

# GREENHOUSE GAS EMISSIONS TECHNICAL MEMORANDUM

**To:** Chris Jacobs, Principal Planner, City of Santee  
**From:** Sharon Toland, Senior Technical Specialist, and Kelsey Hawkins, Air Quality and Greenhouse Gas Analyst, Harris & Associates  
**RE:** Greenhouse Gas Emissions Technical Memorandum for the Santee Cannabis Business Ordinance  
**Date:** June 3, 2022  
**Att:** 1, CalEEMod Results

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This memorandum was prepared in accordance with the requirements of the California Environmental Quality Act (CEQA) to assess the potential greenhouse gas (GHG) emissions impacts associated with the implementation of the proposed Santee Cannabis Business Ordinance (Ordinance or project). The City of Santee (City) proposes a comprehensive Ordinance 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. 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, <sup>1</sup> 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
<b>Total</b>	—		<b>20</b>	<b>94,000</b>

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

<sup>1</sup> Definition of a microbusiness includes a maximum cultivation canopy of 10,000 square feet.

## Background

A GHG is any gas that absorbs infrared radiation and traps heat in the atmosphere. GHGs are produced from natural processes and human activities. The accumulation of GHGs in the atmosphere influences the long-term atmospheric temperatures and contributes to global climate change. Carbon dioxide (CO<sub>2</sub>) accounts for the largest amount of GHG emissions, and collectively, CO<sub>2</sub>, methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) amount to 80 percent of the total radiative forcing from well-mixed GHGs (CARB 2014).

For each GHG, a global warming potential has been calculated to reflect how long emissions remain in the atmosphere and how strongly each GHG absorbs energy on a per-kilogram basis relative to CO<sub>2</sub>. For example, 1 pound of CH<sub>4</sub> has 25 times more heat-capturing potential than 1 pound of CO<sub>2</sub>. To simplify reporting and analysis, GHG emissions are typically reported in metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) units. Global warming potential is a metric that indicates the relative climate forcing of a kilogram of emissions when averaged over the period of interest. Table 2, Global Warming Potential for Select Greenhouse Gases, identifies the CO<sub>2</sub>e and atmospheric lifetimes of basic GHGs.

**Table 2. Global Warming Potential for Select Greenhouse Gases**

Pollutant	Atmospheric Lifetime (years)	Global Warming Potential (100-year) <sup>2</sup>
CH <sub>4</sub>	12	28
CO <sub>2</sub>	~100 <sup>1</sup>	1
N <sub>2</sub> O	121	265

**Source:** CAPCOA 2020. Consistent with CalEEMod, Version 2020.4.0.

**Notes:** CH<sub>4</sub> = methane; CO<sub>2</sub> = carbon dioxide; N<sub>2</sub>O = nitrous oxide

<sup>1</sup> CO<sub>2</sub> has a variable atmospheric lifetime and cannot be readily approximated as a single number.

<sup>2</sup> The warming effects over a 100-year period relative to other GHGs.

## Regulatory Setting

### Federal

The U.S. Environmental Protection Agency is responsible for implementing federal policy to address global climate change. In 2009, the U.S. Environmental Protection Agency issued a final rule for mandatory reporting of GHG

emissions, which applies to fossil fuel and industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and requires annual reporting of emissions. This final rule does not regulate the emissions of GHGs; it only requires the monitoring and reporting of GHGs for the specified sources above certain thresholds.

## State

California has enacted a variety of legislation relating to climate change, much of which has set aggressive goals for GHG emissions reductions throughout the state. Executive Order (EO) S-03-05 established the goal of reducing GHG emissions to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050. In September 2006, Governor Arnold Schwarzenegger signed California’s Global Warming Solutions Act of 2006 (Assembly Bill [AB] 32), requiring the California Air Resources Board to establish a statewide GHG emissions cap for 2020 based on 1990 emissions and to adopt mandatory reporting rules for significant sources of GHG emissions. In April 2015, Governor Jerry Brown signed EO B-30-15, which established the goal of reducing GHG emissions to 40 percent below 1990 levels by 2030. This goal was set into law in Senate Bill (SB) 32.

## Local

The City adopted the Sustainable Santee Plan: The City’s Roadmap to Greenhouse Gas Reductions (SSP) on January 8, 2020, which provides guidance for the reduction of GHG emissions in the City. The SSP provides policy direction and identifies actions the City and community will take to reduce GHG emissions consistent with state goals and targets. State GHG emissions reduction targets proposed and/or codified by EO S-3-05, AB 32, EO B-30-15, and SB 32 include achieving 1990 emissions levels by 2020 (which the state achieved), 40 percent below 1990 levels by 2030, and 80 percent below 1990 levels by 2050. The SSP would also work to achieve a per-capita GHG emissions level by 2030 in conformance with SB 32 and the California Air Resources Board’s 2017 Climate Change Scoping Plan.

## Thresholds of Significance

The SSP is a qualified GHG emissions reduction plan in accordance with the CEQA Guidelines, Section 15183.5 (City of Santee 2020). Pursuant to CEQA Guidelines, Sections 15064(h)(3), 15130(d), and 15183(b), a project’s incremental contribution to a cumulative GHG emissions effect may be determined not to be cumulatively considerable if it complies with the requirements of a qualified plan. Projects that are consistent with a General Plan and implement applicable qualified plan GHG reduction measures may incorporate by reference the plan’s cumulative GHG analysis. Conversely, projects that are consistent with a General Plan but do not implement applicable plan GHG reduction measures, as well as General Plan Amendments and annexations that increase emissions beyond plan projections, require a project-level GHG analysis to determine if the project would result in significant GHG emissions. Because the SSP is an adopted, qualified GHG reduction plan, consistency with the SSP is the applicable threshold for the project.

## Project Emissions Inventory

### Construction

Project construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. 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. Development of cannabis facilities is anticipated to take place over 10–15 years (LLG 2022). However, for the purposes of modeling a worst-case construction scenario, it was assumed that project construction of all 20 facilities would take place within 12 months based on the CalEEMod default schedule assumption for the total amount of allowable development. Assumed construction phases include 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, it is

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 (with the exception of the architectural coating phase, which was extended to include several days per facility), construction equipment, daily vehicle trips, and haul trip distance. Detailed assumptions and modeling datasheets are provided in Attachment 1, CalEEMod Results. To reflect the contribution of construction emissions to the project’s total GHG emissions, estimated annual construction emissions are provided in Table 3, Estimated Project-Related Greenhouse Gas Emissions, and amortized over the projected project lifetime. Specific guidance for construction emissions is not available from the San Diego Air Pollution Control District; therefore, project lifetime is assumed to be 30 years, consistent with guidance from the South Coast Air Quality Management District (2008).

## Operation

Operation of cannabis facilities permitted by the Ordinance would result in direct GHG emissions from vehicle trips and area and indirect emissions sources from electricity and natural gas consumption, water and wastewater transport, and solid waste generation. GHG emissions from electricity consumed on site by the project would be generated off site by fuel combustion at the electricity provider. GHG emissions from water and wastewater transport would also be indirect emissions resulting from the energy required to transport water from its source and the energy required to treat wastewater and transport it to its treated discharge point.

Operational emissions for the project were 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 uses as 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). Energy use was adjusted in CalEEMod to more accurately reflect cannabis facility usage based on other approved cannabis projects (County of Sonoma 2021). Operational emissions from cannabis facilities permitted by the proposed Ordinance are shown in Table 3.

**Table 3. Estimated Project-Related Greenhouse Gas Emissions**

Emissions Source	Emissions (MTCO <sub>2</sub> e)
<b>Annual Construction Emissions</b>	
Demolition	22
Site Preparation	3
Grading	5
Building Construction	291
Paving	8
<b>Total</b>	<b>329</b>
<b>Amortized over 30 years</b>	
	<b>11</b>
<b>Annual Operation Emissions</b>	
Area	<1
Electricity	1,191
Natural Gas	48
Mobile	1,534
Waste	57
Water	87
<b>Total Annual Operation Emissions</b>	<b>2,917</b>
<b>Total Project Annual GHG Emissions</b>	<b>2,928</b>

**Source:** CAPCOA 2020. Consistent with CalEEMod, version 2020.4.0 (output data provided in Attachment 1).

**Notes:** GHG = greenhouse gas; MTCO<sub>2</sub>e = metric tons of carbon dioxide equivalent

## Impact Analysis

As shown in Table 3, construction and operation of cannabis facilities allowed by the Ordinance would result in an increase in GHG emissions. However, development of similar types of commercial and industrial uses in the project area was generally assumed in the Santee General Plan. Per the Ordinance, cannabis facilities (including storefront or non-storefront retail with optional delivery, manufacturing, testing, and distribution and microbusinesses with optional cultivation) would be allowed in the General Commercial (GC), Light Industrial (IL), and General Industrial (IG) zones consistent with the Santee General Plan land use designations. These cannabis uses are similar to other allowable uses in the City's commercial and industrial zones. Future cannabis facilities would be subject to the City's administrative review process, which includes consistency with the SSP.

The SSP includes a Project Consistency Checklist (Checklist) that is intended to be a tool for development projects to demonstrate consistency with the SSP, which is a qualified GHG emissions reduction plan in accordance with CEQA Guidelines, Section 15183.5. The Checklist was developed as part of the SSP implementation and monitoring process and supports the achievement of individual GHG reduction measures and the City's overall GHG reduction goals. Additionally, the Checklist supports the City's sustainability goals and policies that encourage sustainable development and aim to conserve and reduce the consumption of resources, such as energy and water, among others. Projects that meet the Checklist requirements are considered consistent with the SSP and would have a less than significant contribution to cumulative GHG impacts (i.e., the project's incremental contribution to cumulative GHG effects is not cumulatively considerable), pursuant to CEQA Guidelines, Sections 15064(h)(3), 15130(d), and 15183(b). The Checklist includes a two-step process to determine if a project would result in a GHG impact. Step 1 consists of an evaluation to determine the project's consistency with existing Santee General Plan land use and zoning designations for the project area, which demonstrates consistency with the SSP GHG forecast. Step 2 consists of an evaluation of the project's design features for compliance with the SSP's GHG emissions reduction measures.

Regarding Step 1, new cannabis facilities would generally be consistent with planned commercial and industrial land uses for the project area identified in the Santee General Plan. However, based on a review of analyses of similar projects, cannabis cultivation facilities tend to have a higher energy demand than typical commercial or industrial facilities (County of Santa Barbara 2017). Therefore, energy use from new cultivation facilities would likely result in higher energy demand than forecasted for planned development in the SSP. Because facility locations and operation specifications are unknown, future cannabis cultivation facilities would have the potential to exceed the energy demand forecasted in the SSP. Therefore, impacts from new cultivation facilities would be potentially significant. The remaining allowable cannabis facilities (storefront or non-storefront retail with optional delivery, manufacturing, testing, and distribution and microbusinesses without cultivation) would have an energy demand typical of other planned commercial and industrial facilities and would not result in a conflict with Step 1 of the SSP Checklist.

Step 2 includes various reduction measures applicable to future cannabis facilities. This includes requiring new commercial buildings to meet or exceed California Green Building Standards Tier 2 Voluntary Measures, such as obtaining green building ratings, including Leadership in Energy and Environmental Design (LEED), Build It Green, or Energy Star building certifications. Measures also include decreasing energy demand by reducing the heat island effect through tree planting and enhanced cool roof installation. Transportation measures include reducing vehicle miles traveled by requiring future projects to install sidewalks, bike lanes, and electric vehicle chargers and implement traffic flow improvements as applicable. Clean energy measures include installing at least 2 kilowatt per square foot of building area of photovoltaic solar systems on commercial buildings unless the installation is infeasible due to poor solar resources. Future cannabis facilities would demonstrate consistency with each of these applicable measures to demonstrate required compliance with Step 2 of the Checklist. The allowable cannabis facilities, including cultivation, would not include unusual features that would preclude implementation of applicable measures.

Therefore, because the project would be generally consistent with the growth assumptions in the Santee General Plan and would not increase the planned development capacity of the City and because the City has adopted a

qualified GHG reduction plan with consistency requirements in place for future development under the project, implementation of the project would not result in significant GHG emissions, with the exception of cultivation facilities. Additionally, the SSP demonstrates how the City achieves its fair share of emissions reductions to meet statewide emissions reduction targets. Through consistency with the SSP, the project would also be consistent with statewide reduction goals established in AB 32 and SB 32. Cultivation facilities would have the potential to conflict with Step 1 of the SSP and result in a potentially significant impact.

## Mitigation Measures

Mitigation Measure ENE-1, Sustainable Santee Plan Forecast Consistency, would be implemented for future cannabis facilities with cultivation to demonstrate energy demand that is in line with the forecast assumptions of the SSP. This mitigation measure was also identified to mitigate potential energy impacts in the Energy Technical Memorandum prepared by Harris & Associates (Harris 2022).

**ENE-1: Sustainable Santee Plan Forecast Consistency.** Before the approval of a cannabis business permit to operate a cannabis facility with cultivation, the applicant shall demonstrate that energy demand from the proposed cannabis facility would be consistent with a typical commercial or industrial use (1.08 kilowatt-hours per year per square foot)<sup>1</sup> as forecasted in the Sustainable Santee Plan. Energy demand may be reduced through energy-efficient building design, use of energy-efficient equipment, or installation of solar panels to offset energy demand.

## Summary

Implementation of the Ordinance would have the potential to result in an increase in GHG emissions. However, the City has an adopted, qualified GHG reduction plan in place to achieve the City's GHG emissions reduction targets. The SSP includes a required Checklist for future cannabis facilities to demonstrate consistency with the SSP. Most allowable cannabis facilities would propose development consistent with forecast assumptions and would be able to demonstrate SSP consistency. However, because the energy demand of cannabis cultivation facilities is anticipated to be higher than typical commercial and industrial uses addressed in the SSP, Mitigation Measure ENE-1 would be implemented to demonstrate consistency with Step 1 of the SSP Checklist. Therefore, with implementation of Mitigation Measure ENE-1, GHG emissions impacts would be reduced to below a level of significance.

## References

- CAPCOA (California Air Pollution Control Officers Association). 2020. California Emissions Estimator Model. Version 2020.4.0.
- CARB (California Air Resources Board). 2014. First Update to the Climate Change Scoping Plan: Building on the Framework Pursuant to AB 32, the California Global Warming Solutions Act of 2006. May.
- City of Santee. 2020. Sustainable Santee Plan: The City's Roadmap to Greenhouse Gas Reductions. Adopted January. Accessed June 2022. <https://www.cityofsanteeca.gov/home/showdocument?id=18422>.
- County of Santa Barbara. 2017. Cannabis Land Use Ordinance and Licensing Program Final Environmental Impact Report. December.
- County of Sonoma County. 2021. Sonoma County Cannabis Land Use Ordinance Update and General Plan Amendment. February.
- Harris (Harris & Associates). 2022. Energy Technical Memorandum for the Santee Cannabis Business Ordinance.

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<sup>1</sup> Based on California Emissions Estimator Model (CalEEMod) version 20.4.0 defaults, typical energy demand is 1.08 kilowatt-hours per year per square foot (CAPCOA 2020).

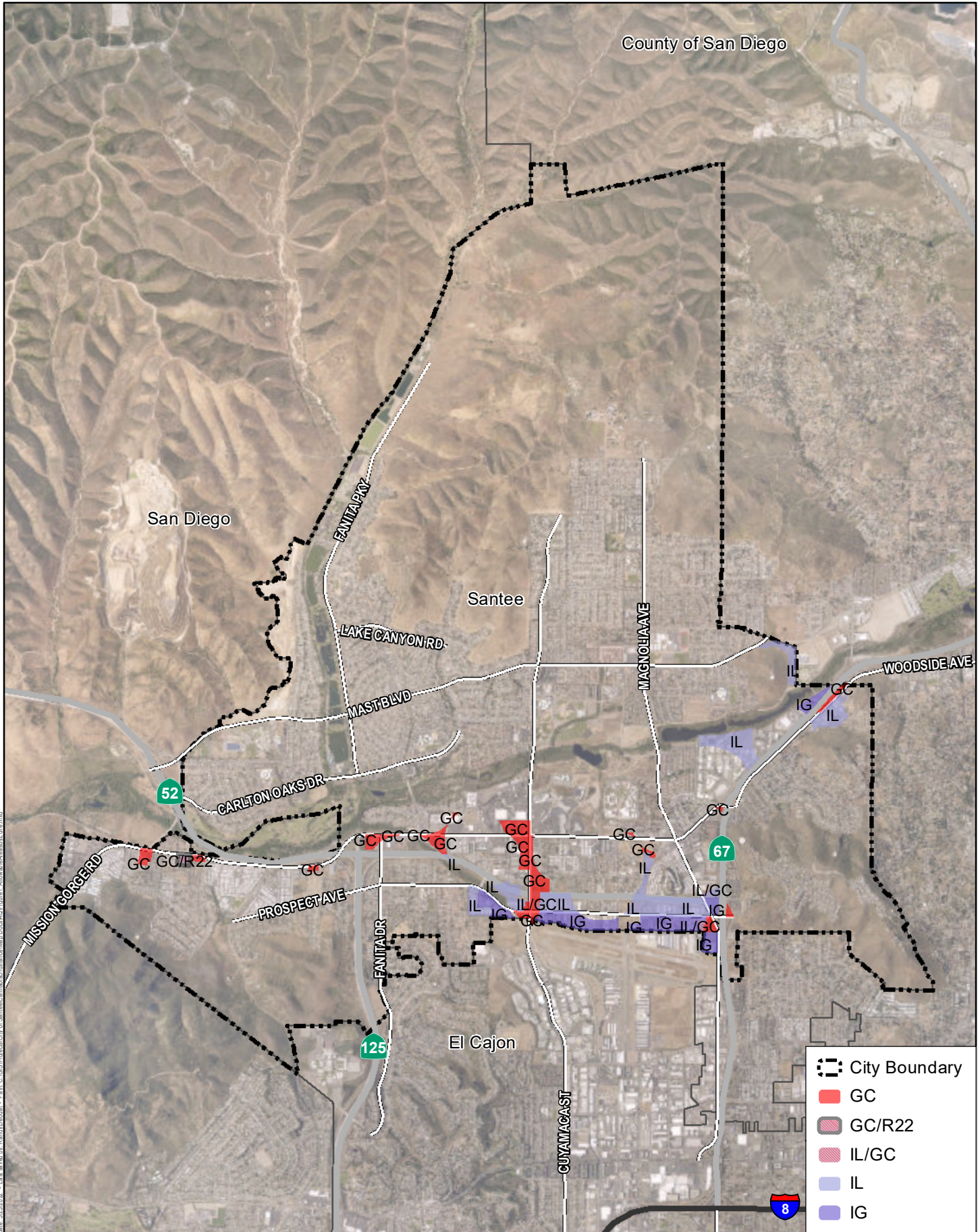
LLG (Linscott Law & Greenspan, Engineers). 2022. Transportation Impact Analysis, Santee Cannabis Business Ordinance, Santee, California. April 25.

SANDAG (San Diego Association of Governments). 2002. (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region.

South Coast Air Quality Management District. 2008. Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold. October.

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Source: SanGIS 2022; ESRI 2022

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## **Attachment 1. CalEEMod Results**

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Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

**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, Annual**

**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**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.6	<b>Precipitation Freq (Days)</b>	40
<b>Climate Zone</b>	13			<b>Operational Year</b>	2024
<b>Utility Company</b>	San Diego Gas & Electric				
<b>CO2 Intensity (lb/MWhr)</b>	539.98	<b>CH4 Intensity (lb/MWhr)</b>	0.033	<b>N2O Intensity (lb/MWhr)</b>	0.004

**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 LIG 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, Annual

**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, Annual

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

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1049	0.8691	0.8157	1.6000e-003	0.0398	0.0404	0.0802	0.0151	0.0384	0.0535	0.0000	137.5367	137.5367	0.0251	2.1600e-003	138.8081
2023	1.2290	1.0905	1.1970	2.3500e-003	0.0303	0.0479	0.0781	8.2000e-003	0.0459	0.0541	0.0000	201.2923	201.2923	0.0315	3.5500e-003	203.1368
<b>Maximum</b>	<b>1.2290</b>	<b>1.0905</b>	<b>1.1970</b>	<b>2.3500e-003</b>	<b>0.0398</b>	<b>0.0479</b>	<b>0.0802</b>	<b>0.0151</b>	<b>0.0459</b>	<b>0.0541</b>	<b>0.0000</b>	<b>201.2923</b>	<b>201.2923</b>	<b>0.0315</b>	<b>3.5500e-003</b>	<b>203.1368</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1049	0.8691	0.8157	1.6000e-003	0.0398	0.0404	0.0802	0.0151	0.0384	0.0535	0.0000	137.5366	137.5366	0.0251	2.1600e-003	138.8080
2023	1.2290	1.0905	1.1970	2.3500e-003	0.0303	0.0479	0.0781	8.2000e-003	0.0459	0.0541	0.0000	201.2921	201.2921	0.0315	3.5500e-003	203.1366
<b>Maximum</b>	<b>1.2290</b>	<b>1.0905</b>	<b>1.1970</b>	<b>2.3500e-003</b>	<b>0.0398</b>	<b>0.0479</b>	<b>0.0802</b>	<b>0.0151</b>	<b>0.0459</b>	<b>0.0541</b>	<b>0.0000</b>	<b>201.2921</b>	<b>201.2921</b>	<b>0.0315</b>	<b>3.5500e-003</b>	<b>203.1366</b>

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	8-1-2022	10-31-2022	0.5854	0.5854
2	11-1-2022	1-31-2023	0.5610	0.5610
3	2-1-2023	4-30-2023	0.5474	0.5474
4	5-1-2023	7-31-2023	1.4794	1.4794
5	8-1-2023	9-30-2023	0.1092	0.1092
		Highest	1.4794	1.4794

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4761	1.0000e-005	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Energy	4.8400e-003	0.0440	0.0369	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003	0.0000	1,234.7271	1,234.7271	0.0735	9.6700e-003	1,239.4448
Mobile	1.4681	1.1931	10.0218	0.0160	1.6309	0.0140	1.6449	0.4353	0.0130	0.4483	0.0000	1,503.0856	1,503.0856	0.1588	0.0918	1,534.4186
Waste						0.0000	0.0000		0.0000	0.0000	22.8893	0.0000	22.8893	1.3527	0.0000	56.7072
Water						0.0000	0.0000		0.0000	0.0000	5.8990	61.7714	67.6704	0.6097	0.0148	87.3115
<b>Total</b>	<b>1.9490</b>	<b>1.2371</b>	<b>10.0596</b>	<b>0.0163</b>	<b>1.6309</b>	<b>0.0173</b>	<b>1.6482</b>	<b>0.4353</b>	<b>0.0164</b>	<b>0.4516</b>	<b>28.7883</b>	<b>2,799.5858</b>	<b>2,828.3740</b>	<b>2.1946</b>	<b>0.1163</b>	<b>2,917.8839</b>



Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.4761	1.0000e-005	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Energy	4.8400e-003	0.0440	0.0369	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003	0.0000	1,234.7271	1,234.7271	0.0735	9.6700e-003	1,239.4448
Mobile	1.4681	1.1931	10.0218	0.0160	1.6309	0.0140	1.6449	0.4353	0.0130	0.4483	0.0000	1,503.0856	1,503.0856	0.1588	0.0918	1,534.4186
Waste						0.0000	0.0000		0.0000	0.0000	22.8893	0.0000	22.8893	1.3527	0.0000	56.7072
Water						0.0000	0.0000		0.0000	0.0000	5.8990	61.7714	67.6704	0.6097	0.0148	87.3115
<b>Total</b>	<b>1.9490</b>	<b>1.2371</b>	<b>10.0596</b>	<b>0.0163</b>	<b>1.6309</b>	<b>0.0173</b>	<b>1.6482</b>	<b>0.4353</b>	<b>0.0164</b>	<b>0.4516</b>	<b>28.7883</b>	<b>2,799.5858</b>	<b>2,828.3740</b>	<b>2.1946</b>	<b>0.1163</b>	<b>2,917.8839</b>

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

**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	

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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
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

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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**

**3.2 Demolition - 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	tons/yr										MT/yr					
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2120
<b>Total</b>	<b>0.0169</b>	<b>0.1662</b>	<b>0.1396</b>	<b>2.4000e-004</b>		<b>8.3800e-003</b>	<b>8.3800e-003</b>		<b>7.8300e-003</b>	<b>7.8300e-003</b>	<b>0.0000</b>	<b>21.0777</b>	<b>21.0777</b>	<b>5.3700e-003</b>	<b>0.0000</b>	<b>21.2120</b>

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

**3.2 Demolition - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.7000e-004	3.2000e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.8574	0.8574	3.0000e-005	2.0000e-005	0.8654
<b>Total</b>	<b>3.8000e-004</b>	<b>2.7000e-004</b>	<b>3.2000e-003</b>	<b>1.0000e-005</b>	<b>1.0400e-003</b>	<b>1.0000e-005</b>	<b>1.0500e-003</b>	<b>2.8000e-004</b>	<b>1.0000e-005</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.8574</b>	<b>0.8574</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>0.8654</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2119
<b>Total</b>	<b>0.0169</b>	<b>0.1662</b>	<b>0.1396</b>	<b>2.4000e-004</b>		<b>8.3800e-003</b>	<b>8.3800e-003</b>		<b>7.8300e-003</b>	<b>7.8300e-003</b>	<b>0.0000</b>	<b>21.0777</b>	<b>21.0777</b>	<b>5.3700e-003</b>	<b>0.0000</b>	<b>21.2119</b>

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

**3.2 Demolition - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.8000e-004	2.7000e-004	3.2000e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0500e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.8574	0.8574	3.0000e-005	2.0000e-005	0.8654
<b>Total</b>	<b>3.8000e-004</b>	<b>2.7000e-004</b>	<b>3.2000e-003</b>	<b>1.0000e-005</b>	<b>1.0400e-003</b>	<b>1.0000e-005</b>	<b>1.0500e-003</b>	<b>2.8000e-004</b>	<b>1.0000e-005</b>	<b>2.8000e-004</b>	<b>0.0000</b>	<b>0.8574</b>	<b>0.8574</b>	<b>3.0000e-005</b>	<b>2.0000e-005</b>	<b>0.8654</b>

**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	tons/yr										MT/yr					
Fugitive Dust					1.1500e-003	0.0000	1.1500e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0700e-003	0.0235	0.0151	4.0000e-005		8.9000e-004	8.9000e-004		8.2000e-004	8.2000e-004	0.0000	3.2321	3.2321	1.0500e-003	0.0000	3.2582
<b>Total</b>	<b>2.0700e-003</b>	<b>0.0235</b>	<b>0.0151</b>	<b>4.0000e-005</b>	<b>1.1500e-003</b>	<b>8.9000e-004</b>	<b>2.0400e-003</b>	<b>1.2000e-004</b>	<b>8.2000e-004</b>	<b>9.4000e-004</b>	<b>0.0000</b>	<b>3.2321</b>	<b>3.2321</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>3.2582</b>

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**3.3 Site Preparation - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	3.0000e-005	2.9000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0799
<b>Total</b>	<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0791</b>	<b>0.0791</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0799</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.1500e-003	0.0000	1.1500e-003	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.0700e-003	0.0235	0.0151	4.0000e-005		8.9000e-004	8.9000e-004		8.2000e-004	8.2000e-004	0.0000	3.2321	3.2321	1.0500e-003	0.0000	3.2582
<b>Total</b>	<b>2.0700e-003</b>	<b>0.0235</b>	<b>0.0151</b>	<b>4.0000e-005</b>	<b>1.1500e-003</b>	<b>8.9000e-004</b>	<b>2.0400e-003</b>	<b>1.2000e-004</b>	<b>8.2000e-004</b>	<b>9.4000e-004</b>	<b>0.0000</b>	<b>3.2321</b>	<b>3.2321</b>	<b>1.0500e-003</b>	<b>0.0000</b>	<b>3.2582</b>

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**3.3 Site Preparation - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-005	3.0000e-005	2.9000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0791	0.0791	0.0000	0.0000	0.0799
<b>Total</b>	<b>3.0000e-005</b>	<b>3.0000e-005</b>	<b>2.9000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>0.0000</b>	<b>1.0000e-004</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0791</b>	<b>0.0791</b>	<b>0.0000</b>	<b>0.0000</b>	<b>0.0799</b>

**3.4 Grading - 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	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6200e-003	0.0510	0.0277	6.0000e-005		2.2300e-003	2.2300e-003		2.0500e-003	2.0500e-003	0.0000	5.4308	5.4308	1.7600e-003	0.0000	5.4747
<b>Total</b>	<b>4.6200e-003</b>	<b>0.0510</b>	<b>0.0277</b>	<b>6.0000e-005</b>	<b>0.0213</b>	<b>2.2300e-003</b>	<b>0.0235</b>	<b>0.0103</b>	<b>2.0500e-003</b>	<b>0.0123</b>	<b>0.0000</b>	<b>5.4308</b>	<b>5.4308</b>	<b>1.7600e-003</b>	<b>0.0000</b>	<b>5.4747</b>

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**3.4 Grading - 2022**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	6.0000e-005	7.4000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1979	0.1979	1.0000e-005	1.0000e-005	0.1997
<b>Total</b>	<b>9.0000e-005</b>	<b>6.0000e-005</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1979</b>	<b>0.1979</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.1997</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.6200e-003	0.0510	0.0277	6.0000e-005		2.2300e-003	2.2300e-003		2.0500e-003	2.0500e-003	0.0000	5.4308	5.4308	1.7600e-003	0.0000	5.4747
<b>Total</b>	<b>4.6200e-003</b>	<b>0.0510</b>	<b>0.0277</b>	<b>6.0000e-005</b>	<b>0.0213</b>	<b>2.2300e-003</b>	<b>0.0235</b>	<b>0.0103</b>	<b>2.0500e-003</b>	<b>0.0123</b>	<b>0.0000</b>	<b>5.4308</b>	<b>5.4308</b>	<b>1.7600e-003</b>	<b>0.0000</b>	<b>5.4747</b>



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**3.4 Grading - 2022**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e-005	6.0000e-005	7.4000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	7.0000e-005	0.0000	0.1979	0.1979	1.0000e-005	1.0000e-005	0.1997
<b>Total</b>	<b>9.0000e-005</b>	<b>6.0000e-005</b>	<b>7.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>0.0000</b>	<b>2.4000e-004</b>	<b>6.0000e-005</b>	<b>0.0000</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>0.1979</b>	<b>0.1979</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.1997</b>

**3.5 Building Construction - 2022**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0752	0.5915	0.5813	1.0100e-003		0.0284	0.0284		0.0273	0.0273	0.0000	84.1104	84.1104	0.0162	0.0000	84.5161
<b>Total</b>	<b>0.0752</b>	<b>0.5915</b>	<b>0.5813</b>	<b>1.0100e-003</b>		<b>0.0284</b>	<b>0.0284</b>		<b>0.0273</b>	<b>0.0273</b>	<b>0.0000</b>	<b>84.1104</b>	<b>84.1104</b>	<b>0.0162</b>	<b>0.0000</b>	<b>84.5161</b>

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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**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3400e-003	0.0334	0.0110	1.3000e-004	4.0300e-003	3.5000e-004	4.3900e-003	1.1600e-003	3.4000e-004	1.5000e-003	0.0000	12.6688	12.6688	3.8000e-004	1.8400e-003	13.2268
Worker	4.3300e-003	3.1400e-003	0.0368	1.1000e-004	0.0120	7.0000e-005	0.0121	3.1900e-003	6.0000e-005	3.2600e-003	0.0000	9.8826	9.8826	3.1000e-004	2.9000e-004	9.9754
<b>Total</b>	<b>5.6700e-003</b>	<b>0.0366</b>	<b>0.0478</b>	<b>2.4000e-004</b>	<b>0.0161</b>	<b>4.2000e-004</b>	<b>0.0165</b>	<b>4.3500e-003</b>	<b>4.0000e-004</b>	<b>4.7600e-003</b>	<b>0.0000</b>	<b>22.5514</b>	<b>22.5514</b>	<b>6.9000e-004</b>	<b>2.1300e-003</b>	<b>23.2021</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0752	0.5915	0.5813	1.0100e-003		0.0284	0.0284		0.0273	0.0273	0.0000	84.1103	84.1103	0.0162	0.0000	84.5160
<b>Total</b>	<b>0.0752</b>	<b>0.5915</b>	<b>0.5813</b>	<b>1.0100e-003</b>		<b>0.0284</b>	<b>0.0284</b>		<b>0.0273</b>	<b>0.0273</b>	<b>0.0000</b>	<b>84.1103</b>	<b>84.1103</b>	<b>0.0162</b>	<b>0.0000</b>	<b>84.5160</b>

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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**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.3400e-003	0.0334	0.0110	1.3000e-004	4.0300e-003	3.5000e-004	4.3900e-003	1.1600e-003	3.4000e-004	1.5000e-003	0.0000	12.6688	12.6688	3.8000e-004	1.8400e-003	13.2268
Worker	4.3300e-003	3.1400e-003	0.0368	1.1000e-004	0.0120	7.0000e-005	0.0121	3.1900e-003	6.0000e-005	3.2600e-003	0.0000	9.8826	9.8826	3.1000e-004	2.9000e-004	9.9754
<b>Total</b>	<b>5.6700e-003</b>	<b>0.0366</b>	<b>0.0478</b>	<b>2.4000e-004</b>	<b>0.0161</b>	<b>4.2000e-004</b>	<b>0.0165</b>	<b>4.3500e-003</b>	<b>4.0000e-004</b>	<b>4.7600e-003</b>	<b>0.0000</b>	<b>22.5514</b>	<b>22.5514</b>	<b>6.9000e-004</b>	<b>2.1300e-003</b>	<b>23.2021</b>

**3.5 Building Construction - 2023**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1191	0.9469	0.9879	1.7400e-003		0.0427	0.0427		0.0409	0.0409	0.0000	144.3529	144.3529	0.0273	0.0000	145.0354
<b>Total</b>	<b>0.1191</b>	<b>0.9469</b>	<b>0.9879</b>	<b>1.7400e-003</b>		<b>0.0427</b>	<b>0.0427</b>		<b>0.0409</b>	<b>0.0409</b>	<b>0.0000</b>	<b>144.3529</b>	<b>144.3529</b>	<b>0.0273</b>	<b>0.0000</b>	<b>145.0354</b>

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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**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2200e-003	0.0463	0.0163	2.1000e-004	6.9200e-003	2.7000e-004	7.2000e-003	2.0000e-003	2.6000e-004	2.2600e-003	0.0000	20.9178	20.9178	6.3000e-004	3.0300e-003	21.8368
Worker	6.9600e-003	4.8200e-003	0.0588	1.8000e-004	0.0206	1.1000e-004	0.0207	5.4800e-003	1.0000e-004	5.5800e-003	0.0000	16.5220	16.5220	4.8000e-004	4.6000e-004	16.6698
<b>Total</b>	<b>8.1800e-003</b>	<b>0.0511</b>	<b>0.0751</b>	<b>3.9000e-004</b>	<b>0.0275</b>	<b>3.8000e-004</b>	<b>0.0279</b>	<b>7.4800e-003</b>	<b>3.6000e-004</b>	<b>7.8400e-003</b>	<b>0.0000</b>	<b>37.4398</b>	<b>37.4398</b>	<b>1.1100e-003</b>	<b>3.4900e-003</b>	<b>38.5066</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1191	0.9469	0.9879	1.7400e-003		0.0427	0.0427		0.0409	0.0409	0.0000	144.3528	144.3528	0.0273	0.0000	145.0352
<b>Total</b>	<b>0.1191</b>	<b>0.9469</b>	<b>0.9879</b>	<b>1.7400e-003</b>		<b>0.0427</b>	<b>0.0427</b>		<b>0.0409</b>	<b>0.0409</b>	<b>0.0000</b>	<b>144.3528</b>	<b>144.3528</b>	<b>0.0273</b>	<b>0.0000</b>	<b>145.0352</b>

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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**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.2200e-003	0.0463	0.0163	2.1000e-004	6.9200e-003	2.7000e-004	7.2000e-003	2.0000e-003	2.6000e-004	2.2600e-003	0.0000	20.9178	20.9178	6.3000e-004	3.0300e-003	21.8368
Worker	6.9600e-003	4.8200e-003	0.0588	1.8000e-004	0.0206	1.1000e-004	0.0207	5.4800e-003	1.0000e-004	5.5800e-003	0.0000	16.5220	16.5220	4.8000e-004	4.6000e-004	16.6698
<b>Total</b>	<b>8.1800e-003</b>	<b>0.0511</b>	<b>0.0751</b>	<b>3.9000e-004</b>	<b>0.0275</b>	<b>3.8000e-004</b>	<b>0.0279</b>	<b>7.4800e-003</b>	<b>3.6000e-004</b>	<b>7.8400e-003</b>	<b>0.0000</b>	<b>37.4398</b>	<b>37.4398</b>	<b>1.1100e-003</b>	<b>3.4900e-003</b>	<b>38.5066</b>

**3.6 Paving - 2023**

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8179
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.4000e-003</b>	<b>0.0431</b>	<b>0.0584</b>	<b>9.0000e-005</b>		<b>2.1700e-003</b>	<b>2.1700e-003</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>	<b>0.0000</b>	<b>7.7564</b>	<b>7.7564</b>	<b>2.4600e-003</b>	<b>0.0000</b>	<b>7.8179</b>

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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**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.4000e-004	1.7100e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4819	0.4819	1.0000e-005	1.0000e-005	0.4862
<b>Total</b>	<b>2.0000e-004</b>	<b>1.4000e-004</b>	<b>1.7100e-003</b>	<b>1.0000e-005</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>6.0000e-004</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>0.4819</b>	<b>0.4819</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.4862</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	4.4000e-003	0.0431	0.0584	9.0000e-005		2.1700e-003	2.1700e-003		2.0000e-003	2.0000e-003	0.0000	7.7564	7.7564	2.4600e-003	0.0000	7.8178
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>4.4000e-003</b>	<b>0.0431</b>	<b>0.0584</b>	<b>9.0000e-005</b>		<b>2.1700e-003</b>	<b>2.1700e-003</b>		<b>2.0000e-003</b>	<b>2.0000e-003</b>	<b>0.0000</b>	<b>7.7564</b>	<b>7.7564</b>	<b>2.4600e-003</b>	<b>0.0000</b>	<b>7.8178</b>

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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**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e-004	1.4000e-004	1.7100e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4819	0.4819	1.0000e-005	1.0000e-005	0.4862
<b>Total</b>	<b>2.0000e-004</b>	<b>1.4000e-004</b>	<b>1.7100e-003</b>	<b>1.0000e-005</b>	<b>6.0000e-004</b>	<b>0.0000</b>	<b>6.0000e-004</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>1.6000e-004</b>	<b>0.0000</b>	<b>0.4819</b>	<b>0.4819</b>	<b>1.0000e-005</b>	<b>1.0000e-005</b>	<b>0.4862</b>

**3.7 Architectural Coating - 2023**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0892					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1900e-003	0.0489	0.0679	1.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	9.5747	9.5747	5.7000e-004	0.0000	9.5890
<b>Total</b>	<b>1.0964</b>	<b>0.0489</b>	<b>0.0679</b>	<b>1.1000e-004</b>		<b>2.6600e-003</b>	<b>2.6600e-003</b>		<b>2.6600e-003</b>	<b>2.6600e-003</b>	<b>0.0000</b>	<b>9.5747</b>	<b>9.5747</b>	<b>5.7000e-004</b>	<b>0.0000</b>	<b>9.5890</b>

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

**3.7 Architectural Coating - 2023**

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1000e-004	4.9000e-004	6.0000e-003	2.0000e-005	2.1100e-003	1.0000e-005	2.1200e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.6866	1.6866	5.0000e-005	5.0000e-005	1.7017
<b>Total</b>	<b>7.1000e-004</b>	<b>4.9000e-004</b>	<b>6.0000e-003</b>	<b>2.0000e-005</b>	<b>2.1100e-003</b>	<b>1.0000e-005</b>	<b>2.1200e-003</b>	<b>5.6000e-004</b>	<b>1.0000e-005</b>	<b>5.7000e-004</b>	<b>0.0000</b>	<b>1.6866</b>	<b>1.6866</b>	<b>5.0000e-005</b>	<b>5.0000e-005</b>	<b>1.7017</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.0892					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	7.1900e-003	0.0489	0.0679	1.1000e-004		2.6600e-003	2.6600e-003		2.6600e-003	2.6600e-003	0.0000	9.5747	9.5747	5.7000e-004	0.0000	9.5890
<b>Total</b>	<b>1.0964</b>	<b>0.0489</b>	<b>0.0679</b>	<b>1.1000e-004</b>		<b>2.6600e-003</b>	<b>2.6600e-003</b>		<b>2.6600e-003</b>	<b>2.6600e-003</b>	<b>0.0000</b>	<b>9.5747</b>	<b>9.5747</b>	<b>5.7000e-004</b>	<b>0.0000</b>	<b>9.5890</b>



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

**3.7 Architectural Coating - 2023**

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.1000e-004	4.9000e-004	6.0000e-003	2.0000e-005	2.1100e-003	1.0000e-005	2.1200e-003	5.6000e-004	1.0000e-005	5.7000e-004	0.0000	1.6866	1.6866	5.0000e-005	5.0000e-005	1.7017
<b>Total</b>	<b>7.1000e-004</b>	<b>4.9000e-004</b>	<b>6.0000e-003</b>	<b>2.0000e-005</b>	<b>2.1100e-003</b>	<b>1.0000e-005</b>	<b>2.1200e-003</b>	<b>5.6000e-004</b>	<b>1.0000e-005</b>	<b>5.7000e-004</b>	<b>0.0000</b>	<b>1.6866</b>	<b>1.6866</b>	<b>5.0000e-005</b>	<b>5.0000e-005</b>	<b>1.7017</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.4681	1.1931	10.0218	0.0160	1.6309	0.0140	1.6449	0.4353	0.0130	0.4483	0.0000	1,503.0856	1,503.0856	0.1588	0.0918	1,534.4186
Unmitigated	1.4681	1.1931	10.0218	0.0160	1.6309	0.0140	1.6449	0.4353	0.0130	0.4483	0.0000	1,503.0856	1,503.0856	0.1588	0.0918	1,534.4186

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	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	4,222.40	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**

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

**4.4 Fleet Mix**

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

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	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,186.8661	1,186.8661	0.0725	8.7900e-003	1,191.2994
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,186.8661	1,186.8661	0.0725	8.7900e-003	1,191.2994
NaturalGas Mitigated	4.8400e-003	0.0440	0.0369	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003	0.0000	47.8609	47.8609	9.2000e-004	8.8000e-004	48.1454
NaturalGas Unmitigated	4.8400e-003	0.0440	0.0369	2.6000e-004		3.3400e-003	3.3400e-003		3.3400e-003	3.3400e-003	0.0000	47.8609	47.8609	9.2000e-004	8.8000e-004	48.1454

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

**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**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	230400	1.2400e-003	0.0113	9.4900e-003	7.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	12.2950	12.2950	2.4000e-004	2.3000e-004	12.3681
General Light Industry	345600	1.8600e-003	0.0169	0.0142	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4425	18.4425	3.5000e-004	3.4000e-004	18.5521
Manufacturing	276480	1.4900e-003	0.0136	0.0114	8.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	14.7540	14.7540	2.8000e-004	2.7000e-004	14.8417
Strip Mall	44400	2.4000e-004	2.1800e-003	1.8300e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.3694	2.3694	5.0000e-005	4.0000e-005	2.3834
<b>Total</b>		<b>4.8300e-003</b>	<b>0.0440</b>	<b>0.0369</b>	<b>2.6000e-004</b>		<b>3.3500e-003</b>	<b>3.3500e-003</b>		<b>3.3500e-003</b>	<b>3.3500e-003</b>	<b>0.0000</b>	<b>47.8609</b>	<b>47.8609</b>	<b>9.2000e-004</b>	<b>8.8000e-004</b>	<b>48.1453</b>

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

**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**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	230400	1.2400e-003	0.0113	9.4900e-003	7.0000e-005		8.6000e-004	8.6000e-004		8.6000e-004	8.6000e-004	0.0000	12.2950	12.2950	2.4000e-004	2.3000e-004	12.3681
General Light Industry	345600	1.8600e-003	0.0169	0.0142	1.0000e-004		1.2900e-003	1.2900e-003		1.2900e-003	1.2900e-003	0.0000	18.4425	18.4425	3.5000e-004	3.4000e-004	18.5521
Manufacturing	276480	1.4900e-003	0.0136	0.0114	8.0000e-005		1.0300e-003	1.0300e-003		1.0300e-003	1.0300e-003	0.0000	14.7540	14.7540	2.8000e-004	2.7000e-004	14.8417
Strip Mall	44400	2.4000e-004	2.1800e-003	1.8300e-003	1.0000e-005		1.7000e-004	1.7000e-004		1.7000e-004	1.7000e-004	0.0000	2.3694	2.3694	5.0000e-005	4.0000e-005	2.3834
<b>Total</b>		<b>4.8300e-003</b>	<b>0.0440</b>	<b>0.0369</b>	<b>2.6000e-004</b>		<b>3.3500e-003</b>	<b>3.3500e-003</b>		<b>3.3500e-003</b>	<b>3.3500e-003</b>	<b>0.0000</b>	<b>47.8609</b>	<b>47.8609</b>	<b>9.2000e-004</b>	<b>8.8000e-004</b>	<b>48.1453</b>

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

**5.3 Energy by Land Use - Electricity**

**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.762e+006	431.5681	0.0264	3.2000e-003	433.1801
General Light Industry	2.643e+006	647.3521	0.0396	4.8000e-003	649.7702
Manufacturing	196320	48.0848	2.9400e-003	3.6000e-004	48.2644
Strip Mall	244400	59.8611	3.6600e-003	4.4000e-004	60.0847
<b>Total</b>		<b>1,186.8661</b>	<b>0.0725</b>	<b>8.8000e-003</b>	<b>1,191.2995</b>

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

**5.3 Energy by Land Use - Electricity**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	1.762e+006	431.5681	0.0264	3.2000e-003	433.1801
General Light Industry	2.643e+006	647.3521	0.0396	4.8000e-003	649.7702
Manufacturing	196320	48.0848	2.9400e-003	3.6000e-004	48.2644
Strip Mall	244400	59.8611	3.6600e-003	4.4000e-004	60.0847
<b>Total</b>		<b>1,186.8661</b>	<b>0.0725</b>	<b>8.8000e-003</b>	<b>1,191.2995</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4761	1.0000e-005	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
Unmitigated	0.4761	1.0000e-005	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003

**6.2 Area by SubCategory**

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1089					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3671					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
<b>Total</b>	<b>0.4761</b>	<b>1.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.6800e-003</b>	<b>1.6800e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.7900e-003</b>



Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

**6.2 Area by SubCategory**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1089					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.3671					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0000e-005	1.0000e-005	8.6000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.6800e-003	1.6800e-003	0.0000	0.0000	1.7900e-003
<b>Total</b>	<b>0.4761</b>	<b>1.0000e-005</b>	<b>8.6000e-004</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>		<b>0.0000</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.6800e-003</b>	<b>1.6800e-003</b>	<b>0.0000</b>	<b>0.0000</b>	<b>1.7900e-003</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	67.6704	0.6097	0.0148	87.3115
Unmitigated	67.6704	0.6097	0.0148	87.3115

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	11.5625 / 0	40.5439	0.3790	9.1700e-003	52.7518
Manufacturing	5.55 / 0	19.4611	0.1819	4.4000e-003	25.3209
Strip Mall	1.48145 / 0.907986	7.6655	0.0487	1.1900e-003	9.2389
<b>Total</b>		<b>67.6704</b>	<b>0.6097</b>	<b>0.0148</b>	<b>87.3115</b>

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

**7.2 Water by Land Use**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	11.5625 / 0	40.5439	0.3790	9.1700e-003	52.7518
Manufacturing	5.55 / 0	19.4611	0.1819	4.4000e-003	25.3209
Strip Mall	1.48145 / 0.907986	7.6655	0.0487	1.1900e-003	9.2389
<b>Total</b>		<b>67.6704</b>	<b>0.6097</b>	<b>0.0148</b>	<b>87.3115</b>

**8.0 Waste Detail**

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**8.1 Mitigation Measures Waste**

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	22.8893	1.3527	0.0000	56.7072
Unmitigated	22.8893	1.3527	0.0000	56.7072

**8.2 Waste by Land Use**

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	62	12.5854	0.7438	0.0000	31.1799
Manufacturing	29.76	6.0410	0.3570	0.0000	14.9664
Strip Mall	21	4.2628	0.2519	0.0000	10.5609
<b>Total</b>		<b>22.8893</b>	<b>1.3527</b>	<b>0.0000</b>	<b>56.7072</b>

Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

**8.2 Waste by Land Use**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	62	12.5854	0.7438	0.0000	31.1799
Manufacturing	29.76	6.0410	0.3570	0.0000	14.9664
Strip Mall	21	4.2628	0.2519	0.0000	10.5609
<b>Total</b>		<b>22.8893</b>	<b>1.3527</b>	<b>0.0000</b>	<b>56.7072</b>

**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
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**User Defined Equipment**

Equipment Type	Number
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Santee Cannabis Business Ordinance - San Diego Air Basin, Annual

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

**11.0 Vegetation**

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