

3.1.1 Consistency with Regional Air Quality Plans

The plans applicable to the project are the SDAPCD RAQS and the SIP. The SDAPCD relies on information from CARB and the San Diego Association of Governments (SANDAG), including projected growth in the County and mobile, area, and all other source emissions, to project future emissions and to develop appropriate strategies for the reduction of source emissions through regulatory controls. The majority of regional emissions (67 percent) result from motor vehicle emissions. These emissions are primarily reduced through emissions standards, which are established by CARB, and further reduced at the air district level through incentive programs to encourage the use of alternative transportation (SDAPCD 2016). Because of the limited jurisdiction that the SDAPCD has over mobile source emissions and even smaller control that individual projects have on influencing the public's ultimate use of motor vehicles, compliance with the RAQS is based on whether or not an individual project would comply with the emissions projections contained in the plan. Reduction strategies are applied to the region as a whole and determined to be adequate or not to meet the NAAQS based on the regional emissions projections. A project that proposes growth that exceeds planned growth assumptions would potentially conflict with the RAOS and SIP because it would potentially result in mobile source emissions that would exceed the projected emissions inventory.

3.1.2 Ambient Air Quality Standards

Daily air pollutant emissions during construction were estimated using the assumed worst-case activity data and the emissions factors included in the California Emissions Estimator Model (CalEEMod), version 2020.4.0. To be consistent with the Transportation Impact Analysis (LLG 2022), 20 cannabis facilities were modeled throughout the City. For the purposes of modeling a worst-case construction scenario, it was assumed that project construction would take 12 months, beginning in August 2022 and concluding in August 2023 based on the CalEEMod default schedule assumption for the total amount of allowable development. Assumed construction phases included demolition, site preparation, grading, building construction, paving, and architectural coating. It is assumed that a total of 2.16 acres would be disturbed. Earthwork assumptions are unknown for future construction, and a model default is not available. Due to the developed nature of the project area, is it assumed that earthwork would generally be balanced on individual construction sites with minimal import and export required. Model defaults were used to estimate emissions associated with the construction schedule except the architectural coating phase. The

default assumption for this phase included less than 1 day per allowable new facility; therefore, the schedule was extended to include several days per allowable facility. Model defaults were also assumed for construction equipment, daily vehicle trips, and haul trip distance.

Operational emissions for the project were also estimated using CalEEMod. Vehicle trip data was obtained from the project's Transportation Impact Analysis (LLG 2022). Trip lengths were adjusted to the regional estimate for specialty retail, manufacturing, science research and development, and industrial park with retail reported in the (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region (SANDAG 2002). The project would generate approximately 4,427 average daily trips (LLG 2022).

3.1.3 Sensitive Receptors

Impacts from CO hotspots on sensitive receptors were analyzed using street segment volumes provided by Linscott, Law & Greenspan, Engineers, to determine if there would be any potentially congested intersections as a result of project traffic. The analysis of localized impacts from other pollutants is based on applicable regulations and CARB siting recommendations in the Air Quality and Land Use Handbook (CARB 2005).

3.1.4 Odors

The potential for the project to result in exposure to significant odors is based on a review of CARB's Air Quality and Land Use Handbook and a comparison of the proposed land use types to the odor-causing uses listed in the handbook. The analysis is also based on review of analyses of similar cannabis facilities.

3.2 Significance Criteria

Based on Appendix G of the California Environmental Quality Act (CEQA) Guidelines, implementation of the project would result in a significant adverse impact if it would:

- Threshold 1: Result in a conflict with or obstruct implementation of the SDAPCD RAQS or the SIP.
- Threshold 2: Contribute substantially to an existing or projected air quality violation, or 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.
 - By its nature, air pollution is largely a cumulative impact. The non-attainment status of regional pollutants is a result of past and present development in the SDAB, and this regional impact is cumulative rather than attributable to any one source and is representative of an existing air quality violation. A project's emissions may be individually limited but cumulatively considerable when

- taken in combination with past, present, and probable future development projects. The standards of significance are relevant to whether a project's individual emissions would result in a cumulatively considerable incremental contribution to the existing cumulative air quality conditions.
- The SDAPCD does not provide quantitative thresholds for determining the significance of construction- or mobile source-related projects. However, the SDAPCD specifies air quality impact analysis trigger levels for new or modified stationary sources (SDAPCD Rules 20.2 and 20.3). If these incremental levels are exceeded, an air quality impact analysis must be performed. For CEQA purposes, the screening level thresholds can be used to demonstrate that a project's total emissions would not result in a significant impact on air quality. Because the air quality impact analysis screening thresholds do not include VOCs, the screening levels for VOCs used in this analysis are from the South Coast Air Quality Management District (SCAQMD), which has stricter emissions thresholds than the SDAPCD. For PM2.5, the USEPA Proposed Rule to Implement the Fine Particle NAAQS (published in 2005), which quantifies significant emissions as 10 tons per year, is used as the screening level threshold. The trigger thresholds are listed in Table 5, San Diego Air Pollution Control District Pollutant Thresholds.
- The standards in Table 5 are designed to identify those projects that would result in significant levels of air pollution, and to assist the region in attaining the applicable state and federal ambient air quality standards. As such, they are cumulative in nature. Projects that would not exceed the standards of significance would not contribute a considerable amount of criteria air pollutant emissions to the region's emissions profile and would not impede attainment and maintenance of ambient air quality standards. However, if the region is in non-attainment status for a particular criteria pollutant, and if a project's individual emissions exceed the threshold levels, the project's incremental contribution could be considered cumulatively considerable.
- The SDAB is listed as non-attainment for O₃, PM₁₀, and PM_{2.5}. Therefore, there is a significant cumulative impact on air quality resulting from air quality violations of PM₁₀, PM_{2.5}, and O₃ precursor (VOC and NO_x) emissions.
- If the project would result in net emissions that exceed the thresholds in Table 5 for CO or SO_x, the project would result in a potentially significant air quality violation. If the project would result in net emissions that exceed the thresholds in Table 5 for PM₁₀, PM_{2.5}, and O₃ precursor (VOC and NO_x), the impact would be considered a potentially significant air quality violation, in addition to being a cumulatively considerable impact.

Table 5. San Diego Air Pollution Control District Pollutant Thresholds

Pollutant	Pounds/Day
СО	550
NOx	250
PM ₁₀	100
PM _{2.5}	55a
SOx	250
Lead	3.2
VOC	75 ^b

Source: County of San Diego 2007.

Notes: CO = carbon monoxide; NO_x = nitrogen oxides; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; SO_x = sulfur oxides; VOC = volatile organic compound

- Threshold 3: Expose on- or off-site sensitive receptors to substantial CO concentrations, or expose new on-site sensitive receptors to existing off-site sources of TACs. An air quality impact related to CO is considered significant if CO emissions create a hotspot where either the California 1-hour standard of 20 ppm or the federal and California 8-hour standard of 9.0 ppm is exceeded.
- Threshold 4: Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

^a Based on the USEPA Proposed Rule to Implement the Fine Particle NAAQS published September 2005.

^b Based on the VOCs threshold from the SCAQMD.

Section 4 Impact Analysis and Mitigation Measures

This section determines the significance of the project's potential air quality impacts.

4.1 Impact Analysis

4.1.1 Threshold 1: Consistency with Regional Air Quality Plans

The following addresses the project's consistency with applicable regional air quality plans.

4.1.1.1 Impact Analysis

The California SIP is the document that sets forth the state's strategies for achieving federal air quality standards. The applicable air quality planning documents for the SDAPCD are the 2016 RAQS (SDAPCD 2016) and the Ozone Attainment Plan (SDAPCD 2020), which is the SDAPCD portion of the SIP. The RAQS and Ozone Attainment Plan were prepared by the SDAPCD for CARB to be included as part of the SIP. These plans demonstrate how the SDAB would either maintain or strive to attain the NAAQS. Both documents were developed in conjunction with each other by the SDAPCD to reduce regional O₃ emissions.

The SDAPCD relies on information from CARB and SANDAG, including projected growth in the County and resulting mobile, area, and other source emissions to project future emissions and to develop appropriate strategies for the reduction of source emissions through regulatory controls. The majority of regional emissions (67 percent) result from motor vehicle emissions. These emissions are reduced primarily through emissions standards, which are established by CARB, but are further reduced at the district level through incentive programs to encourage the use of alternative transportation (SDAPCD 2016). Because of the limited jurisdiction that SDAPCD has over mobile source emissions and the limited control that individual projects have on influencing the public's ultimate use of motor vehicles, compliance with the RAQS is based on whether or not an individual project would comply with the emissions projections contained in the RAQS. Reduction strategies were applied to the region as a whole and determined to adequately meet the NAAQS based on the regional emissions projections. A project that proposes growth that exceeds growth assumptions would potentially conflict with the RAQS and SIP because it would potentially result in mobile source emissions that would exceed the projected emissions inventory.

The CARB mobile source emissions projections and SANDAG growth projections are based on population and vehicle trends and land use plans developed by the cities, including Santee, and the County. That is, the emissions estimates that CARB and the SDAPCD use to plan for achieving ambient air quality standards compliance are based on the land uses projected by SANDAG. The use of construction equipment in the RAQS is estimated for the region on an annual basis, and construction-related emissions are estimated as an aggregate in the RAQS. Therefore, the project would not increase the assumptions for off-road equipment use in the RAQS.

Assumptions for land use development used in the RAQS were taken from local and regional planning documents. Emissions forecasts rely on projections of vehicle miles traveled by the metropolitan planning organizations, such as SANDAG, and population, employment, and land use projections made by local jurisdictions during development of the area and general plans. According to the County's Guidelines for Determining Significance – Air Quality, projects that propose development consistent with or less than the growth projections anticipated by a General Plan would be consistent with the RAQS and SIP because the emissions resulting from these projects have been accounted for in the air quality plans (County of San Diego 2007).

The Santee City Council adopted the Santee General Plan on August 27, 2003. The City adopted a General Plan Amendment Housing Element (Sixth Cycle: 2021–2029) on April 27, 2022. Development consistent with the Santee General Plan and 2022 Housing Element would be consistent with the RAQS and SIP because the 2022 Housing Element's growth projections are consistent with what was projected in the RAQS. The anticipated areas for the proposed cannabis facilities are zoned and designated Light Industrial (IL), General Industrial (IG), and General Commercial (GC). The Ordinance prohibits the siting of cannabis facilities outside these zones. The proposed Ordinance would accommodate a new allowable use (cannabis facilities) that is consistent with Santee General Plan growth assumptions for other commercial and industrial uses in the project area.

Moreover, if a project's emissions would exceed regional thresholds for VOC, NO_x, PM₁₀, or PM_{2.5}, it follows that the emissions could cumulatively contribute to an exceedance of a pollutant for which the SDAB is non-attainment (O₃, NO₂, PM₁₀, and PM_{2.5}) at a monitoring station in the SDAB. An exceedance of a non-attainment pollutant at a monitoring station would not be consistent with the goals of the RAQS to achieve attainment of pollutants. As quantified and discussed in Section 4.1.2, Threshold 2: Conformance to Federal and State Ambient Air Quality Standards, the project would not exceed significance thresholds for any criteria air pollutants during construction or operation. Therefore, implementation of the project would not exceed the Santee General Plan growth projections for the project area, and the project would not conflict with the RAQS or SIP.

4.1.1.2 Mitigation Measures

Impacts related to regional air quality plans would be less than significant; therefore, no mitigation measures would be required.

4.1.1.3 Significance after Mitigation

Impacts related to regional air quality plans would be less than significant without mitigation.

4.1.1.4 Cumulative Impacts

The RAQS and SIP are intended to address cumulative impacts in the SDAB based on future growth predicted by SANDAG. As described previously, implementation of the project would be consistent with the growth projections in the RAQS and SIP. Cumulative development is not expected to result in a significant impact in terms of conflicting with the SDAPCD air quality management plans and the SIP because the majority of cumulative projects would propose development that is consistent with the applicable growth projections incorporated into local air quality management plans. Implementation of the project, in combination with other cumulative projects, would not conflict with or obstruct implementation of the RAQS or SIP air quality plans. A cumulative impact would not occur.

4.1.2 Threshold 2: Conformance to Federal and State Ambient Air Quality Standards

The following section quantifies the project's emissions of criteria air pollutants and compares the emissions to applicable thresholds.

4.1.2.1 Impact Analysis

Implementation of the project would result in construction and operational air pollutant emissions, as described in the following sections.

Construction Emissions

The project does not propose any specific new development; however, it would allow cannabis facilities to be permitted in the City, consistent with the Ordinance. Construction activities associated with future development of new facilities permitted consistent with the Ordinance would have the potential to result in temporary increases in air pollutant emissions. These emissions would be generated as fugitive dust emissions from earth disturbance during fine site grading and exhaust emissions from operation of heavy equipment and vehicles during construction. Paving activities would emit VOCs during off-gassing. Development of future cannabis facilities is anticipated to take place over 10 to 15 years. However, for modeling purposes, a worst-case buildout scenario of 12 months was assumed for all 20 cannabis facilities, which concentrates the air pollutant emissions over a shorter duration.

Table 6, Construction Daily Maximum Air Pollutant Emissions, presents a summary of estimated maximum daily air pollutant emissions for each construction phase anticipated to occur as a result of project implementation.

Table 6. Construction Daily Maximum Air Pollutant Emissions

	Maximum Daily Emissions (pounds/day)						
Construction Phase	VOC	NOx	CO	SOx	PM ₁₀	PM _{2.5}	
Demolition	2	17	14	<1	1	1	
Site Preparation	1	16	10	<1	1	1	
Grading	2	17	9	<1	8	4	
Building Construction	2	16	15	<1	1	1	
Paving	1	9	12	<1	<1	V	
Architectural Coating	29	1	2	<1	<1	<1	
Maximum Daily Emissions	29	17	15	<1	8	4	
Significance Threshold	75	250	550	250	100	55	
Significant Impact?	No	No	No	No	No	No	

Source: CalEEMod, version 2020.24.0. See Appendix A for model output.

Notes: CO = carbon monoxide; NO_x = nitrogen oxides; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; SO_x = sulfur oxides; VOC = volatile organic compound

Emissions quantities are rounded to the nearest whole number. Exact values are provided in Appendix A.

The construction emissions estimate indicates that anticipated worst-case development (20 facilities) associated with the project would not exceed the significance thresholds for any criteria air pollutants during any phase of construction. Therefore, based on worst-case assumptions, the project would result in a less than significant impact related to air pollutant emissions during construction.

Regarding health effects related to criteria pollutant emissions, the applicable significance thresholds are established for regional compliance with the state and federal ambient air quality standards, which are intended to protect public health from both acute and long-term health impacts, depending on the potential effects of the pollutant (USEPA 2019). Because emissions of criteria pollutants during construction of the project would be below the applicable thresholds, the project would not contribute to regional acute and long-term health impacts related to non-attainment of the ambient air quality standards.

As discussed in Section 2.2, Air Pollutants, criteria pollutants also have the potential to result in health impacts, such as headaches or throat irritation, at the time of exposure. However, individual exposure levels and individual reactions to localized short-term exposure to pollutant emissions from project construction cannot be feasibly determined. The localized level of O₃ that receptors may be exposed to from VOC emissions cannot be determined because the formation of O₃ is not directly determined by the quantity of VOC and NO_x emissions generated by a project (San Joaquin Valley APCD 2015). The amount of O₃ formed depends on heat and sunlight exposure, and once formed, O₃ is likely to be dispersed or carried away from the site by wind. Conversely, O₃ exposure on the site could have been transported to the site by wind and be attributable to another source (USEPA 2021d). Currently, there are no known methods that can feasibly ascertain the ultimate locations of O₃ formation associated with the emissions of O₃ precursors such as VOC

and NO_x (San Joaquin Valley APCD 2015). However, because project construction emissions are anticipated to be below the significance thresholds, construction of individual new facilities would be spread out across the City's commercial and industrial zones, and those emissions would be spread out across the anticipated project sites and off site on haul routes, significant adverse acute health impacts as a result of project construction are not anticipated.

Operational Emissions

Area sources of air pollutant emissions associated with new cannabis facilities include fuel combustion emissions from space and water heating, fuel combustion emissions from landscape maintenance equipment, VOC emissions from periodic repainting of interior and exterior surfaces, and natural gas use. Increased volumes of vehicles also contribute to regional emissions of criteria pollutants. The total estimated operational emissions from buildout of allowable uses under the project (worst-case scenario – 20 facilities) are provided in Table 7, Operational Daily Maximum Air Pollutant Emissions. As shown in Table 7, operational emissions from future cannabis facilities would not exceed any of the significance thresholds for maximum daily emissions. Air quality impacts associated with operation of future cannabis facilities consistent with the Ordinance would be less than significant.

Table 7. Operational Daily Maximum Air Pollutant Emissions

	Maximum Daily Emissions (pounds/day)					
Emissions Source	VOC	NO _x	CO	SO ₂	PM ₁₀	PM _{2.5}
Natural Gas	<1	<1	<1	<1	<1	<1
Landscape	<1	<1	<1	0	<1	<1
Consumer Products	2	0	0	0	0	0
Architectural Coatings	1	0	0	0	0	0
Vehicular Sources	9	6	52	<1	9	3
Total Operational Emissions	12	6	52	<1	9	3
Significance Threshold	75	250	550	250	100	55
Significant Impact?	No	No	No	No	No	No

Source: CalEEMod, version 2020.4.0. See Appendix A for model output.

Notes: CO = carbon monoxide; NO_x = nitrogen oxides; PM_{10} = respirable particulate matter; $PM_{2.5}$ = fine particulate matter; SO_2 = sulfur dioxide; VOC = volatile organic compound

Emissions quantities are rounded to the nearest whole number. Exact values are provided in Appendix A.

4.1.2.2 Mitigation Measures

Impacts related to air quality standards would be less than significant; therefore, no mitigation measures would be required.

4.1.2.3 Significance after Mitigation

Impacts related to air quality standards would be less than significant without mitigation.

4.1.2.4 Cumulative Impacts

An existing cumulative impact exists in the SDAB related to PM₁₀, PM_{2.5}, and O₃ precursors (NO_x and VOC). The thresholds listed in Table 5 reflect the potential for the project to result in a potentially significant contribution of criteria pollutant emissions to regional air quality and ambient air quality standards attainment. A project that is consistent with the thresholds in Table 5 is considered to result in less than cumulatively considerable emissions. As demonstrated in Tables 6 and 7, construction and operation of future cannabis facilities consistent with the Ordinance would not exceed applicable significance thresholds and would not result in a cumulatively considerable contribution to a significant cumulative impact.

4.1.3 Threshold 3: Impacts on Sensitive Receptors

The following section describes the project's potential impacts related to sensitive receptors.

4.1.3.1 Impact Analysis

Sensitive receptors typically include schools, hospitals, resident care facilities, daycare centers, or other facilities that may house individuals with health conditions who would be adversely affected by changes in air quality. The proposed Ordinance prohibits cannabis facilities within 900 feet of most sensitive receptors, including schools and daycares. However, the project is evaluated for the two primary emissions of concern regarding health effects for land development projects, CO and TACs, below.

Carbon Monoxide Hotspots

Areas with high vehicle density, such as congested intersections and parking garages, have the potential to create high concentrations of CO, known as "CO hotspots." Localized CO concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses. CO hotspots due to traffic almost exclusively occur at signalized intersections that operate at a level of service (LOS) E or below. A project should be evaluated for the potential to result in or contribute to a CO hotspot if it would worsen traffic flow at signalized intersections operating at LOS E or F with peak-hour trips for that intersection exceeding 3,000 trips (County of San Diego 2007).

Street segment volumes from the Transportation Impact Analysis prepared by Linscott, Law & Greenspan, Engineers (LLG 2022), were used to determine potentially congested intersections because intersection volumes were not available. If a street segment on either side of an intersection is free-flowing (LOS D or better), then it is assumed that the intersection would not be congested and a CO hotpot would not occur. According to the Transportation Impact Analysis (LLG 2022), none of the study area street segments would degrade to LOS E or F with the addition

of the project. The addition of project traffic would not cause any degradation of the street segments from existing conditions. Therefore, the project would not have the potential to cause a CO hotspot, and impacts would be less than significant.

Toxic Air Contaminants

According to the County Guidelines for Determining Significance and Report Format and Content Requirements: Air Quality (County of San Diego 2007), DPM is the primary TAC of concern for typical land use projects that do not propose stationary sources of emissions regulated by the SDAPCD. Based on guidance from the SCAQMD in the Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (SCAQMD 2003), projects that should be analyzed for DPM emissions include truck stops, distribution centers, and transit centers, which could be sources of DPM from heavy-duty diesel trucks.

Based on a review of analyses of similar cannabis facilities, future cannabis facilities would include equipment typical of commercial, retail, and light industrial uses that generally do not include stationary sources of emissions regulated by the SDAPCD (Trinity 2019; Santa Barbara 2017). Therefore, the primary source of DPM from project implementation would be construction equipment. As shown in Table 6, implementation of the project would not result in PM emissions above the screening level threshold during construction, assuming a conservative development intensity of buildout in approximately 12 months. Construction of future cannabis facilities is anticipated to occur throughout the City's commercial and industrial zones over approximately 10-15 years so that construction would not be concentrated at individual receptors and maximum daily emissions may be reduced compared to the emissions in Table 6. Specific construction schedules and development intensity are currently unknown. Although construction resulting from facilities developed under the proposed Ordinance would occur intermittently over approximately 10-15 years, an individual receptor would only be exposed to short-term emissions from construction of a particular facility within the receptor's immediate vicinity. Because DPM is considered to have long-term health effects and construction exposure to individual receptors would be a short-term event, emissions would not result in a significant long-term health risk to surrounding receptors.

The project does not propose any specific new development; however, it would allow cannabis facilities to be permitted in the City, consistent with the Ordinance. Operation of future cannabis facilities consistent with the Ordinance is anticipated to require some diesel truck trips associated with operational product and business deliveries. In 2004, CARB adopted an Airborne Toxic Control Measure to limit heavy-duty diesel motor vehicle idling in order to reduce public exposure to DPM and other TACs and their pollutants. The measure applies to diesel-fueled commercial vehicles with gross vehicle weight ratings greater than 10,000 pounds that are licensed to operate on highways regardless of where they are registered. The measure does not allow diesel-fueled

commercial vehicles to idle for more than 5 minutes at any given time. Potential localized air toxic impacts from on-site sources of DPM would be minimal since only a limited number of heavy-duty trucks would be anticipated to supply the cannabis facilities due to size limitations in the Ordinance, and the trucks that would frequent the area would not idle for extended periods.

Based on CARB siting recommendations in the Air Quality and Land Use Handbook, a detailed health risk assessment should be conducted for proposed sensitive receptors within 1,000 feet of a warehouse distribution center, 300 feet of a large gas station, 50 feet of a typical gas dispensing facilities, or 300 feet of a dry-cleaning facility that uses perchloroethylene (i.e., PCE), among other siting recommendations (CARB 2005). Additionally, CARB recommends that a health risk assessment be prepared for any sensitive receptors proposed within 500 feet of a highway. Future cannabis facilities permitted consistent with the Ordinance are not anticipated to generate significant truck trips or include land uses that would require a health risk assessment for existing nearby sensitive receptors based on CARB guidance. Based on a review of analyses of similar facilities, operation of allowable cannabis facilities under the Ordinance would not include major sources of TACs (Trinity 2019; Santa Barbara 2017). In addition, cannabis facilities would be spread throughout the City's commercial and industrial zones and would be prohibited within 900 feet of schools; daycare centers; recreational facilities, including parks; and religious establishments. Therefore, impacts on sensitive receptors would be less than significant.

4.1.3.2 Mitigation Measures

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

4.1.3.3 Significance after Mitigation

Impacts related to sensitive receptors would be less than significant without mitigation.

4.1.3.4 Cumulative Impacts

Cumulative growth in the project area would have the potential to increase congestion and potentially result in CO hotspots if a significant deterioration of traffic LOS would occur. This analysis incorporates the cumulative projects assumed in the Transportation Impact Analysis for the project (LLG 2022) (see Figure 2, Cumulative Projects). The increase in vehicle trips associated with implementation of the project, in combination with cumulative trips, would not result in significant congestion at any intersection during construction or operation, as represented by surrounding roadway segments. Therefore, a significant cumulative impact related to CO hotspots would not occur.

Cumulative projects would also have the potential to result in a significant cumulative impact associated with sensitive receptors if, in combination, they would expose sensitive receptors to a

substantial concentration of TACs that would significantly increase cancer risk. The cumulative projects near the project area may include residential, commercial, and industrial warehouse projects that would not be expected to result in significant emissions of TACs. As such, the cumulative projects would not result in an increased risk to sensitive receptors from off-site TAC sources. As described previously, the project would not result in a new sources of TACs. Therefore, a cumulative impact would not occur.

4.1.4 Threshold 4: Odor Impacts

The following section addresses the project's potential to result in significant odors.

4.1.4.1 Impact Analysis

Construction of new cannabis facilities consistent with the Ordinance could result in minor amounts of odor compounds associated with diesel-heavy equipment exhaust. However, development of individual facilities would occur throughout the City, diesel equipment would not be operating together at one time, and construction near existing receptors would be temporary. Additionally, SO_x is the only criteria air pollutant with a strong, pungent odor (ATSDR 2015). As shown in Table 5, maximum construction emissions of SO_x would be less than 1 pound per day, which would be well below the threshold of 250 pounds per day. Therefore, impacts associated with odors during construction would not result in nuisance odors that would result in a significant impact.

CARB's Air Quality and Land Use Handbook (CARB 2005) includes a list of the most common sources of odor complaints received by local air districts. Typical sources of odor complaints include facilities such as sewage treatment plants, landfills, recycling facilities, petroleum refineries, and livestock operations. Cannabis facilities are not listed as a typical source of odor complaints.

The project is the implementation of a cannabis ordinance that would allow for permitting of cannabis facilities throughout the City's commercial and industrial zones, consistent with the Ordinance. These uses could include storefront retail and delivery, cultivation, manufacturing, distribution, and testing. The cultivation and processing of cannabis generates odors associated with the plant itself, which during maturation, can produce odors. Odors can be perceived and considered objectionable depending on the size and type of cultivation operation, nearby receptors, strain of cannabis being cultivated, presence of nearby vegetation, and topographic and atmospheric conditions. Under the proposed Ordinance, cultivation would only be allowed indoors and limited to 10,000 square feet of canopy grow within industrial zones. In addition, under the Ordinance, Section 7.04.340(i), all cannabis facilities would be required to incorporate odor control devices and techniques to ensure odors from cannabis are not detected off site. Cannabis facilities are required to provide a sufficient odor-absorbing ventilation and exhaust system so that odor generated inside the cannabis facility that is distinctive to its operation is not detected outside the facility; anywhere on adjacent property or public rights-of-way; on or about the exterior or interior common area walkways, hallways, breezeways, foyers, lobby areas, or any other areas available for use by common tenants or the visiting public; or within any other unit

inside the same building as the cannabis facility. Equipment that may be installed includes an exhaust air filtration system with odor controller or an air system that creates negative air pressure between the building interior and exterior to prevent odors from being detected outside. Therefore, compliance with the proposed Ordinance requirements would reduce potential odors from future cannabis facilities such that they would not adversely affect a substantial number of people. Operational odor impacts would be less than significant.

4.1.4.2 Mitigation Measures

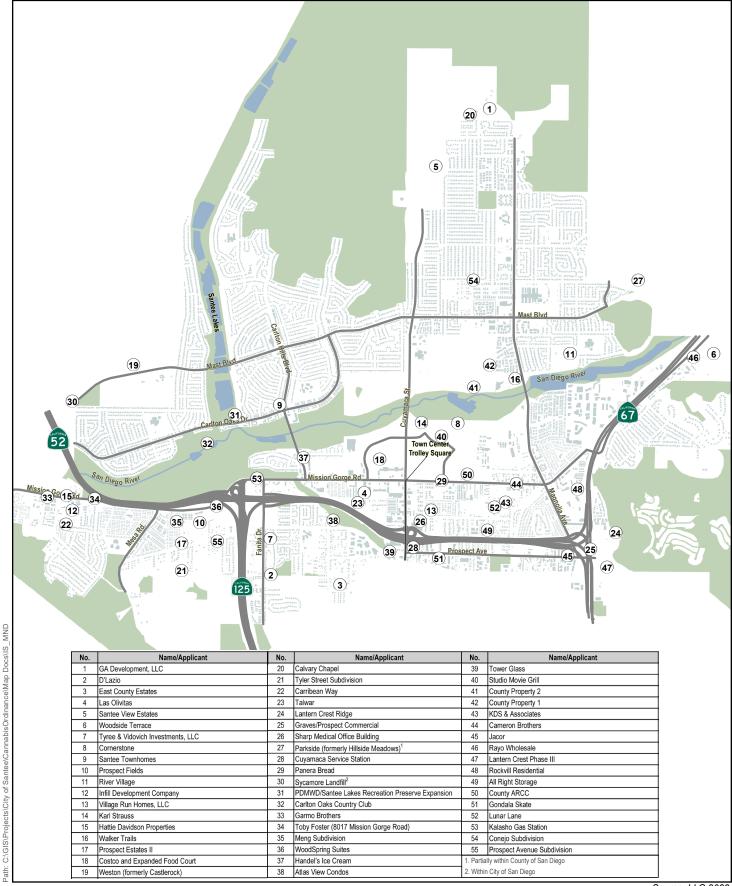
Impacts related to odors would be less than significant; therefore, no mitigation measures would be required.

4.1.4.3 Significance after Mitigation

Impacts related to odors would be less than significant without mitigation.

4.1.4.4 Cumulative Impacts

Impacts related to objectionable odors are limited to the area immediately surrounding the odor source and are not cumulative in nature because the air emissions that cause odors disperse beyond the sources of the odor. As the emissions disperse, the odor becomes decreasingly detectable. The cumulative projects surrounding the project area include residential, commercial, and industrial warehouse projects that would not be expected to result in substantial objectionable odors. In addition, implementation of the project would not generate a new source of objectionable odors with compliance with odor-containing requirements included in the project. Therefore, implementation of the project, in combination with other cumulative projects, would not result in a cumulatively considerable contribution to a significant cumulative impact associated with objectionable odors.





0.5

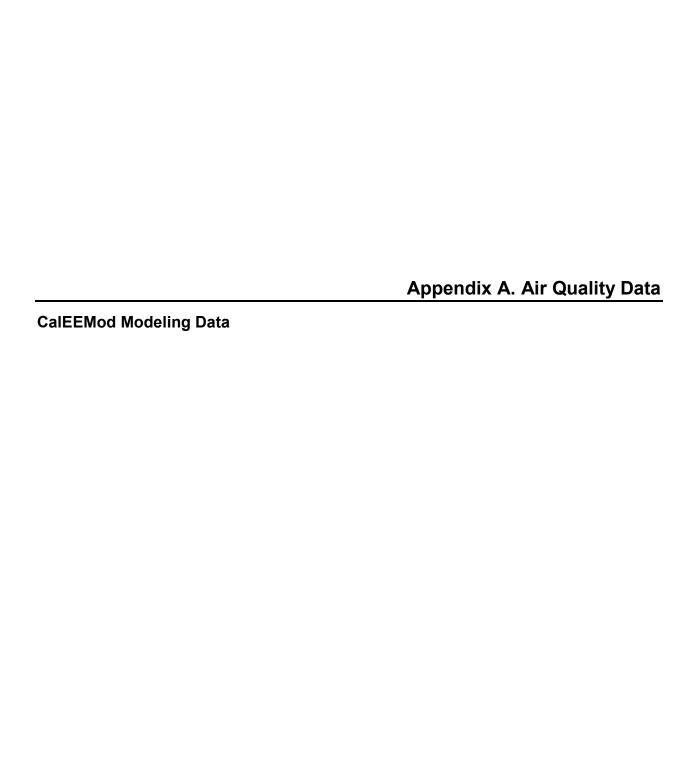
Source: LLG 2022.

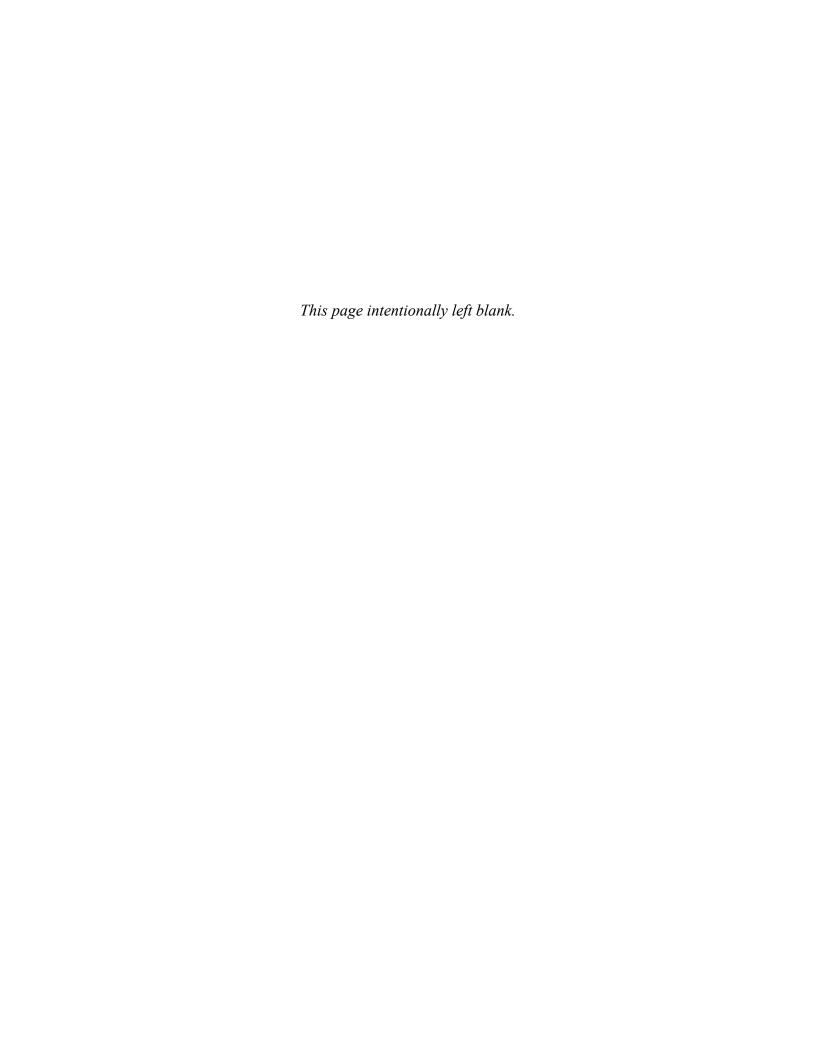
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Santee Cannabis Business Ordinance - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Santee Cannabis Business Ordinance

San Diego Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	30.00	1000sqft	0.69	30,000.00	0
Manufacturing	24.00	1000sqft	0.55	24,000.00	0
Strip Mall	20.00	1000sqft	0.46	20,000.00	0
General Light Industry	20.00	1000sqft	0.46	20,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2024

Utility Company San Diego Gas & Electric

 CO2 Intensity
 539.98
 CH4 Intensity
 0.033
 N2O Intensity
 0.004

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Input location data per City

Land Use - Per land assumptions table 4/2022

Construction Phase - Defaults

Demolition - none

Grading - Assume full acreage of the land uses; import export assumed to be balanced

Vehicle Trips - From TIA LLG 4/2022 and took avg for disitrib, cult, and testing

Energy Use - Revised per spreadsheet for cultivation use.

Santee Cannabis Business Ordinance - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	75.00
tblConstructionPhase	PhaseStartDate	7/28/2023	4/28/2023
tblEnergyUse	T24E	1.08	81.00
tblGrading	AcresOfGrading	4.50	2.16
tblVehicleTrips	CC_TL	7.30	10.00
tblVehicleTrips	CC_TL	7.30	11.70
tblVehicleTrips	CC_TL	7.30	4.30
tblVehicleTrips	CNW_TL	7.30	10.00
tblVehicleTrips	CNW_TL	7.30	11.70
tblVehicleTrips	CNW_TL	7.30	4.30
tblVehicleTrips	CW_TL	9.50	10.00
tblVehicleTrips	CW_TL	9.50	11.70
tblVehicleTrips	CW_TL	9.50	4.30
tblVehicleTrips	ST_TR	1.99	2.00
tblVehicleTrips	ST_TR	6.42	3.80
tblVehicleTrips	ST_TR	42.04	211.12
tblVehicleTrips	SU_TR	5.00	2.00
tblVehicleTrips	SU_TR	5.09	3.80
tblVehicleTrips	SU_TR	20.43	211.12
tblVehicleTrips	WD_TR	4.96	2.00
tblVehicleTrips	WD_TR	3.93	3.80
tblVehicleTrips	WD_TR	44.32	211.12

2.0 Emissions Summary

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Santee Cannabis Business Ordinance - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/c	lay		
2022	1.9969	17.0026	15.5795	0.0310	7.1647	0.8385	7.9075	3.4465	0.7834	4.1299	0.0000	2,916.183 4	2,916.183 4	0.7699	0.0573	2,944.769 1
2023	31.0895	15.6447	17.3161	0.0343	0.4630	0.6903	1.1534	0.1251	0.6644	0.7895	0.0000	3,229.397 4	3,229.397 4	0.5632	0.0561	3,257.817 5
Maximum	31.0895	17.0026	17.3161	0.0343	7.1647	0.8385	7.9075	3.4465	0.7834	4.1299	0.0000	3,229.397 4	3,229.397 4	0.7699	0.0573	3,257.817 5

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					lb/d	day							lb/d	lay		
2022	1.9969	17.0026	15.5795	0.0310	7.1647	0.8385	7.9075	3.4465	0.7834	4.1299	0.0000	2,916.183 4	2,916.183 4	0.7699	0.0573	2,944.769 1
2023	31.0895	15.6447	17.3161	0.0343	0.4630	0.6903	1.1534	0.1251	0.6644	0.7895	0.0000	3,229.397 4	3,229.397 4	0.5632	0.0561	3,257.817 5
Maximum	31.0895	17.0026	17.3161	0.0343	7.1647	0.8385	7.9075	3.4465	0.7834	4.1299	0.0000	3,229.397 4	3,229.397 4	0.7699	0.0573	3,257.817 5

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

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Santee Cannabis Business Ordinance - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Area	2.6093	9.0000e- 005	9.5800e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0206	0.0206	5.0000e- 005		0.0219
Energy	0.0265	0.2409	0.2024	1.4500e- 003		0.0183	0.0183		0.0183	0.0183		289.0830	289.0830	5.5400e- 003	5.3000e- 003	290.8009
Mobile	8.6536	6.1165	52.4319	0.0912	9.1778	0.0769	9.2547	2.4448	0.0716	2.5164		9,444.008 9	9,444.008 9	0.8987	0.5305	9,624.562 2
Total	11.2894	6.3575	52.6438	0.0926	9.1778	0.0953	9.2731	2.4448	0.0900	2.5348		9,733.112 5	9,733.112 5	0.9042	0.5358	9,915.384 9

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/e	day							lb/d	lay		
Area	2.6093	9.0000e- 005	9.5800e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0206	0.0206	5.0000e- 005		0.0219
Energy	0.0265	0.2409	0.2024	1.4500e- 003		0.0183	0.0183		0.0183	0.0183		289.0830	289.0830	5.5400e- 003	5.3000e- 003	290.8009
Mobile	8.6536	6.1165	52.4319	0.0912	9.1778	0.0769	9.2547	2.4448	0.0716	2.5164		9,444.008 9	9,444.008 9	0.8987	0.5305	9,624.562 2
Total	11.2894	6.3575	52.6438	0.0926	9.1778	0.0953	9.2731	2.4448	0.0900	2.5348		9,733.112 5	9,733.112 5	0.9042	0.5358	9,915.384 9

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2022	8/26/2022	5	20	
2	Site Preparation	Site Preparation	8/27/2022	8/31/2022	5	3	
3	Grading	Grading	9/1/2022	9/8/2022	5	6	
4	Building Construction	Building Construction	9/9/2022	7/13/2023	5	220	
5	Paving	Paving	7/14/2023	7/27/2023	5	10	
6	Architectural Coating	Architectural Coating	4/28/2023	8/10/2023	5	75	

Acres of Grading (Site Preparation Phase): 2.16

Acres of Grading (Grading Phase): 6

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 141,000; Non-Residential Outdoor: 47,000; Striped Parking Area: 0 (Architectural Coating - sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Scrapers	1	8.00	367	0.48

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Santee Cannabis Business Ordinance - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	37.00	15.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	7.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

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Santee Cannabis Business Ordinance - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022 <u>Unmitigated Construction On-Site</u>

ROG NOx CO SO2 Fugitive PM10 PM10 Fugitive PM2.5 PM2.5 Bio- CO2 NBio- CO2 Total CO2 CH4 N2O CO2e Exhaust Exhaust PM10 PM2.5 Total Total Category lb/day lb/day 1.6889 16.6217 13.9605 0.8379 0.8379 2,323.416 2,323.416 0.5921 Off-Road 0.0241 0.7829 0.7829 2,338.219 8 1.6889 16.6217 13.9605 0.0241 0.8379 0.8379 0.7829 0.7829 2,323.416 2,323.416 0.5921 2,338.219 Total 8

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0380	0.0247	0.3371	9.7000e- 004	0.1068	6.0000e- 004	0.1074	0.0283	5.6000e- 004	0.0289		99.1386	99.1386	2.8500e- 003	2.5600e- 003	99.9714
Total	0.0380	0.0247	0.3371	9.7000e- 004	0.1068	6.0000e- 004	0.1074	0.0283	5.6000e- 004	0.0289		99.1386	99.1386	2.8500e- 003	2.5600e- 003	99.9714

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Santee Cannabis Business Ordinance - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829	0.0000	2,323.416 8	2,323.416 8	0.5921		2,338.219 1
Total	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829	0.0000	2,323.416 8	2,323.416 8	0.5921		2,338.219 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0380	0.0247	0.3371	9.7000e- 004	0.1068	6.0000e- 004	0.1074	0.0283	5.6000e- 004	0.0289		99.1386	99.1386	2.8500e- 003	2.5600e- 003	99.9714
Total	0.0380	0.0247	0.3371	9.7000e- 004	0.1068	6.0000e- 004	0.1074	0.0283	5.6000e- 004	0.0289		99.1386	99.1386	2.8500e- 003	2.5600e- 003	99.9714

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Fugitive Dust					0.7636	0.0000	0.7636	0.0825	0.0000	0.0825			0.0000			0.0000
Off-Road	1.3784	15.6673	10.0558	0.0245		0.5952	0.5952		0.5476	0.5476		2,375.156 9	2,375.156 9	0.7682		2,394.361 3
Total	1.3784	15.6673	10.0558	0.0245	0.7636	0.5952	1.3587	0.0825	0.5476	0.6300		2,375.156 9	2,375.156 9	0.7682		2,394.361 3

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0234	0.0152	0.2074	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		61.0084	61.0084	1.7500e- 003	1.5700e- 003	61.5209
Total	0.0234	0.0152	0.2074	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		61.0084	61.0084	1.7500e- 003	1.5700e- 003	61.5209

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					0.7636	0.0000	0.7636	0.0825	0.0000	0.0825			0.0000			0.0000
Off-Road	1.3784	15.6673	10.0558	0.0245	 	0.5952	0.5952		0.5476	0.5476	0.0000	2,375.156 9	2,375.156 9	0.7682	 	2,394.361 3
Total	1.3784	15.6673	10.0558	0.0245	0.7636	0.5952	1.3587	0.0825	0.5476	0.6300	0.0000	2,375.156 9	2,375.156 9	0.7682		2,394.361 3

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0234	0.0152	0.2074	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		61.0084	61.0084	1.7500e- 003	1.5700e- 003	61.5209
Total	0.0234	0.0152	0.2074	6.0000e- 004	0.0657	3.7000e- 004	0.0661	0.0174	3.4000e- 004	0.0178		61.0084	61.0084	1.7500e- 003	1.5700e- 003	61.5209

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.5403	16.9836	9.2202	0.0206		0.7423	0.7423		0.6829	0.6829		1,995.482 5	1,995.482 5	0.6454		2,011.616 9
Total	1.5403	16.9836	9.2202	0.0206	7.0826	0.7423	7.8249	3.4247	0.6829	4.1076		1,995.482 5	1,995.482 5	0.6454		2,011.616 9

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0292	0.0190	0.2593	7.5000e- 004	0.0822	4.7000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		76.2605	76.2605	2.1900e- 003	1.9700e- 003	76.9011
Total	0.0292	0.0190	0.2593	7.5000e- 004	0.0822	4.7000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		76.2605	76.2605	2.1900e- 003	1.9700e- 003	76.9011

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Santee Cannabis Business Ordinance - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.5403	16.9836	9.2202	0.0206	 	0.7423	0.7423		0.6829	0.6829	0.0000	1,995.482 5	1,995.482 5	0.6454	 	2,011.616 9
Total	1.5403	16.9836	9.2202	0.0206	7.0826	0.7423	7.8249	3.4247	0.6829	4.1076	0.0000	1,995.482 5	1,995.482 5	0.6454		2,011.616 9

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0292	0.0190	0.2593	7.5000e- 004	0.0822	4.7000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		76.2605	76.2605	2.1900e- 003	1.9700e- 003	76.9011
Total	0.0292	0.0190	0.2593	7.5000e- 004	0.0822	4.7000e- 004	0.0826	0.0218	4.3000e- 004	0.0222		76.2605	76.2605	2.1900e- 003	1.9700e- 003	76.9011

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.281 3	2,289.281 3	0.4417		2,300.323 0
Total	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731		2,289.281 3	2,289.281 3	0.4417		2,300.323

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0334	0.7977	0.2669	3.2000e- 003	0.1016	8.6700e- 003	0.1103	0.0293	8.3000e- 003	0.0375		344.7384	344.7384	0.0105	0.0500	359.9121
Worker	0.1080	0.0703	0.9594	2.7700e- 003	0.3040	1.7200e- 003	0.3057	0.0806	1.5800e- 003	0.0822		282.1637	282.1637	8.1000e- 003	7.2700e- 003	284.5340
Total	0.1414	0.8680	1.2262	5.9700e- 003	0.4055	0.0104	0.4159	0.1099	9.8800e- 003	0.1198		626.9021	626.9021	0.0186	0.0573	644.4461

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Santee Cannabis Business Ordinance - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.281 3	2,289.281 3	0.4417		2,300.323 0
Total	1.8555	14.6040	14.3533	0.0250		0.7022	0.7022		0.6731	0.6731	0.0000	2,289.281 3	2,289.281 3	0.4417		2,300.323 0

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0334	0.7977	0.2669	3.2000e- 003	0.1016	8.6700e- 003	0.1103	0.0293	8.3000e- 003	0.0375		344.7384	344.7384	0.0105	0.0500	359.9121
Worker	0.1080	0.0703	0.9594	2.7700e- 003	0.3040	1.7200e- 003	0.3057	0.0806	1.5800e- 003	0.0822		282.1637	282.1637	8.1000e- 003	7.2700e- 003	284.5340
Total	0.1414	0.8680	1.2262	5.9700e- 003	0.4055	0.0104	0.4159	0.1099	9.8800e- 003	0.1198		626.9021	626.9021	0.0186	0.0573	644.4461

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136	1 1 1	0.5880	0.5880		2,289.523 3	2,289.523 3	0.4330		2,300.347 9
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880		2,289.523 3	2,289.523 3	0.4330		2,300.347 9

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day															
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0179	0.6430	0.2317	3.0700e- 003	0.1016	3.9200e- 003	0.1055	0.0293	3.7500e- 003	0.0330		331.5704	331.5704	0.0101	0.0480	346.1283
Worker	0.1012	0.0628	0.8904	2.6900e- 003	0.3040	1.6300e- 003	0.3056	0.0806	1.5100e- 003	0.0821		274.8558	274.8558	7.3600e- 003	6.7700e- 003	277.0563
Total	0.1191	0.7059	1.1221	5.7600e- 003	0.4055	5.5500e- 003	0.4111	0.1099	5.2600e- 003	0.1151		606.4262	606.4262	0.0174	0.0548	623.1846

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Santee Cannabis Business Ordinance - San Diego Air Basin, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
Off-Road	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.523 3	2,289.523 3	0.4330		2,300.347 9
Total	1.7136	13.6239	14.2145	0.0250		0.6136	0.6136		0.5880	0.5880	0.0000	2,289.523 3	2,289.523 3	0.4330		2,300.347 9

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0179	0.6430	0.2317	3.0700e- 003	0.1016	3.9200e- 003	0.1055	0.0293	3.7500e- 003	0.0330		331.5704	331.5704	0.0101	0.0480	346.1283
Worker	0.1012	0.0628	0.8904	2.6900e- 003	0.3040	1.6300e- 003	0.3056	0.0806	1.5100e- 003	0.0821		274.8558	274.8558	7.3600e- 003	6.7700e- 003	277.0563
Total	0.1191	0.7059	1.1221	5.7600e- 003	0.4055	5.5500e- 003	0.4111	0.1099	5.2600e- 003	0.1151		606.4262	606.4262	0.0174	0.0548	623.1846

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023
<u>Unmitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.992 6	1,709.992 6	0.5420		1,723.541 4
Paving	0.0000]			0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003		1,709.992 6	1,709.992 6	0.5420		1,723.541 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0410	0.0255	0.3610	1.0900e- 003	0.1232	6.6000e- 004	0.1239	0.0327	6.1000e- 004	0.0333		111.4280	111.4280	2.9800e- 003	2.7400e- 003	112.3201
Total	0.0410	0.0255	0.3610	1.0900e- 003	0.1232	6.6000e- 004	0.1239	0.0327	6.1000e- 004	0.0333		111.4280	111.4280	2.9800e- 003	2.7400e- 003	112.3201

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

<u>Mitigated Construction On-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Off-Road	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.992 6	1,709.992 6	0.5420		1,723.541 4
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.8802	8.6098	11.6840	0.0179		0.4338	0.4338		0.4003	0.4003	0.0000	1,709.992 6	1,709.992 6	0.5420		1,723.541 4

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0410	0.0255	0.3610	1.0900e- 003	0.1232	6.6000e- 004	0.1239	0.0327	6.1000e- 004	0.0333		111.4280	111.4280	2.9800e- 003	2.7400e- 003	112.3201
Total	0.0410	0.0255	0.3610	1.0900e- 003	0.1232	6.6000e- 004	0.1239	0.0327	6.1000e- 004	0.0333		111.4280	111.4280	2.9800e- 003	2.7400e- 003	112.3201

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3.7 Architectural Coating - 2023 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	29.0460					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003	 	0.0708	0.0708	i i	0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	29.2377	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0191	0.0119	0.1685	5.1000e- 004	0.0575	3.1000e- 004	0.0578	0.0153	2.8000e- 004	0.0155		51.9998	51.9998	1.3900e- 003	1.2800e- 003	52.4161
Total	0.0191	0.0119	0.1685	5.1000e- 004	0.0575	3.1000e- 004	0.0578	0.0153	2.8000e- 004	0.0155		51.9998	51.9998	1.3900e- 003	1.2800e- 003	52.4161

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3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Archit. Coating	29.0460					0.0000	0.0000	1 1 1	0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e- 003		0.0708	0.0708	1 1 1	0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	29.2377	1.3030	1.8111	2.9700e- 003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	lay		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0191	0.0119	0.1685	5.1000e- 004	0.0575	3.1000e- 004	0.0578	0.0153	2.8000e- 004	0.0155		51.9998	51.9998	1.3900e- 003	1.2800e- 003	52.4161
Total	0.0191	0.0119	0.1685	5.1000e- 004	0.0575	3.1000e- 004	0.0578	0.0153	2.8000e- 004	0.0155		51.9998	51.9998	1.3900e- 003	1.2800e- 003	52.4161

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/c	day		
Mitigated	8.6536	6.1165	52.4319	0.0912	9.1778	0.0769	9.2547	2.4448	0.0716	2.5164		9,444.008 9	9,444.008 9	0.8987	0.5305	9,624.562 2
Unmitigated	8.6536	6.1165	52.4319	0.0912	9.1778	0.0769	9.2547	2.4448	0.0716	2.5164		9,444.008 9	9,444.008 9	0.8987	0.5305	9,624.562 2

4.2 Trip Summary Information

	Avei	age Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	60.00	60.00	60.00	203,724	203,724
General Light Industry	40.00	40.00	40.00	135,816	135,816
Manufacturing	91.20	91.20	91.20	362,285	362,285
Strip Mall	4,222.40	4,222.40	4222.40	3,657,950	3,657,950
Total	4,413.60	4,413.60	4,413.60	4,359,774	4,359,774

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	10.00	10.00	10.00	59.00	28.00	13.00	92	5	3
General Light Industry	10.00	10.00	10.00	59.00	28.00	13.00	92	5	3
Manufacturing	11.70	11.70	11.70	59.00	28.00	13.00	92	5	3

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		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Strip Mall	4.30	4.30	4.30	16.60	64.40	19.00	45	40	15

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Manufacturing	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949
Strip Mall	0.557888	0.062607	0.178921	0.119061	0.024112	0.006269	0.008734	0.006266	0.000708	0.000566	0.028949	0.000971	0.004949

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					lb/d	day							lb/d	day		
NaturalGas Mitigated	0.0265	0.2409	0.2024	1.4500e- 003		0.0183	0.0183		0.0183	0.0183		289.0830	289.0830	5.5400e- 003	5.3000e- 003	290.8009
NaturalGas Unmitigated	0.0265	0.2409	0.2024	1.4500e- 003		0.0183	0.0183		0.0183	0.0183		289.0830	289.0830	5.5400e- 003	5.3000e- 003	290.8009

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	lay		
General Light Industry	631.233	6.8100e- 003	0.0619	0.0520	3.7000e- 004		4.7000e- 003	4.7000e- 003		4.7000e- 003	4.7000e- 003		74.2627	74.2627	1.4200e- 003	1.3600e- 003	74.7040
General Light Industry	946.849	0.0102	0.0928	0.0780	5.6000e- 004		7.0500e- 003	7.0500e- 003		7.0500e- 003	7.0500e- 003		111.3940	111.3940	2.1400e- 003	2.0400e- 003	112.0560
Manufacturing	757.479	8.1700e- 003	0.0743	0.0624	4.5000e- 004		5.6400e- 003	5.6400e- 003		5.6400e- 003	5.6400e- 003		89.1152	89.1152	1.7100e- 003	1.6300e- 003	89.6448
Strip Mall	121.644	1.3100e- 003	0.0119	0.0100	7.0000e- 005		9.1000e- 004	9.1000e- 004		9.1000e- 004	9.1000e- 004		14.3110	14.3110	2.7000e- 004	2.6000e- 004	14.3961
Total		0.0265	0.2409	0.2024	1.4500e- 003		0.0183	0.0183		0.0183	0.0183		289.0830	289.0830	5.5400e- 003	5.2900e- 003	290.8009

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					lb/d	day							lb/d	day		
General Light Industry	0.631233	6.8100e- 003	0.0619	0.0520	3.7000e- 004		4.7000e- 003	4.7000e- 003		4.7000e- 003	4.7000e- 003		74.2627	74.2627	1.4200e- 003	1.3600e- 003	74.7040
General Light Industry	0.946849	0.0102	0.0928	0.0780	5.6000e- 004		7.0500e- 003	7.0500e- 003		7.0500e- 003	7.0500e- 003		111.3940	111.3940	2.1400e- 003	2.0400e- 003	112.0560
Manufacturing	0.757479	8.1700e- 003	0.0743	0.0624	4.5000e- 004		5.6400e- 003	5.6400e- 003		5.6400e- 003	5.6400e- 003		89.1152	89.1152	1.7100e- 003	1.6300e- 003	89.6448
Strip Mall	0.121644	1.3100e- 003	0.0119	0.0100	7.0000e- 005		9.1000e- 004	9.1000e- 004		9.1000e- 004	9.1000e- 004		14.3110	14.3110	2.7000e- 004	2.6000e- 004	14.3961
Total		0.0265	0.2409	0.2024	1.4500e- 003		0.0183	0.0183		0.0183	0.0183		289.0830	289.0830	5.5400e- 003	5.2900e- 003	290.8009

6.0 Area Detail

6.1 Mitigation Measures Area

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	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/d	day				
Mitigated	2.6093	9.0000e- 005	9.5800e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0206	0.0206	5.0000e- 005		0.0219
Unmitigated	2.6093	9.0000e- 005	9.5800e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0206	0.0206	5.0000e- 005		0.0219

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/d	day				
Architectural Coating	0.5968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.8000e- 004	9.0000e- 005	9.5800e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0206	0.0206	5.0000e- 005		0.0219
Total	2.6093	9.0000e- 005	9.5800e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0206	0.0206	5.0000e- 005		0.0219

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6.2 Area by SubCategory

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day								lb/day							
Coating	0.5968					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
	2.0116					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
' · ·	8.8000e- 004	9.0000e- 005	9.5800e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0206	0.0206	5.0000e- 005		0.0219
Total	2.6093	9.0000e- 005	9.5800e- 003	0.0000		3.0000e- 005	3.0000e- 005		3.0000e- 005	3.0000e- 005		0.0206	0.0206	5.0000e- 005		0.0219

7.0 Water Detail

7.1 Mitigation Measures Water

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8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation