APPENDIX B

Cathedral City 2040 General Plan Update

Air Quality and Greenhouse Gas Report

June, 2019

Prepared for

Cathedral City
68-700 Avenida Lalo Guerrero
Cathedral City, CA 92234

Prepared by

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Cathedral City

Cathedral City
2040 General Plan Update

AIR QUALITY AND GREENHOUSE GAS REPORT

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Cathedral City 2040 General Plan Update

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AIR QUALITY AND GREENHOUSE GAS REPORT

SECTION I. INTRODUCTION & PROJECT DESCRIPTION

A. Introduction

The purpose of this report is to assess the potential air quality impacts associated with buildout of the proposed Cathedral City 2040 General Plan update ("Project"). This report describes the current air quality regulations and provides historical air quality monitoring concentrations and minimization measures to further reduce projected emissions of criteria pollutants and greenhouse gases.

B. Project Description

The "Project" is the Comprehensive General Plan Update for the City of Cathedral City and the City Active Transportation Plan. The General Plan study area address 14,557± acres or approximately 22.7 square miles within the City's corporate limits. The analysis also considers but does not specifically analyze the 8,425± acres (13.16 square miles) in the City Sphere-of-Influence or other unincorporated lands. Therefore, the total planning area analyzed in this EIR encompasses the 14,557± acres comprising the City's corporate limits in 2018. The Project includes changes to land use designations and circulation system, new and integrated elements, and new goals, policies and programs for all General Plan Elements.

The subject General Plan update has a planning horizon of 2040. It is intended to ensure that the City's existing and planned pattern of land uses, transportation infrastructure and other areas of community planning are compatible with long-term physical and regulatory environments, and the changing and evolving economy.

The updated General Plan Land Use Map describes and designates the distribution of land uses by type, location, intensity and/or extent of use. Uses considered are diverse and include residential, commercial, industrial, open space, recreation, public buildings and facilities, and other categories of public and private land uses. Land use categories and their assignment, as well as the City corporate limits, have evolved through two previous General Plan updates (2002 and 2009).

Table 1 provides statistical summaries of land uses for the current (2018) and proposed General Plan update.

Table 1 Cathedral City 2040 General Plan Update Proposed Land Use Table

Land Use Category	ROW Acres	Land Use Acres	Total Acres	Vacant	Percentage of Vacant Lands	Developed	Percentage Developed Lands	Total	Percentage	Existing SF/Units	Potential SF/Units*	Build out SF/Units*
Residential												
Hillside Reserve (1du/20ac)	1.77	457.28	459.05	451.22	98.67%	6.06	1.33%	457.28	3.52%	0	23	**23**
Estate Residential (0-2du/ac)	8.09	420.69	428.78	420.10	99.86%	0.59	0.14%	420.69	3.24%	1	630	**631**
Low Density Residential (2-4.5du/ac)	791.59	3144.12	3935.71	762.77	24.26%	2381.35	75.74%	3144.12	24.19%	11,841	2,574	**14,415**
Resort Residential (3-6.5du/ac)	46.62	1337.54	1384.16	942.80	70.49%	394.74	29.51%	1337.54	10.29%	5,153	4,596	**9,749**
Medium Density Res (4.5-10du/ac)	47.21	415.26	462.47	166.65	40.13%	248.61	59.87%	415.26	3.19%	4,224	1,250	**5,474**
Medium-High Density Res (11-20du/ac)	0.53	21.53	22.06	21.53	100.00%	0.00	0.00%	21.53	0.17%	-	323	**323**
High Density Residential (20-24du/ac)	2.01	38.43	40.44	38.43	100.00%	0.00	0.00%	38.43	0.30%	-	692	**692**
Mixed Use - Neighborhood	9.25	240.64	249.89	240.64	100.00%	0.00	0.00%	240.64	1.85%	-	5,114	**5,114**
Mixed Use - Urban	29.86	482.49	512.35	475.67	98.59%	6.82	1.41%	482.49	3.71%		18,194	**18,194**
Total Residential Acreage	**936.93**	**6557.98**	**7494.91**	**3519.81**	**53.67%**	**3038.17**	**46.33%**	**6557.98**	**50.45%**	**21,219**	**33,396**	**54,615**
Commercial												
Neighborhood Commercial	6.55	32.42	38.97	20.63	63.63%	11.79	36.37%	32.42	0.25%	112,986	197,701	**310,687**
General Commercial	129.27	559.73	689.00	193.24	34.52%	366.49	65.48%	559.73	4.31%	3,516,986	1,851,858	**5,368,844**
Downtown Commercial	37.54	93.39	130.93	40.70	43.58%	52.69	56.42%	93.39	0.72%	504,939	390,036	**894,975**
Mixed Use - Neighborhood	13.87	360.98	374.85	360.98	100.00%	0.00	0.00%	360.98	2.78%	-	3,459,344	**3,459,344**
Mixed Use - Urban	19.91	321.66	341.57	317.11	98.59%	4.55	1.41%	321.66	2.47%	43,604	3,038,929	**3,082,532**
Total Commercial Acreage	**207.14**	**1368.18**	**1575.32**	**932.66**	**68.17%**	**435.52**	**31.83%**	**1368.18**	**10.53%**	**4,178,508**	**8,937,867**	**13,116,382**
Industrial												
Industrial	26.20	761.38	787.58	688.40	90.41%	72.98	9.59%	761.38	5.86%	1,080,863	10,195,479	**11,276,342**
Business Park	24.54	439.26	463.80	362.52	82.53%	76.74	17.47%	439.26	3.38%	1,136,550	5,369,066	**6,505,616**
Total Industrial Acreage	**50.74**	**1200.64**	**1251.38**	**1050.92**	**87.53%**	**149.72**	**12.47%**	**1200.64**	**9.24%**	**2,217,413**	**15,564,546**	**17,781,959**
Open Space												
Open Space - Other	10.73	528.61	539.34	499.69	94.53%	28.92	5.47%	528.61	4.07%	N/A	N/A	**N/A**
Open Space - Public	150.08	2303.85	2453.93	2303.85	100.00%	0.00	0.00%	2303.85	17.72%	N/A	N/A	**N/A**
Open Space - Water	8.56	772.77	781.33	477.32	61.77%	295.45	38.23%	772.77	5.94%	N/A	N/A	**N/A**
Total Open Space Acreage	**169.37**	**3605.23**	**3774.60**	**3280.86**	**91.00%**	**324.37**	**9.00%**	**3605.23**	**27.73%**	**N/A**	**N/A**	**N/A**
Public												
Cemetery	4.64	55.74	60.38	0.00	0.00%	55.74	100.00%	55.74	0.43%	N/A	N/A	**N/A**
Library	0.77	2.80	3.57	0.00	0.00%	2.80	100.00%	2.80	0.02%	N/A	N/A	**N/A**
Schools	7.29	149.38	156.67	0.00	0.00%	149.38	100.00%	149.38	1.15%	N/A	N/A	**N/A**
Transportation	181.20	58.97	240.17	0.00	0.00%	58.97	100.00%	58.97	0.45%	N/A	N/A	**N/A**
Total Public Acreage	**193.90**	**266.89**	**460.79**	**0.00**	**0.00%**	**266.89**	**100.00%**	**266.89**	**2.05%**	**N/A**	**N/A**	**N/A**
Totals	**1558.08**	**12998.92**	**14557.00**	**8784.25**	**67.58%**	**4214.67**	**32.42%**	**12998.92**	**100.00%**			

*Existing and future conditions of Mixed-Use, Commercial, and Industrial land uses are calculated using the following assumptions: residential development is assumed to occur at 75% of the maximum density permitted, 22% lot coverage for commercial and mixed-use development, and 34% lot coverage for industrial development. Mixed-use Neighborhood is developed as 60% commercial and 40% residential. Mixed-use Urban is developed as 60% residential and 40% commercial. Updated 5.30.19

C. Project Location

The Project is the Comprehensive General Plan Update for the City of Cathedral City. The Project planning are is limited to the current Cathedral City corporate limits and encompasses 14,557± acres or approximately 22.7 square miles. It does not include the City's Sphere-of-Influence or other unincorporated lands in the planning area. The Project includes changes to land use designations and circulation system, new and integrated elements, and new goals, policies and programs for all General Plan Elements.

The Project area is generally bounded by the Rancho Mirage city limits and unincorporated county lands on the east, the Palm Springs and Desert Hot Springs city limits on the west, Palm Springs and Rancho Mirage corporate lands to the south, and unincorporated Riverside County lands on the north. (See Exhibits 1-4).

07.03.19

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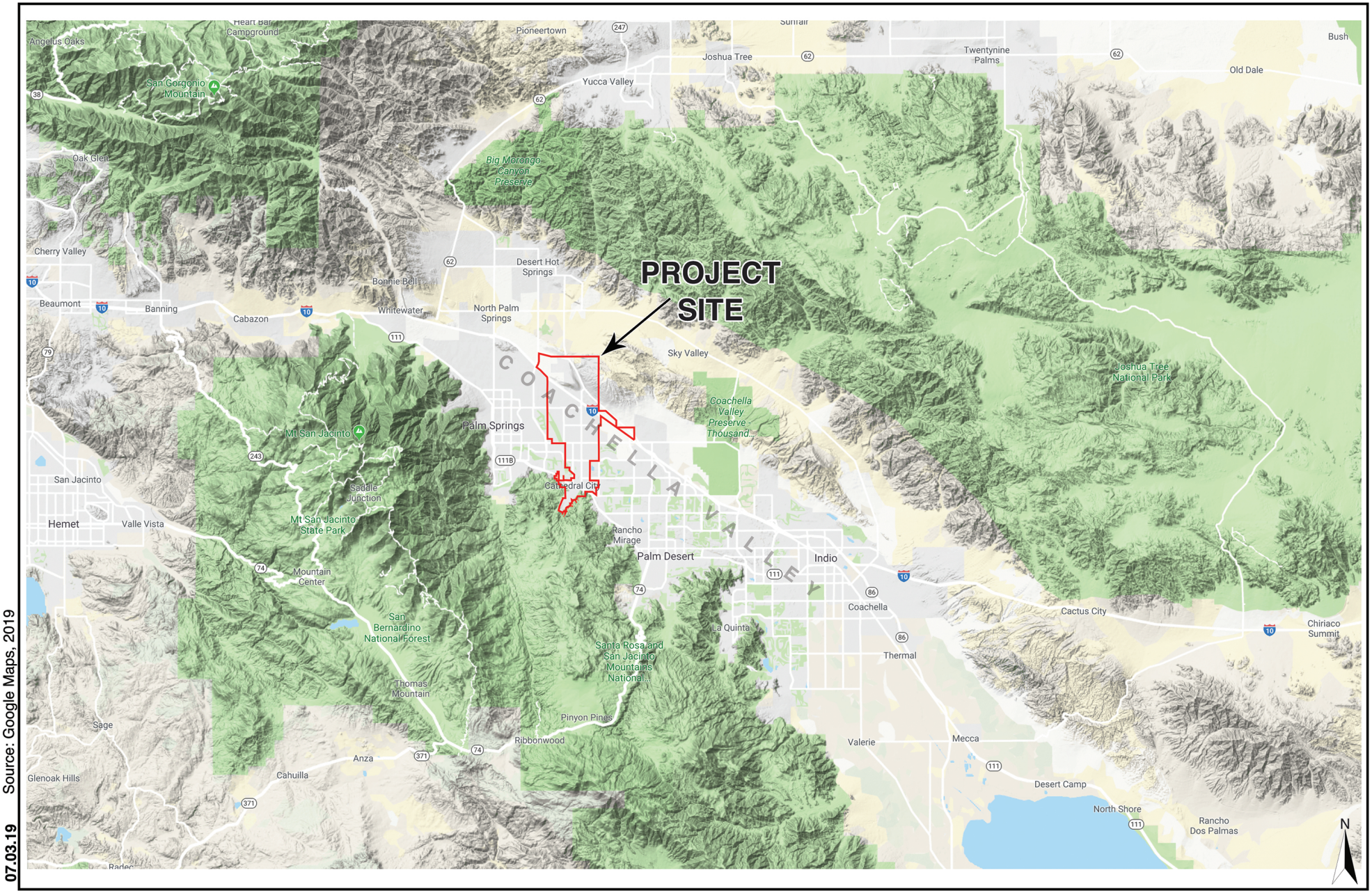
Cathedral City General Plan Update
AQ/GHG Report
Regional Location Map
Cathedral City, California

Cathedral City

Exhibit

1



07.03.19

Source: Google Maps, 2019

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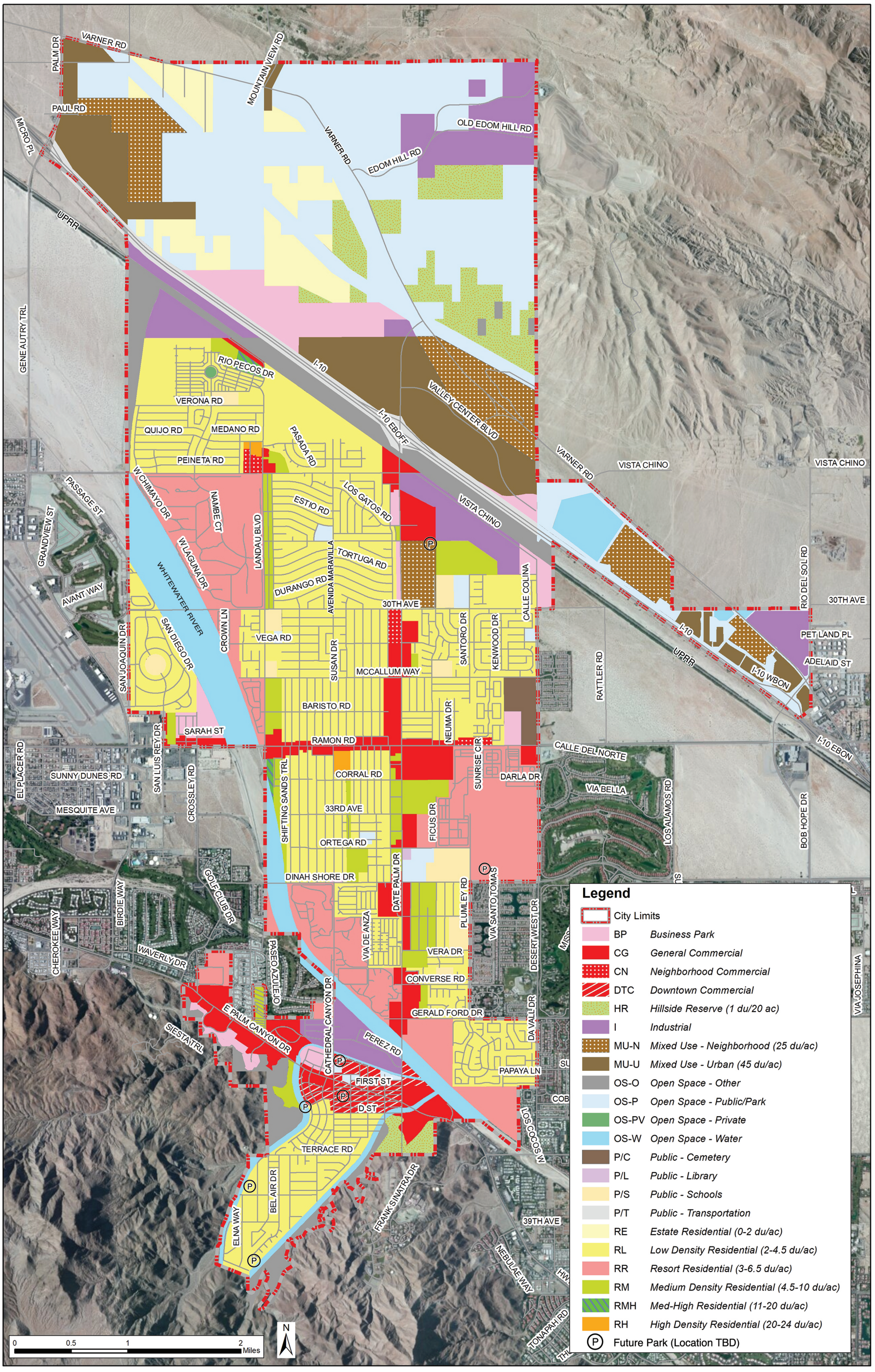
Cathedral City General Plan Update
AQ/GHG Report
Area Location Map
Cathedral City, California

Cathedral City

Exhibit

2



07.03.19 Source: City of Cathedral City General Plan, 2009; ESRI 2019, City of Cathedral Cityy and Terra Nova Planning & Research, 2019.

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Cathedral City General Plan Update
AQ/ GHG Report
Proposed Land Use Map
Cathedral City, California

Cathedral City

Exhibit

3

Cathedral City

City of Cathedral City General Plan Update

AIR QUALITY AND GREENHOUSE GAS REPORT

SECTION II. EXISTING CONDITIONS

Introduction

The Project is located within the Salton Sea Air Basin (SSAB) and is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). Air quality in the Salton Sea Air Basin has been impacted by emissions associated with increased development, population growth, and vehicle emissions. Although air pollution is emitted locally from various sources, some of the degradation of air quality within the Salton Sea Air Basin can be attributed to sources tributary to but located outside of the basin. In the project area, air quality is regulated by the SCAQMD, as well as federal and state policy.

A. Climatic Conditions and Air Quality

Cathedral City is located within the Coachella Valley portion of the SSAB immediately east of the San Jacinto Mountains. Meteorological conditions are largely attributable to the low desert geographic setting and the mountains surrounding the region that isolate the Coachella Valley from moderating coastal influences and create a hot and dry low-lying desert condition. As the desert heats up a large area of thermal low pressure develops, which draws dense, cooler coastal air through the narrow San Gorgonio Pass and into the valley, generating strong winds that cross the most active fluvial (water-related) erosion zones in the valley. These strong winds sweep up, suspend and transport large quantities of sand and dust, reducing visibility, damaging property, and constituting a significant health threat. The region is also subject to seasonal northeasterly Santa Ana winds that are associated with high pressure parked over Nevada and the four corners region.

The Coachella Valley portion of the SSAB is typical of a low desert climate, with summer temperatures that frequently exceed 110°F and drop into the 20's during winter. The valley floor historically receives an average of four to six inches of rainfall per year with greater precipitation at higher elevations.

Air inversions, where a layer of stagnant air is trapped near the ground and is loaded with pollutants from motor vehicles and other sources, occasionally occur in the Coachella Valley due to local geological and climatic conditions. Inversions create conditions of haziness caused by suspended water vapor, dust, and a variety of chemical aerosols. Due to local climactic conditions, inversion layers generally form 6,000 to 8,000 feet above the desert floor.

Regulating agencies, including SCAQMD, have developed standards and regulations to reduce emissions and enhance air quality throughout the SSAB. These are further described below.

B. Air Quality Management and Regulation

Federal and state agencies have adopted air quality standards for a variety of pollutants. In 1971, the Environmental Protection Agency (EPA) established the National Ambient Air Quality Standards (NAAQS) for managing criteria pollutants. The California Clean Air Act (CCAA) became effective on January 1, 1989 and mandated health-based air quality standards at the state level. The California Air Resources Board (CARB) is responsible for enforcing state standards, which are generally more stringent than federal standards. One of the ways standards are applied is through State Implementation Plans (SIP), which are prepared to assist regional air quality management districts in meeting the federal and state ambient air quality standards in accordance with the deadlines specified in the federal Clean Air Act (CAA) and emission reduction targets of the California Clean Air Act.

Regional and local agencies have also assumed some responsibility for assuring that state and federal air quality standards are achieved. For the Coachella Valley, including the subject project site, the South Coast Air Quality Management District (SCAQMD) is responsible for establishing air quality measurement criteria and relevant management policies for the SSAB.

The 2003 PM_{10} Coachella Valley State Implementation Plan (CVSIP) was jointly developed by the SCAQMD, Coachella Valley Association of Governments (CVAG) and its member cities, and was approved by the U.S. EPA. The 2003 PM_{10} CVSIP updated the 1990 plan, which was drafted as a requirement of the federal Clean Air Act to demonstrate expeditious attainment of PM_{10} standards.[1] On April 18, 2003, the EPA approved the updated CVSIP.

The SSAB, including the Coachella Valley, is subject to the provisions of the SCAQMD Rule Book,[2] which sets forth policies and other measures designed to meet federal and state ambient air quality standards. These rules, along with SCAQMD's 2016 Air Quality Management Plan are intended to satisfy the planning requirements of both the federal and state Clean Air Acts. The SCAQMD also monitors daily pollutant levels and meteorological conditions throughout the District. Currently there are three monitoring sites in the Coachella Valley, located in Palm Springs, Indio, and Mecca.

The California Environmental Quality Act (CEQA) also sets forth standards to determine a project's potential to affect air quality. These standards as defined by the California Environmental Quality Act (CEQA) are described below.

Air Quality and Greenhouse Gas Significance Thresholds

The following significant thresholds or criteria are not strictly those recommended in § 15064.7 of the CEQA Guidelines, rather they are derived from Appendix G of the Guidelines, and are used to determine if and to what extent a project may have a potentially significant impact on air quality. The project would have a significant effect to air quality if the Project would:

a) Conflict with or obstruct implementation of the applicable air quality plan;

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

c) Expose sensitive receptors to substantial pollutant concentrations; or

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

1 "2003 Coachella Valley PM10 State Implementation Plan, August 1, 2003, p.ES-1.

2 South Coast Air Quality Management District Rules and Regulations, Adopted February 4, 1977.

Table 2 shows the SCAQMD significance thresholds for criteria pollutant emissions during construction and operation of a Project.

Table 2
SCAQMD Air Quality Significance Thresholds
Mass Daily Thresholds

Pollutant	Construction and Operation Thresholds
CO	550 lbs/day
NO_x	100 lbs/day
ROG	75 lbs/day
PM_{10}	150 lbs/day
$PM_{2.5}$	55 lbs/day
SOx	150 lbs/day
For the Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.	

In addition, the Project would be considered to have a significant effect on greenhouse gas emissions if it is determined that the project would:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.

A significant effect on the environment is defined as a "substantial, or potentially substantial, adverse change to the environment" (California Public Resources Code Section 21068).

On December 5, 2008, the SCAQMD formally adopted a greenhouse gas significance threshold of 10,000 MTCO2e/year that only applies to stationary sources (industrial uses) where SCAQMD is the lead agency (SCAQMD Resolution No. 08-35). This threshold was adopted based upon an October 2008 staff report and draft interim guidance document[3] that also recommended a threshold for all projects using a tiered approach.

It was recommended by SCAQMD staff that a project's greenhouse gas emissions would be considered significant if it could not comply with at least one of the following "tiered" tests:

- **Tier 1**: Is there an applicable exemption?
- **Tier 2**: Is the project compliant with a greenhouse gas reduction plan that is, at a minimum, consistent with the goals of AB 32?
- **Tier 3**: Is the project below an absolute threshold (10,000 MTCO2e/yr for industrial projects; 3,000 MTCO2e/yr for residential and commercial projects)?
- **Tier 4**: Is the project below a (yet to be set) performance threshold?
- **Tier 5**: Would the project achieve a screening level with off-site mitigation?

[3] Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, prepared by SCAQMD, October 2008.

C. Air Quality Standards

Federal and state air quality standards established for criteria pollutants are designed to protect the general population and especially that segment of the population that is most susceptible to respiratory distress or infection, including the elderly, children, asthmatics, or those who are weak from disease or illness.

The following air pollutants are collectively known as criteria air pollutants and are defined as those pollutants for which established air quality standards have been adopted by federal and state governments:

Ozone (O_3) is a pungent, colorless, toxic gas, and a component of photochemical smog. It is formed when byproducts of combustion react in the presence of ultraviolet sunlight. This process takes place in the atmosphere where oxides of nitrogen combine with reactive organic gases, such as hydrocarbons. Exposure to ozone can result in diminished breathing capacity, increased sensitivity to infections, and inflammation of the lung tissue. Children and people with pre-existing lung disease are most susceptible to the effects of ozone.

Carbon Monoxide (CO) is a colorless, odorless, toxic gas and a byproduct from the partial combustion of fossil fuels, most notably from automobiles and other motor vehicles. Carbon monoxide passes through the lungs directly into the blood stream and reduces the amount of oxygen reaching the vital organs, such as the heart, brain and tissues. In high concentrations, carbon monoxide can contribute to the development of heart disease, anemia, and impaired psychological behavior. Individuals that have heart and blood diseases, smokers, babies in utero, and people with chronic hypoxemia are most susceptible to the effects of CO. The SSAB is in non-attainment for the federal 8-hour O_3 standard.

Nitrogen Oxide (NO_x) includes Nitric oxide (NO) and Nitrogen dioxide (NO_2), which are the primary oxides of nitrogen, and combined are known as nitrogen oxides. These oxides are produced at high temperatures during combustion as byproducts of motor vehicles, power plants, and off-road equipment. NOx contributes to the formation of ozone serving as the primary receptor of ultraviolet light and initiating the photochemical reaction. Short-term exposure to nitrogen dioxide can result in airway constriction, diminished lung capacity, and is highly toxic by inhalation. Populations living near roadways are more likely to experience effects of nitrogen oxides due to elevated exposure to motor vehicle exhaust. The SSAB is in attainment for NO_2.

Sulfur Dioxide (SO_2) results from the combustion of high-sulfur content fuels, such as coal and petroleum. Sources include motor vehicle fuel combustion, chemical manufacturing plants, and sulfur recovery plants. Sulfur dioxide is a colorless, pungent, extremely irritating gas that can cause airway constriction and severe breathing difficulties in asthmatics. High levels of exposure can cause fluid accumulation in the lungs, damage to lung tissue, and sloughing off of cells lining the respiratory tract. The SSAB is in attainment for SO_2.

Particulate Matter (PM_{10} and $PM_{2.5}$) consist of fine suspended particles of ten microns or smaller in diameter, and are the byproducts of road dust, sand, diesel soot, windstorms, and the abrasion of tires and brakes. The elderly, children and adults with pre-existing respiratory or cardiovascular disease are most susceptible to the effects of PM. Elevated PM_{10} and $PM_{2.5}$ levels are also associated with an increase in mortality rates, respiratory infections, occurrences and severity of asthma attacks and hospital admissions. The SSAB is a non- attainment area for PM_{10} and is classified as attainment/unclassifiable for $PM_{2.5}$.

Volatile Organic Compounds (VOC) are also known as Reactive Organic Gas (ROG). This class of pollutants has no state or federal ambient air quality standards and is not classified as criteria pollutants; however, they are regulated because they are responsible for contributing to the formation of ozone. They also contribute to higher PM_{10} levels because they transform into organic aerosols when released into the atmosphere. VOCs pose a health threat when people are exposed to high concentrations. Benzene, for example, is a hydrogen component of VOC emissions known to be a carcinogen.

Lead (Pb) occurs in the atmosphere as particulate matter resulting from the manufacturing of batteries, paint, ink, and ammunition. Exposure to lead can result in anemia, kidney disease, gastrointestinal dysfunction, and neuromuscular and neurological disorders. Babies in utero, infants, and children are especially susceptible to health risks associated with exposure to lead by impacting the central nervous system and cause learning disorders. The SSAB is in attainment for lead.

Table 3 on the following page shows the state and national ambient air quality standards for criteria pollutants.

Table 3
State and National Ambient Air Quality Standards

Pollutant	State Standards		National Standards**	
	Avg. Time	Concentration	Avg. Time	Concentration
Ozone (O_3)	1-hour 8-hour	0.09 ppm 0.07 ppm	1-hour 8-hour	None 0.070 ppm
Carbon Monoxide (CO)	1-hour 8-hour	20.0 ppm 9.0 ppm	1-hour 8-hour	35.0 ppm 9.0 ppm
Nitrogen Dioxide (NO_2)	1-hour AAM	0.18 ppm 0.030 ppm	1-hour AAM	0.10 ppm 0.053 ppm
Sulfur Dioxide (SO_2)	1-hour 24-hour AAM	0.25 ppm 0.04 ppm None	1-hour 24-hour AAM	0.075 ppm 0.14 ppm 0.03 ppm
Particulate Matter (PM_{10})	24-hour AAM	50 $\mu g/m^3$ 20 $\mu g/m^3$	24-hour AAM	150 $\mu g/m^3$ None
Particulate Matter ($PM_{2.5}$)	AAM 24-hour	12 $\mu g/m^3$ None	AAM 24-hour	12 $\mu g/m^3$ 35 $\mu g/m^3$
Lead	30-day Avg.	1.5 $\mu g/m^3$	3-month Avg.	0.15 $\mu g/m^3$
Visibility Reducing Particles	8-hour	No standard	No Federal Standards	
Sulfates	24-hour	25$\mu g/m^3$		
Hydrogen Sulfide	1-hour	0.03 ppm		
Vinyl Chloride	24-hour	0.01 ppm		

Source: California Air Resources Board, 1/3/19.
Notes: ppm = parts per million; ppb= parts per billion; $\mu g/ m^3$ = micrograms per cubic meter of air;
AAM = Annual Arithmetic Mean.

The air quality of a particular locale is considered to be in attainment if the measured ambient air pollutant levels for O_3, CO, SO_2 (1-hour and 24-hour), NO_2, and PM_{10} and $PM_{2.5}$ are not exceeded and all other standards are not equaled or exceeded at any time in any consecutive three-year period. Attainment also assumes the national standards (other than O_3, PM_{10}, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O_3 standard is in attainment when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

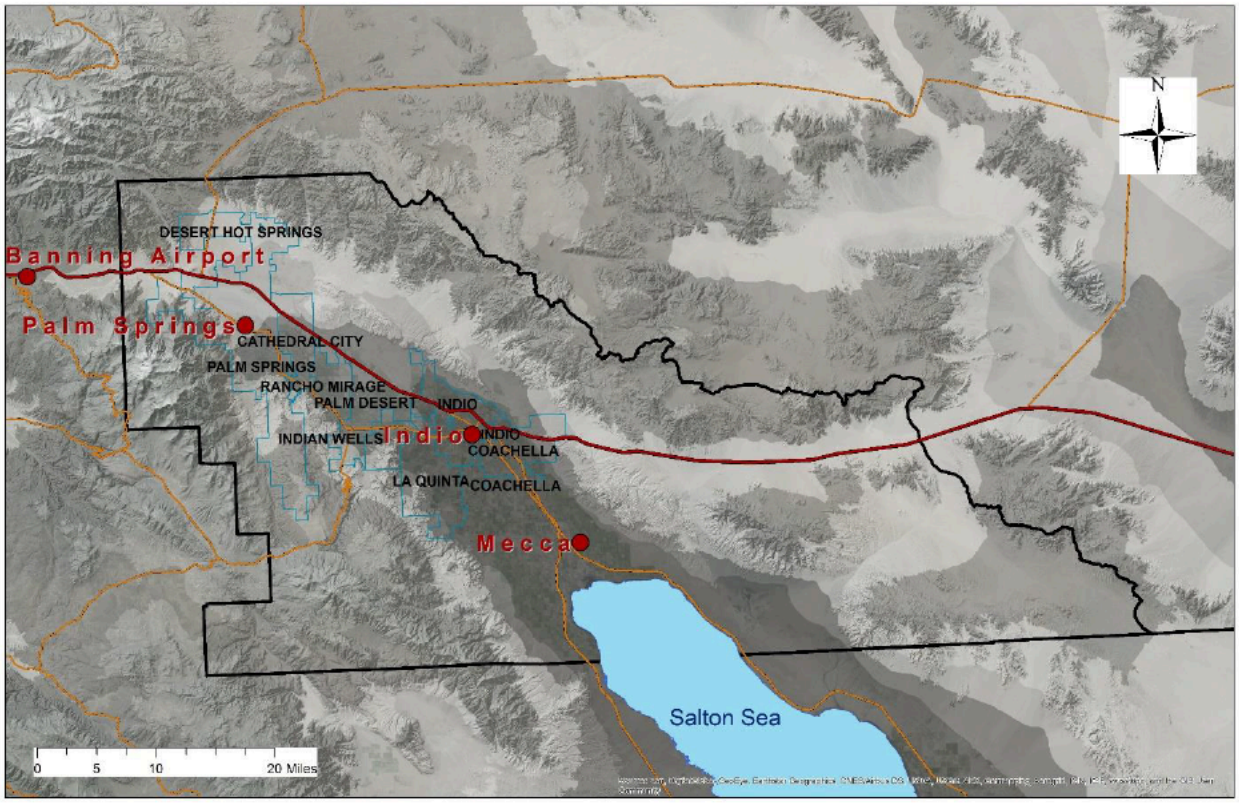
Toxic Air Contaminants (TAC)

The US EPA regulates TACs through technology-based requirements that are implemented by state and local agencies. California regulates TACs through the air toxics program and the Air Toxics "Hot Spots" Information and Assessment Act.[4] The CARB works alongside the Office of Environmental Health Hazard Assessment (OEHHA) to identify TACs, and adopt Air Toxic Control Measures (ATCMs) to reduce the identified TACs. Where there are federal standards, CARB must, at minimum, adopt the standards established by the US EPA.

[4] AB 2588.

D. Regional Air Quality Monitoring

The South Coast Air Quality Management District operates and maintains three air quality monitoring stations within Source Receptor Area (SRA) 30 (Coachella Valley). SR 30 includes the Indio, Palm Springs and Mecca monitoring stations, which have been operational since 1985, 1987, and 2013, respectively. Both Indio and Palm Springs stations monitor for ozone, PM_{10} and $PM_{2.5}$. The Mecca station monitors for PM_{10}.The map below shows the locations of the three monitoring stations in the Coachella Valley.



The following tables show the maximum concentration and number of days annual that state and federal standards for ozone and particulate matter (PM_{10} and $PM_{2.5}$) were exceeded between 2010 and 2017 in the Coachella Valley.

Table 4 (next page) shows that the annual average for PM_{10} was higher at the Indio and Mecca stations between 2010 and 2017. Limited 24-hour state data has been provided from all three stations the past several years, however it is assumed that PM_{10} levels continue to exceed state and federal standards until otherwise reported.

Table 4
PM_{10} Monitoring Data for the Coachella Valley

Monitoring Station	Year	Maximum Concentration (µg/m³/24hours) **	No. Days Exceeding 24-hr. Standards		Annual Average (µg/m³)
			Federal[1]	State[2]	AAM[3]
Palm Springs	2010	144.8	0.0	0.0	19.4
	2011	396.9	2.0	0.0	21.7
	2012	143.4	0.0	0.0	19.9
	2013	185.8	1.0	13.1	23.1
	2014	313.8	1.1	*	25.4
	2015	199.0	1.0	*	20.9
	2016	447.2	1.1	*	23.1
	2017	105.6	0.0	*	22.1
Indio	2010	107.0	0.0	23.9	28.8
	2011	375.9	2.0	18.6	32.6
	2012	270.6	*	43.2	33.6
	2013	255.2	3.0	85.2	37.5
	2014	322.3	6.1	94.9	43.5
	2015	381.0	*	*	44.0
	2016	393.2	*	135.7	37.0
	2017	198.6	1.0	*	34.8
Mecca	2014	*	*	*	*
	2015	306.4	5.0	*	44.2
	2016	468.9	*	*	41.1
	2017	477.6	*	81.5	47.5

Source: Annual air quality site monitoring reports per ARB. http://www.arb.ca.gov/adam/ Accessed January 2019.
1. 150 µg/m3 in 24-hour period;
2. 50 µg/m3 in 24-hour period;
3. Federal Annual Average Standard AAM > 50µg/m3
* There are insufficient (or no) data available to determine the value.
** Data may include exceptional events.

Table 5 shows that both the federal 24-hour $PM_{2.5}$ standard and the AAM state standard of >12 µg/m^3 have not been exceeded at either monitoring station from 2010 to 2017.

Table 5
$PM_{2.5}$ Monitoring Data for the Coachella Valley

Monitoring Station	Year	Max Concentration (µg/m^3/24hours)	No. Days Exceeding 24-hr. Federal Standards [a]	Annual Average (µg/m^3) AAM [b, c]
Palm Springs	2010	12.8	0.0	5.9
	2011	26.3	0.0	6.0
	2012	15.5	0.0	6.5
	2013	18.5	0.0	6.5
	2014	15.5	*	*
	2015	22.7	*	*
	2016	14.7	0	*
	2017	14.5	0	6.0
Indio	2010	16.0	0.0	6.8
	2011	35.4	0.0	7.2
	2012	18.4	0.0	7.6
	2013	25.8	0.0	8.3
	2014	18.3	*	*
	2015	24.6	*	*
	2016	25.8	0	7.6
	2017	18.8	*	*

Source: Annual air quality site monitoring reports, ARB. http://www.arb.ca.gov/adam/ Accessed January 2019.
1. 35 µg/m^3 in 24-hour period.
2. State Annual Average Standard = AAM > 12µg/m^3
* There was insufficient (or no) data available to determine the value.

Table 6 shows that the Palm Springs monitoring station exceeds the 8-hour federal and state ozone standards more frequently than the Indio site. This exceedance is attributable to the Palm Springs station's location closer to the San Gorgonio Pass where ozone is imported into the SSAB from air basins to the west.

Table 6
Ozone Monitoring Data for the Coachella Valley

Monitoring Station	Year	Max. Concentration		No. Days Standard Exceeded		
				Federal[1]	State[2]	
		1 Hour ppm	8 Hour ppm	8 Hour	1 Hour	8 Hour
Palm Springs	2010	0.114	0.099	52	20	78
	2011	0.124	0.099	49	21	69
	2012	0.126	0.101	51	17	79
	2013	0.113	0.104	46	10	82
	2014	0.108	0.093	55	9	61
	2015	0.102	0.092	47	3	51
	2016	0.103	0.092	46	6	48
	2017	0.113	0.097	57	18	63
Indio	2010	0.100	0.087	45	6	45
	2011	0.099	0.090	40	3	42
	2012	0.102	0.089	43	2	45
	2013	0.105	0.087	35	2	38
	2014	0.095	0.091	24	2	30
	2015	0.093	0.085	11	0	12
	2016	0.099	0.089	27	3	29
	2017	0.107	0.093	44	8	47

Source: ARB Annual Air Quality Data Tables. http://www.arb.ca.gov/adam/ Accessed January 2019.
1. 0.070 parts per million for the 8-hour standard.
2. 0.09 and 0.070 parts per million in 1-hour and 8-hour respectively.

Criteria Air Pollutants Summary

Air quality in the Salton Sea Air Basin exceeds state and federal standards for fugitive dust (PM_{10}) and ozone (O_3), and is in attainment/unclassified for $PM_{2.5}$. Ambient air quality in the SSAB, including the project site, does not exceed state and federal standards for carbon monoxide, nitrogen dioxides, sulfur dioxide, lead, sulfates, hydrogen sulfide, or Vinyl Chloride. The following table shows the basin's federal and state attainment status for criteria pollutants.

Table 7
Salton Sea Air Basin Designation Status

Criteria Pollutants	Federal Designation	State Designation
Ozone – 8-hour standard	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
PM_{10}	Nonattainment	Nonattainment
$PM_{2.5}$	Attainment	Attainment

Source: U.S. EPA Green Book last updated December 2018, accessed January 2019.

E. Regional Pollutants of Concern

Local air quality conditions are determined by climate, geography, and regional activities, including grading, construction and vehicular traffic, as well as heating, cooling, and ventilation equipment. The criteria pollutants of concern in the project area and the Coachella Valley are ozone (O_3), and particulate matter (PM_{10}, and $PM_{2.5}$). These are further described below:

PM_{10} Emissions
Historically, PM_{10} levels in the Coachella Valley are elevated due to fugitive dust emissions from grading and construction activities, agricultural practices, and strong wind. The finer materials, including sand and silt, can be picked up and transported by the wind and are referred to as "blowsand". PM_{10} particles associated with blowsand are of two types: (1) natural PM_{10} produced by direct particle erosion and fragmentation, and (2) secondary PM_{10} whereby sand deposited on roadways is further pulverized by motor vehicles and then re-suspended in the air by those vehicles. The project is located in a PM_{10} non-attainment area for the state and federal PM_{10} standard.

The Coachella Valley had become eligible for redesignation as attainment due to the annual average PM_{10} concentrations meeting the revoked federal standard. On February 25, 2010 the California Air Resources Board approved the Coachella Valley PM_{10} Redesignation Request and Maintenance Plan from serious non-attainment to attainment for the PM_{10} National Ambient Air Quality Standard under CAA Section 107. The PM10 data from the Coachella Valley monitors shows attainment of the PM10 24-hour NAAQS after the removal of the flagged high-wind exceptional events, for which SCAQMD supporting documentation will be submitted and subsequent U.S. EPA approval will be required. However, U.S. EPA has requested that SCAQMD conduct additional ambient monitoring in the southeastern portion of the Coachella Valley before the redesignation can be considered. This new station has been in operation since 2013 in the community of Mecca, and redesignation will be revisited upon analysis of the required 3 full years of data. As of January 2019, the Environmental Protection Agency has not re-designated the PM_{10} classification for the Coachella Valley[5]. The Coachella Valley continues to exceed the state standard and is in a serious non-attainment area for PM_{10}.

SCAQMD employs measures to reduce particulate matter in the District, sets forth new measures that could further reduce particulate matter, and lists those new measures that need further evaluation prior to implementation. In addition, applicable state code and AQMD Rules, including Rule 403 (Fugitive Dust), enforce fugitive dust compliance for all activities within the SSAB.

Ozone Emissions
Under the Federal Clean Air Act, the Coachella Valley portion of the SSAB is classified as a "severe-15" O_3 non-attainment area for the 8-hour state standard, which means that the region must come into compliance with Federal ozone standards by December 31, 2027. With future emission controls, the Coachella Valley will achieve the 2008 8-hour federal O_3 standard by 2024.

SCAQMD studies indicate that most O_3 is transported to the Salton Sea Air Basin from the upwind South Coast Air Basin (SCAB). It is difficult to quantify the amount of ozone contributed from SCAB; however, reduced O_3 concentration in the SSAB depends, in part, upon reduced ozone emissions in the South Coast Air Basin.

F. Climate Change and Greenhouse Gasses

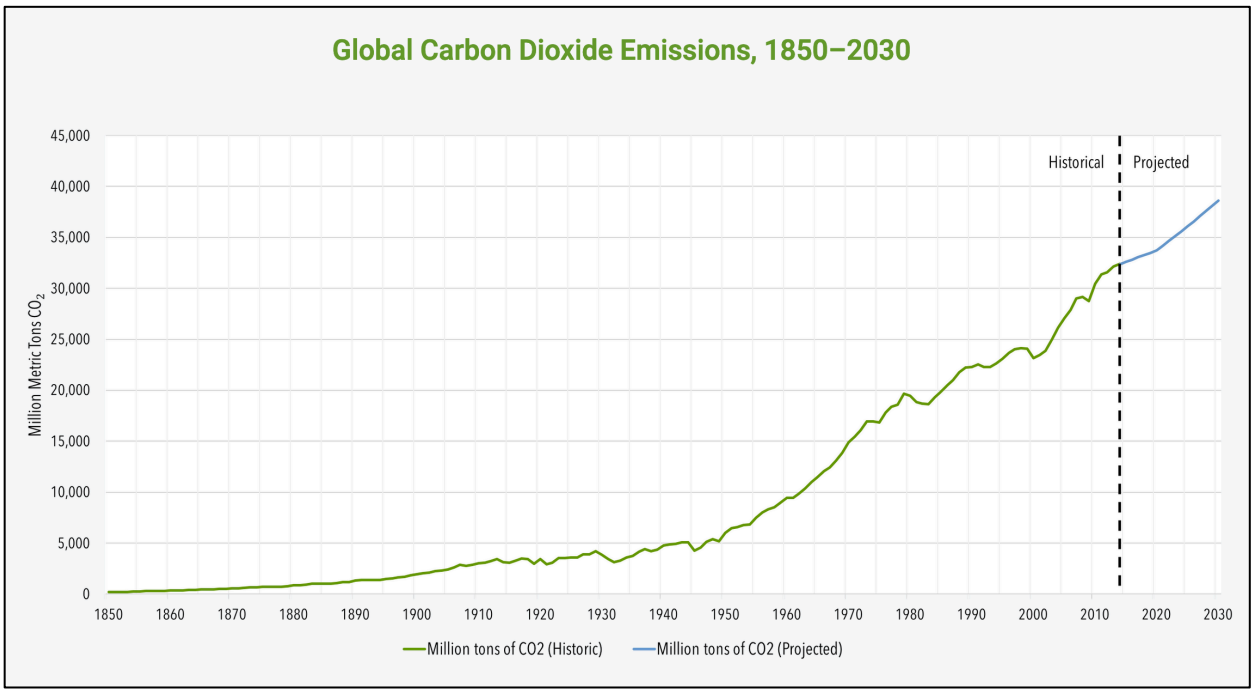
Air pollution is a chemical, physical or biological process that modifies the chemistry and other characteristics of the atmosphere. The primary contributor to air pollution is the burning of fossil fuels used in transportation, power and heat generation, and industrial processes. The byproducts from the combustion

[5] "EPA Green Book Designated Non-attainment Areas for All Criteria Pollutants," Accessed January 2019.

of fossil fuels can contain a number of air polluting substances. These emissions are responsible for the poor air quality that is evident in industrial centers worldwide.

Some air polluting agents are also greenhouse gases (GHG) such as carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and fluorinated gases (hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride), which are released into the atmosphere through natural processes and human activities. These gases are termed greenhouse gases due to their shared characteristic of trapping heat, and are believed to be responsible for the global average increase in surface temperatures of 0.7-1.5 °F that were observed during the 20th century.[6]

Carbon dioxide (CO_2) is the primary greenhouse gas that has raised the most concern of atmospheric scientists due to current atmospheric levels, current and projected emission levels, and the highly correlated temperature regression curve that has been observed, predicting a future path of rising carbon dioxide levels. The following chart demonstrates how rapidly global CO_2 emissions increased beginning in the 20th century.



Source: Carbon Dioxide Information Analysis Center, Oak Ridge National Laboratory, 2017); World Energy Outlook, International Energy Agency, 2016; Center for Climate and Energy Solutions, www.c2es.org, accessed June 2019.

California is the second largest greenhouse gas contributor in the U.S. and the sixteenth largest in the world. In 2004, California produced 492 million metric tons of CO_2 equivalent (MMTCO2e), which was approximately 7% of all U.S. emissions. However, in 2016, California's total emissions were 429.4 $MMTCO_2e$, representing an overall decrease of 12.7% since peak levels in 2004. This puts total emissions just below the 2020 target of 431 million metric tons.

During the 2000 to 2016 period, per capita GHG emissions in California continued to drop from a peak in 2001 of 14.0 tons per person to 10.8 tons per person in 2016, a 22.8% decrease.[7] This decrease may be due to increases in the effectiveness of energy conservation in buildings (Title 24 requirements) and the increased use of renewable energy, including solar generation, hydropower, and wind energy.

6 U.S. Environmental Protection Agency, State of Knowledge.

7 "California Greenhouse Gas Emission Inventory: 2000-2016," California Environmental Protection Agency Air Resources Board, 2018.

The transportation sector remains the largest source of GHG emissions in the state, accounting for 39% of California's emissions in 2016. Regulations and improved fuel efficiency of the state's vehicle fleet will drive down emissions over time, but population growth, lower fuel prices, improved economic conditions and higher employment rates are potential factors that may increase fuel use.[8]

Climate Change Regulation

U.S. Environmental Protection Agency

The United States Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address global climate change. The USEPA implements several voluntary programs that help to reduce GHG emissions that focus on energy efficiency, renewable energy, methane and other non-CO2e gases, agricultural practices, and implementation of technologies to achieve GHG reductions. These voluntary programs include: the State Climate and Energy Partner Network, which encourages the exchange of information between federal and state agencies regarding climate and energy; the Climate Leaders program for companies; the Energy Star® labeling system for energy-efficient products; and the Green Power Partnership for organizations interested in buying green power.

In 2009, the USEPA issued a Final Rule for mandatory monitoring and reporting of GHG emissions by fossil fuel suppliers, industrial gas suppliers, direct GHG emitters and manufacturers of heavy-duty and off-road vehicles and vehicle engines that emit 25,000 metric tons or more of carbon dioxide equivalent per year. Implementation of 40 CFR Part 98 is referred to as the Greenhouse Gas Reporting Program (GHGRP).

In addition, the USEPA adopted a Final Endangerment Finding for the six defined GHGs. This Endangerment Finding is required for the USEPA to regulate GHG emissions under Section 202(a)(1) of the Clean Air Act (CAA). In, 2010, the USEPA issued a Final Rule (GHG Tailoring Rule) that establishes a common-sense approach to addressing greenhouse gas emissions from stationary sources under CAA permitting programs, including the Prevention of Significant Deterioration (PSD) and title V Operating Permit Programs. The Tailoring Rule set initial emission thresholds - known as Steps 1 and 2 of the Tailoring Rule - for PSD and Title V permitting based on carbon dioxide equivalent (CO_2e) emissions. In these phases, new construction projects that exceed a CO2e threshold of 100,000 tons per year and modifications of existing facilities that increase CO2e emissions by at least 75,000 tons per year are subject to permitting requirements. Additionally, operating facilities that emit at least 100,000 tons per year are subject to Title V permitting requirements for GHGs. New and existing industrial facilities that meet or exceed that threshold require a permit under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs. Step 3 of the GHG Tailoring Rule, issued on June 29, 2012, continued to focus GHG permitting on the largest emitters by retaining the permitting thresholds that were established in Steps 1 and 2. Step 3 revised the plantwide applicability limitations (PAL) regulations to allow a source that emits or has the potential to emit at least 100,000 tons per year of CO_2e, but that has minor source emissions of all other regulated NSR pollutants, to apply for a GHG PAL while still maintaining its minor source status[9].

Assembly Bill 1493 – The Pavley Bill

California was the first state to establish regulations that require the reduction of emissions of GHGs from motor vehicles. On September 24, 2004, the California legislature adopted the Pavley Bill that requires all motor vehicles of 2009 vintage or later to reduce their greenhouse gas emissions by about 30% by the year 2016.

8 Ibid.

9 "Clean Air Act Permitting for Greenhouse Gases," United States Environmental Protection Agency. Website. www.epa.gov. Accessed June 2019.

In 2012, CARB approved a new emissions-control program for model years 2017 through 2025. The program combines the control of smog, soot, and global warming gases and requirements for greater numbers of zero-emission vehicles into a single package of standards called Advanced Clean Cars. By 2025, when the rules would be fully implemented, new automobiles would emit 34% fewer global warming gases and 75% fewer smog-forming emissions (CARB 2011).

Assembly Bill 32 - California Global Warming Solutions Act of 2006

On June 1, 2005 Governor Arnold Schwarzenegger issued executive order S-3-05, which calls for reduction in GHG emission to 1990 levels by 2020 and for an 80 percent reduction below 1990 levels by 2050. Also known as the California Global Warming Solutions Act of 2006 (AB 32) was adopted by the state legislature in 2006. It sets forth a program to achieve 1990 emission levels by 2020 and requires CARB to proclaim 1990 GHG emissions and develop a Scoping Plan, which sets forth GHG reduction methods. CARB has reported that 1990 GHG emissions totaled 427 million metric tons (MMT) for the state of California; CARB adopted a GHG scoping plan on December 11, 2008.The Scoping Plan includes a cap and trade program, green building strategies, recycling and waste reduction, and Voluntary Early Actions and Reductions. In November 2017, CARB released the 2017 Climate Change Scoping Plan that not only discusses the 2030 targets, but how to substantially advance toward the State's 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

Senate Bill 375

California SB 375 was signed by the Governor in September 2008 and is intended to at least in part implement greenhouse gas reduction targets set forth in AB 32 by setting regional "caps" on the GHGs emitted by the transportation sector. The bill encourages regional land use planning to reduce vehicle miles traveled and requires Metropolitan Planning Organizations (MPO) to adopt a sustainable communities strategy as part of their Regional Transportation Plans. The applicable MPO for the Coachella Valley is the Southern California Association of Governments ("SCAG"), which adopted its most recent Regional Transportation Plan and sustainable communities strategy in April of 2016. The current reduction targets from SCAG's RTP and SCS are 9% reduction by 2020 and a 16% reduction by 2035, as compared to 2005 emissions levels.

Senate Bill 32

More recently, Executive Order B-30-15, was issued by Governor Brown on April 29, 2015 establishing a new California goal to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 ensuring the state will continue its efforts to reduce carbon pollution. Most recently, this 40% target was codified through Senate Bill 32 (2016), which adds section 38566 to the Health and Safety Code and requires that CARB ensure statewide GHG emissions meet the 40% reduction target no later than Dec. 31, 2030.

Green Building Code

In January 2010, the State of California adopted the California Green Building Standards Code (CALGreen) per CCR Title 24, Part 11, which establishes mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of minimum guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels. The City has adopted the Green Building Standards Code.

Climate Action Plans

Riverside County Climate Action Plan

In December 2015, the County of Riverside approved a Climate Action Plan (CAP)[10]. The CAP, which was revised in July 2018, establishes goals and policies that incorporate environmental responsibility into its daily management of residential, commercial and industrial growth, education, energy and water use, air quality, transportation, waste reduction, economic development and open space and natural habitats to further their commitment towards reducing GHG emissions.

In order to reach the reduction target, the County of Riverside would need to implement various state policies and the additional local reduction measures described in the County's CAP. These measures encourage energy efficiency and renewable energy in buildings, transit-oriented planning, water conservation, and increased waste diversion. Riverside County does not have project- or region-specific thresholds for GHG emissions at this time.

Riverside County has set a goal in accordance with AB 32 to reduce emissions back to 1990 levels by the year 2020. This target was calculated as a 15% decrease from 2008 levels, as recommended in the AB 32 Scoping Plan. The estimated community-wide emissions for the year 2020, based on population and housing growth projections associated with the assumptions used in the County's 2015 General Plan Update, are 12,129,497 MT CO2e. In order to reach the reduction target, Riverside County must offset this growth in emissions and reduce community-wide emissions to 5,960,998 MT CO2e by the year 2020.

Cathedral City Climate Action Plan, Energy Action Plan, and GHG Inventory

The City of Coachella completed its first Climate Action Plan in May 2013 in an effort to address climate change at the local level by reducing greenhouse gas emissions within its own operations and within the overall community. The Climate Action Plan provides a framework for the development and implementation of policies and programs that will reduce the City's emissions and is tracked via the City's Greenhouse Gas Inventory. In addition to the Climate Action Plan, the City prepared an Energy Action Plan (2013) to identify opportunities for cost savings through energy efficiency and actions necessary to meet the City's future energy needs, consistent with the energy policies set forth by the State of California.

In 2010, Cathedral City was over its 1990 baseline emissions value by 53,439 tonnes (236,863 tonnes). With growth predicted to exceed 19% between 2010 and 2020, "business as usual" conditions could reach 239,333 tonnes by 2020. To achieve the AB 32 target by 2020, Cathedral City would have to cut GHG emissions by 23.4%, or 55,909 tonnes for a total of 183,424 tonnes.

Greenhouse Gasses Analyzed

For the purpose of this analysis the emission of the following greenhouse gases are evaluated: carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O).

Carbon Dioxide (CO_2): is an odorless and colorless gas that is emitted from natural sources such as the decomposition of dead organic matter, respiration of bacteria, plants, animals and fungus, evaporation from oceans, and volcanic out gassing. Manmade sources of CO_2 include the combustion of coal, oil, natural gas, and wood. Carbon dioxide is naturally removed from the air by photosynthesis, dissolution into ocean water, transfer to soils and ice caps, and chemical weathering of carbonate rocks.

[10] "County of Riverside Climate Action Plan," Riverside County Planning Department. July 17, 2018

Methane (CH_4): is released naturally as part of biological processes such as in low oxygen environments like swamplands, bogs, or in rice production (at the roots of the plants) and in cattle raising. Mining of coal, the combustion of fossil fuels and biomass burning also generate methane emissions. Methane is a more efficient absorber of radiation compared to CO_2, however its atmospheric concentration is less than carbon dioxide.

Nitrous Oxide (N_2O): is more commonly known as laughing gas and is a colorless greenhouse gas that in small doses can cause dizziness, euphoria, and sometimes slight hallucinations.

Chlorofluorocarbons (CFCs): CFCs are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the Earth's surface). CFCs have no natural source, but were first synthesized in 1928. It was used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and in 1989 the European Community agreed to ban CFCs by 2000 and subsequent treaties banned CFCs worldwide by 2010. This effort was extremely successful, and the levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.

Hydrofluorocarbons (HFCs): HFCs are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the GHGs, they are one of three groups with the highest global warming potential. The HFCs with the largest measured atmospheric abundances are (in order), HFC-23 (CHF_3), HFC-134a (CF_3CH_2F), and HFC-152a (CH_3CHF_2). Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant. Concentrations of HFC-23 and HFC-134a in the atmosphere are now about 10 parts per trillion (ppt) each. Concentrations of HFC-152a are about 1 ppt. HFCs are manmade for applications such as automobile air conditioners and refrigerants.

Perfluorocarbons (PFCs): PFCs have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. High-energy ultraviolet rays about 60 kilometers above Earth's surface are able to destroy the compounds. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6). Concentrations of CF_4 in the atmosphere are over 70 ppt. The two main sources of PFCs are primary aluminum production and semiconductor manufacturing.

Sulfur Hexafluoride (SF_6): SF_6 is an inorganic, odorless, colorless, nontoxic, nonflammable gas. Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.

Cathedral City

City of Cathedral City General Plan Update

AIR QUALITY AND GREENHOUSE GAS REPORT

SECTION III. PROPOSED PROJECT IMPACTS

The following discussion describes the major sources of air pollutants associated with buildout of the Cathedral City 2040 General Plan Update.

A. Air Quality Emissions

Construction Emissions

Construction activities that would occur over the next 20 years in accordance with the 2040 General Plan Update would cause temporary, short-term emissions of various air pollutions. Project information regarding specific development projects would be needed in order to quantify and analyze the level of impact associated with construction activity. Build out of the General Plan will result in a mix of small- and large-scale projects that will be required to adhere to the City's procedures and regulations as they relate to CEQA analysis and mitigation. It is possible that some large-scale projects could substantially increase criteria pollutants through the year 2040. Actual significance would be determined on a project-by-project basis as future development applications are submitted.

The 2040 General Plan contains Elements, including the Air Quality and Climate Stability Element, that would serve to control construction emissions, including coordination with the SCAQMD during the review of new development projects, implementing dust control measures (SCAQMD Rule 403.1), and requiring mitigation measures to reduce significant impacts. All new development within the Planning Area shall also adhere to SCAQMD rules and regulations for all construction related activities. The policies and programs set forth in the 2040 General Plan will ensure that potential construction emissions from new development will be mitigated to the greatest extent feasible in accordance with SCAMD requirements.

Operational Emissions

Daily activities at operation will result in the emission of air quality pollutants from the use of electricity and natural gas, and will be emitted from area sources and moving sources. The use of electricity within the Planning Area results in offsite emissions from the production of electricity. Although emission associated with electricity do not occur within the physically boundary of the Planning Area, they are considered as part of the operational impacts from build out of the 2040 General Plan Update. Emissions from natural gas occur from the combustion of natural gas within the Planning Area for operational activities such as heating and cooling, and cooking. Area source emissions include the use of consumer products, the application of architectural coatings, hearth fuel combustion, and fuel used for landscaping purposes. Moving sources include emissions from vehicles at build out of the General Plan Update.

The SCAQMD does not currently recommend quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the significance of cumulative emissions generated by multiple cumulative projects, including build out of a 2040 General Plan. However, it is recommended that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project-specific impacts. Furthermore, SCAQMD states that if an individual development project generates less than significant construction or operational emissions, then the development project would not generate a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment. Individual projects proposed within the General Plan Planning Area will be reviewed on a case-by-case basis for their potential to result in a cumulatively considerable contribution to non-attainment criteria pollutants under CEQA.

As shown in the table below, operational air quality emissions for the 2040 General Plan have the potential to result in a cumulatively considerable net increase of CO, NOx, SOx, PM_{10}, $PM_{2.5}$, and ROG. The majority of GHG emissions are due to mobile sources.

Table 8
Operational Emissions Summary
Existing vs. Proposed Land Use
(lbs./day)

	CO	NO_x	ROG	SO_x	PM_{10}	$PM_{2.5}$
Existing LU Table						
Area	4,637.86	509.91	2,744.19	3.16	61.82	61.82
Energy	209.39	399.20	46.04	2.51	31.81	31.81
Mobile	17,046.83	13,529.10	1,455.39	81.58	6,278.86	1,700.50
TOTAL:	**21,894.08**	**14,438.21**	**4,245.62**	**87.25**	**6,372.49**	**1,794.13**
SCAQMD Threshold*	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds Threshold	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**
Proposed LU Table						
Area	4,686.34	515.21	2,816.59	3.19	62.46	62.46
Energy	222.46	414.35	47.71	2.60	32.96	32.96
Mobile	16,904.81	13,432.64	1,444.33	80.89	6,223.26	1,685.44
TOTAL:	**21,813.61**	**14,362.20**	**4,308.63**	**86.68**	**6,318.68**	**1,780.86**
SCAQMD Threshold*	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds Threshold	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

Source: CalEEMod Version 2016.3.2. See Appendix A for detailed output tables. Value shown represents the average emissions of summer and winter outputs.
* Source: "SCAQMD Air Quality Significance Thresholds" prepared by SCAQMD.

Health Risks and Sensitive Receptors

The 2040 General Plan land use plan has been designed to provide a buffer between sources of air quality emissions and sensitive receptors. CARB adopted the Air Quality and Land Use Handbook (CARB, 2005) to provide guidance to planning agencies and air districts for considering potential impacts to sensitive land uses proposed in proximity to TAC emission sources. The goal of the guidance document is to protect sensitive receptors, such as children, seniors, and acutely ill and chronically ill persons, from exposure to TACs emissions by encouraging adequate separation between new sensitive land uses (residential, educational, healthcare) proposed adjacent to TAC sources in order to minimize land use incompatibility.

Individual development projects would be assessed on a case-by-case basis. If the project would not meet the distance recommendations between sources and receptors, the City shall require the applicant to ensure that TAC impacts would be below the carcinogenic threshold (i.e., probability of contracting cancer for the Maximally Exposed Individual would be less than 10 in one million) and below the non-carcinogenic threshold (i.e., result in a Hazard Index less than 1 for the Maximally Exposed Individual).

B. Greenhouse Gas Emissions

Construction Emissions

Individual development projects proposed under the 2040 General Plan will be evaluated on a case-by-case basis per CEQA requirements and using project specific information to estimate GHG emissions and determine the level of impact. Emissions of GHG's during construction activities have the potential to either directly or indirectly result in a temporary impact on the local and regional air quality conditions. GHG emissions from construction will end once construction activities are complete. Therefore, the generation and emission of GHG's from construction are not expected to have a long term or lasting impact on the environment and impacts to air quality from construction are expected to be less than significant.

Operational Emissions

There are five emission source categories that contribute either directly or indirectly to operational GHG emissions, including energy/electricity usage, water usage, solid waste disposal, area emissions (pavement and architectural coating off-gassing), and mobile sources.

Operational GHG emissions under the existing General Plan land use plan were compared to GHG emissions under the proposed land use plan for build out in 2040. For this analysis purposes, GHG emissions were estimated using the CalEEMod software, which bases GHG projections on land use factors for energy use, water use, solid waste generation, and wastewater generation. It should be noted that GHG emission projections in the City's CAP and GHG Inventory were based on actual usage and not default land use factors[11]. Therefore, actual GHG emission projections may vary.

To achieve the AB 32 target by 2020, Cathedral City would have to cut GHG emissions by 23.4%, or 55,909 tonnes for a total of 183,424 tonnes (1990 levels). To achieve the SB 32 target of 40% below 1990 emissions, the City would need to reduce emissions to a total of 110,054 tonnes. Currently, there are no adopted 2040 reduction targets, however CARB is working towards a 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels, which would require the City to reduce GHG emissions to a total of 36,685 tonnes annually.

The following GHG estimates are provided to compare 2040 conditions under the existing and proposed land use plans. Based on these results, the proposed 2040 General Plan would not only increase the City's existing GHG emissions, but emissions would also fail to achieve the State's GHG reduction targets for 2020, 2030, and 2050.

[11] Disclaimer: The International Council for Local Governmental Initiatives (ICLEI) Clean Air and Climate Protection (CACP) software and California Air Resources Board-approved Local Government Operations Protocol (LGOP) were used for the City's Greenhouse Gas Inventory and Climate Action Plan. The GHG emission projections for the City's Climate Action Plan and Greenhouse Gas Inventory are based on direct emissions from major source categories within the City limits, which were derived from utility bills and real consumption data. Results shown in Table 9 may differ from future CAP and GHG Inventory updates.

Table 9
2040 Operational GHG Emission Comparison
(Metric Tons/Year)

	Existing GP LU	Proposed GP LU	Proposed 2040 Difference
Area Emissions	1,820.48	1,839.46	+ 18.98
Energy Emissions	298,088.72	309,553.68	+ 11,464.96
Mobile Emissions	1,275,498.08	1,261,202.65	- 14,295.43
Waste Emissions	36,993.72	38,848.62	+1,854.90
Water Emissions	54,009.62	58,424.33	+4,414.71
Total	**1,666,410.62**	**1,669,868.74**	**+3,458.12**

Source: CalEEMod Version 2016.3.2. See Appendix A for detailed output tables. Values shown represent the total unmitigated GHG emission projections for 2040 under existing GP conditions vs proposed GP conditions.

C. Cumulative Impacts

Air Quality

A significant impact could occur if the project would make a considerable cumulative contribution to federal or State non-attainment pollutants. The Coachella Valley portion of the SSAB is classified as a "non-attainment" area for PM_{10} and ozone. Cumulative air quality analysis is evaluated on a regional scale (rather than a neighborhood scale or city scale, for example) given the dispersing nature of pollutant emissions and aggregate impacts from surrounding jurisdictions and air management districts. Any development project or activity resulting in emissions of PM_{10}, ozone, or ozone precursors will contribute, to some degree, to regional non-attainment designations of ozone and PM_{10}. As shown in Table 8, projections of these pollutants exceed established daily thresholds and therefore have the potential to result in significant and unavoidable cumulative impacts to ozone and PM_{10}.

However, subsequent CEQA documentation prepared for individual projects would have project-specific data and would be required to address, and to the extent feasible, mitigate any significant air quality impacts to a less than significant level.

Greenhouse Gas

Cumulative impacts were analyzed on a regional scale due to the dispersing nature of these pollutant emissions and aggregate impacts from surrounding jurisdictions and air management districts. Through analysis of the regional and statewide plans for GHG reductions, a summary of projects approach was used. The geographic scope for the analysis of potential cumulative greenhouse gas impacts is the overall Salton Sea Air Basin region

Based on the analysis above, the 2040 General Plan has the potential to make a cumulatively considerable contribution to GHG levels due to the increased emission levels. Although the 2040 General Plan policies and programs, and Climate Action Plan represent the best practicable strategies to reduce emissions associated with buildout, no additional mitigation is currently available to reduce this impact to a less than significant level. Cumulative impacts are significant and unavoidable.

Cathedral City

City of Cathedral City General Plan Update

AIR QUALITY AND GREENHOUSE GAS REPORT

SECTION IV. PROJECT ALTERNATIVES

A. Alternative 1: More Intense Land Use Densities

Alternative 1, the More Intense Alternative, would result in increased housing, commercial, and industrial/business land use intensities when compared to the 2040 General Plan. The land use increases will also increase population, traffic, waste generation, water demand and energy demand. Overall, Alternative 1 would result in an increase of criteria pollutant and greenhouse gas emissions.

Construction Emissions

Consistent with the proposed Project, information regarding specific development projects would be needed in order to quantify and analyze the level of impact associated with construction activity. Build out of Alternative will result in a mix of small- and large-scale projects that will be required to adhere to the City's procedures and regulations as they relate to CEQA analysis and mitigation. It is possible that some large-scale projects could substantially increase criteria pollutants through the year 2040. Actual significance would be determined on a project-by-project basis as future development applications are submitted.

The General Plan policies and programs would serve to control construction emissions, including coordination with the SCAQMD during the review of new development projects, implementing dust control measures (SCAQMD Rule 403.1), and requiring mitigation measures to reduce significant impacts. All new development within the Planning Area shall also adhere to SCAQMD rules and regulations for all construction related activities, ensuring that potential construction emissions from new development will be mitigated to the greatest extent feasible.

Operational Emissions

The Coachella Valley portion of the SSAB is classified as a "non-attainment" area for PM_{10} and ozone. Any development project or activity resulting in emissions of PM_{10}, ozone, or ozone precursors will contribute, to some degree, to regional non-attainment designations of ozone and PM_{10}. As shown in the table below, the cumulative net increases of PM_{10}, ROG, and NOx emissions, which are ozone precursors, would be slightly greater than those emitted under the Proposed Project.

Table 10
Operational Emissions Summary
Proposed vs Alternative 1 Land Use
(lbs./day)

	CO	NO_x	ROG	SO_x	PM_{10}	$PM_{2.5}$
Proposed LU Table						
Area	4,686.34	515.21	2,816.59	3.19	62.46	62.46
Energy	222.46	414.35	47.71	2.60	32.96	32.96
Mobile	16,904.81	13,432.64	1,444.33	80.89	6,223.26	1,685.44
TOTAL:	**21,813.61**	**14,362.20**	**4,308.63**	**86.68**	**6,318.68**	**1,780.86**
SCAQMD Threshold*	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds Threshold	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**
Alternative 1 LU Table						
Area	4,959.43	545.25	2,877.50	3.38	66.10	66.10
Energy	226.12	422.21	48.62	2.65	33.59	33.59
Mobile	17,196.18	13,719.06	1,472.87	82.27	6,319.41	1,711.50
TOTAL:	**22,381.73**	**14,686.52**	**4,398.99**	**88.30**	**6,419.10**	**1,811.19**
SCAQMD Threshold*	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds Threshold	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

Source: CalEEMod Version 2016.3.2. See Appendix A for detailed tables. Value shown represents the average emissions of summer and winter outputs.
* Source: "SCAQMD Air Quality Significance Thresholds" prepared by SCAQMD.

The SCAQMD does not currently recommend quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the significance of cumulative emissions generated by multiple cumulative projects, including build out of a General Plan. However, it is recommended that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project-specific impacts.

As shown above, projections of these pollutants exceed established daily thresholds and therefore have the potential to result in a cumulative impact to ozone and PM_{10}. However, subsequent CEQA documentation prepared for individual projects would have project-specific data and would be required to address, and to the extent feasible, mitigate any significant air quality impacts to a less than significant level. Therefore, with implementation of the General Plan programs, impacts to non-attainment criteria pollutants are expected to be reduced to less than significant levels on a case-by-case basis.

Greenhouse Gas Emissions

Construction Related Greenhouse Gas Emissions

Consistent with the proposed Project, individual development projects under Alternative 1 will be evaluated on a case-by-case basis per CEQA requirements and using project specific information to estimate GHG emissions and determine the level of impact. Emissions of GHG's during construction activities have the potential to either directly or indirectly result in a temporary impact on the local and regional air quality conditions. GHG emissions from construction will end once construction activities are complete. Therefore, the generation and emission of GHG's from construction are not expected to have a long term or lasting impact on the environment and impacts to air quality from construction are expected to be less than significant.

Operational Greenhouse Gas Emissions

The following GHG estimates are provided to compare 2040 conditions under the proposed land use plan and Alternative 1 land use plan.

Table 11
2040 Operational GHG Emission Comparison
(Metric Tons/Year)

	Existing GP LU	Proposed GP LU	Alternative 1 LU
Area Emissions	1,820.48	1,839.46	1,946.69
Energy Emissions	298,088.72	309,553.68	314,077.55
Mobile Emissions	1,275,498.08	1,261,202.65	1,287,766.49
Waste Emissions	36,993.72	38,848.62	40,590.35
Water Emissions	54,009.62	58,424.33	59,322.92
Total	**1,666,410.62**	**1,669,868.74**	**1,703,704.00**

Source: CalEEMod Version 2016.3.2. See Appendix A for detailed tables. Values shown represent the total unmitigated GHG emission projections for 2040 under existing GP conditions vs proposed GP conditions vs Alternative 1 conditions.

Because of the increased land use intensities, and thus increased traffic generation, Alternative 1 would generate more GHG emissions than the Proposed Project. Alternative 1 GHG emissions would also fail to achieve the State's GHG reduction targets for 2020, 2030, and 2050. Similar to the Proposed Project, the same General Plan policies would help promote GHG emission reductions. However, based on the GHG projections above, it is possible that Alternative 1 would generate GHG emissions that could have a significant and unavoidable impact on the environment.

Cumulative Impacts

Cumulative impacts related to air quality and GHG's would be slightly greater than those of the Proposed Project. Cumulative impacts would be less than significant for air quality. However, impacts will remain significant and unavoidable for greenhouse gas emissions.

B. Alternative 2: Less Intense Land Use Densities

Alternative 2, the Less Intense Alternative, would result in decreased housing, commercial, and industrial/business land use intensities when compared to the 2040 General Plan. The land use decreases will also decrease population, traffic, waste generation, water demand and energy demand. Overall, Alternative 2 would result in a decrease of criteria pollutant and greenhouse gas emissions.

Construction Emissions

Consistent with the proposed Project, information regarding specific development projects would be needed in order to quantify and analyze the level of impact associated with construction activity. Build out of Alternative 2 will result in a mix of small- and large-scale projects that will be required to adhere to the City's procedures and regulations as they relate to CEQA analysis and mitigation. It is possible that some large-scale projects could substantially increase criteria pollutants through the year 2040. Actual significance would be determined on a project-by-project basis as future development applications are submitted.

The General Plan policies and programs would serve to control construction emissions, including coordination with the SCAQMD during the review of new development projects, implementing dust control measures (SCAQMD Rule 403.1), and requiring mitigation measures to reduce significant impacts. All new development within the Planning Area shall also adhere to SCAQMD rules and regulations for all construction related activities, ensuring that potential construction emissions from new development will be mitigated to the greatest extent feasible.

Operational Emissions

The Coachella Valley portion of the SSAB is classified as a "non-attainment" area for PM_{10} and ozone. Any development project or activity resulting in emissions of PM_{10}, ozone, or ozone precursors will contribute, to some degree, to regional non-attainment designations of ozone and PM_{10}. As shown in the table below, the cumulative net increases of PM_{10}, ROG, and NOx emissions, which are ozone precursors, would be slightly less than those emitted under the Proposed Project.

Table 12
Operational Emissions Summary
Proposed vs Alternative 2 Land Use
(lbs./day)

	CO	NO_x	ROG	SO_x	PM_{10}	$PM_{2.5}$
Proposed LU Table						
Area	4,686.34	515.21	2,816.59	3.19	62.46	62.46
Energy	222.46	414.35	47.71	2.60	32.96	32.96
Mobile	16,904.81	13,432.64	1,444.33	80.89	6,223.26	1,685.44
TOTAL:	**21,813.61**	**14,362.20**	**4,308.63**	**86.68**	**6,318.68**	**1,780.86**
SCAQMD Threshold*	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds Threshold	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**
Alternative 2 LU Table						
Area	4,059.61	446.27	2,597.59	2.76	54.10	54.10
Energy	207.42	383.48	44.12	2.40	30.48	30.48
Mobile	16,211.63	12,711.86	1,373.85	77.61	6,002.46	1,625.60
TOTAL:	**20,478.66**	**13,541.61**	**4,015.56**	**82.77**	**6,087.04**	**1,710.18**
SCAQMD Threshold*	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds Threshold	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

Source: CalEEMod Version 2016.3.2. See Appendix A for detailed tables. Value shown represents the average emissions of summer and winter outputs.
* Source: "SCAQMD Air Quality Significance Thresholds" prepared by SCAQMD.

The SCAQMD does not currently recommend quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the significance of cumulative emissions generated by multiple cumulative projects, including build out of a General Plan. However, it is recommended that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project-specific impacts.

As shown above, projections of these pollutants exceed established daily thresholds and therefore have the potential to result in a cumulative impact to ozone and PM_{10}. However, subsequent CEQA documentation prepared for individual projects would have project-specific data and would be required to address, and to the extent feasible, mitigate any significant air quality impacts to a less than significant level. Therefore, with implementation of the General Plan programs, impacts to non-attainment criteria pollutants are expected to be reduced to less than significant levels on a case-by-case basis.

Greenhouse Gas Emissions

Construction GHG Emissions

Consistent with the proposed Project, individual development projects under Alternative 2 will be evaluated on a case-by-case basis per CEQA requirements and using project specific information to estimate GHG emissions and determine the level of impact. Emissions of GHG's during construction activities have the potential to either directly or indirectly result in a temporary impact on the local and regional air quality conditions. GHG emissions from construction will end once construction activities are complete. Therefore, the generation and emission of GHG's from construction are not expected to have a long term or lasting impact on the environment and impacts to air quality from construction are expected to be less than significant.

Operational GHG Emissions

The following GHG estimates are provided to compare 2040 conditions under the proposed land use plan and Alternative 2 land use plan.

Table 13
2040 Operational GHG Emission Comparison
(Metric Tons/Year)

	Existing GP LU	**Proposed GP LU**	**Alternative 2 LU**
Area Emissions	1,820.48	1,839.46	1,593.38
Energy Emissions	298,088.72	309,553.68	290,501.50
Mobile Emissions	1,275,498.08	1,261,202.65	1,209,657.55
Waste Emissions	36,993.72	38,848.62	38,441.37
Water Emissions	54,009.62	58,424.33	53,811.23
Total	**1,666,410.62**	**1,669,868.74**	**1,594,005.03**

Source: CalEEMod Version 2016.3.2. See Appendix A for detailed tables. Values shown represent the total unmitigated GHG emission projections for 2040 under existing GP conditions vs proposed GP conditions vs Alternative 2 conditions.

Because of the decreased land use intensities, and thus decreased traffic generation, Alternative 2 would generate fewer GHG emissions than the Proposed Project. Alternative 2 GHG emissions would also fail to achieve the State's GHG reduction targets for 2020, 2030, and 2050. Similar to the Proposed Project, the same General Plan policies would help promote GHG emission reductions. However, based on the GHG projections above, it is possible that Alternative 2 would generate GHG emissions that could have a significant and unavoidable impact on the environment.

Cumulative Impacts

Cumulative impacts related to air quality and GHG's would be slightly less than those of the Proposed Project. Cumulative impacts would be less than significant for air quality. However, impacts will remain significant and unavoidable for greenhouse gas emissions.

C. Alternative 3: No Project Alternative

Under Alternative 3, buildout of the existing General Plan would occur and there would be no modifications to land uses.

Construction Emissions

Consistent with the proposed Project, information regarding specific development projects would be needed in order to quantify and analyze the level of impact associated with construction activity. Build out of Alternative 3 will result in a mix of small- and large-scale projects that will be required to adhere to the City's procedures and regulations as they relate to CEQA analysis and mitigation. It is possible that some large-scale projects could substantially increase criteria pollutants through the year 2040. Actual significance would be determined on a project-by-project basis as future development applications are submitted.

The General Plan policies and programs would serve to control construction emissions, including coordination with the SCAQMD during the review of new development projects, implementing dust control measures (SCAQMD Rule 403.1), and requiring mitigation measures to reduce significant impacts. All new development within the Planning Area shall also adhere to SCAQMD rules and regulations for all construction related activities, ensuring that potential construction emissions from new development will be mitigated to the greatest extent feasible.

Operational Emissions

The Coachella Valley portion of the SSAB is classified as a "non-attainment" area for PM_{10} and ozone. Any development project or activity resulting in emissions of PM_{10}, ozone, or ozone precursors will contribute, to some degree, to regional non-attainment designations of ozone and PM_{10}. As shown in the table below, the cumulative net increases of PM_{10}, ROG, and NOx emissions, which are ozone precursors, would be slightly less than those emitted under the proposed Project.

Table 14
Operational Emissions Summary
Alternative 3 vs. Proposed Land Use
(lbs./day)

	CO	NO_x	ROG	SO_x	PM_{10}	$PM_{2.5}$
Alternative 3 (Existing) LU Table						
Area	4,637.86	509.91	2,744.19	3.16	61.82	61.82
Energy	209.39	399.20	46.04	2.51	31.81	31.81
Mobile	17,046.83	13,529.10	1,455.39	81.58	6,278.86	1,700.50
TOTAL:	**21,894.08**	**14,438.21**	**4,245.62**	**87.25**	**6,372.49**	**1,794.13**
SCAQMD Threshold*	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds Threshold	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**
Proposed LU Table						
Area	4,686.34	515.21	2,816.59	3.19	62.46	62.46
Energy	222.46	414.35	47.71	2.60	32.96	32.96
Mobile	16,904.81	13,432.64	1,444.33	80.89	6,223.26	1,685.44
TOTAL:	**21,813.61**	**14,362.20**	**4,308.63**	**86.68**	**6,318.68**	**1,780.86**
SCAQMD Threshold*	**550.00**	**100.00**	**75.00**	**150.00**	**150.00**	**55.00**
Exceeds Threshold	**Yes**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

Source: CalEEMod Version 2016.3.2. See Appendix A for detailed tables. Value shown represents the average emissions of summer and winter outputs.
* Source: "SCAQMD Air Quality Significance Thresholds" prepared by SCAQMD.

The SCAQMD does not currently recommend quantified analyses of construction and/or operational emissions from multiple development projects nor provides methodologies or thresholds of significance to be used to assess the significance of cumulative emissions generated by multiple cumulative projects, including build out of a General Plan. However, it is recommended that a project's potential contribution to cumulative impacts should be assessed utilizing the same significance criteria as those for project-specific impacts.

As shown above, projections of these pollutants exceed established daily thresholds and therefore have the potential to result in cumulative impacts to ozone and PM_{10}. However, subsequent CEQA documentation prepared for individual projects would have project-specific data and would be required to address, and to the extent feasible, mitigate any significant air quality impacts to a less than significant level. Therefore, with implementation of the existing General Plan programs, impacts to non-attainment criteria pollutants are expected to be reduced to less than significant levels on a case-by-case basis.

Greenhouse Gas Emissions

Construction GHG Emissions

Consistent with the proposed Project, individual development projects under Alternative 3 will be evaluated on a case-by-case basis per CEQA requirements and using project specific information to estimate GHG emissions and determine the level of impact. Emissions of GHG's during construction activities have the potential to either directly or indirectly result in a temporary impact on the local and regional air quality conditions. GHG emissions from construction will end once construction activities are complete. Therefore, the generation and emission of GHG's from construction are not expected to have a long term or lasting impact on the environment and impacts to air quality from construction are expected to be less than significant.

Operational GHG Emissions

The following GHG estimates are provided to compare 2040 conditions under the proposed land use plan and Alternative 3, the existing General Plan land use plan.

Table 15
2040 Operational GHG Emission Comparison
(Metric Tons/Year)

	Alt 3 (Existing) GP LU	**Proposed GP LU**
Area Emissions	1,820.48	1,839.46
Energy Emissions	298,088.72	309,553.68
Mobile Emissions	1,275,498.08	1,261,202.65
Waste Emissions	36,993.72	38,848.62
Water Emissions	54,009.62	58,424.33
Total	**1,666,410.62**	**1,669,868.74**
Source: CalEEMod Version 2016.3.2. See Appendix A for detailed tables. Values shown represent the total unmitigated GHG emission projections for 2040 under existing GP conditions vs proposed GP conditions.		

Because of the lower land use intensities, and thus lower traffic generation, Alternative 3 would generate fewer GHG emissions than the Proposed Project. However, Alternative 3 GHG emissions would also fail to achieve the State's GHG reduction targets for 2020, 2030, and 2050 unless mitigated. The existing General Plan policies and CAP would help promote GHG emission reductions. However, based on the GHG projections above, it is possible that Alternative 3 would generate GHG emissions that could have a significant and unavoidable impact on the environment.

Cumulative Impacts

Cumulative impacts related to air quality and GHG's would be slightly less than those of the Proposed Project. Impacts to air quality would be less than significant. However, impacts will remain significant and unavoidable for greenhouse gas emissions.

Cathedral City

City of Cathedral City General Plan Update

AIR QUALITY AND GREENHOUSE GAS REPORT

SECTION V. AIR QUALITY RECOMMENDATIONS

The following programs are included in the proposed 2040 General Plan Update to ensure impacts to air quality and greenhouse gases will be reduced to the greatest extent possible. Due to the nature of air quality and greenhouse gas impacts, all future development within the City will be analyzed on a case-by-case basis and mitigated accordingly.

AQ-1 PM_{10} Monitoring
AQCS Program 2.A: On an on-going basis, the City shall continue to cooperate and participate in efforts to monitor and control PM_{10} emissions from construction and other sources, and all other air pollutants of regional concern. The City shall coordinate with CVAG and the SCAQMD to provide all reporting data for SCAQMD annual report.
Responsible Agency: Building and Public Works Departments, Planning Department, CVAG, SCAQMD
Schedule: Continuous and On-going

AQ-2 Air Quality Data Records
AQCS Program 2.B: The City shall maintain records of historic and current regional and local air quality trends and make them available to the public. Access to data may be made available via an Internet link, printed material, or other means.
Responsible Agency: Public Works Department, Planning Department, CVAG, SCAQMD
Schedule: On-going

AQ-3 Sensitive Receptors
AQCS Program 3.A: The General Plan Land Use Map and Element shall be developed and maintained to identify and locate air pollution point sources, such as manufacturing operations and highways, at an appropriate distance from sensitive receptors, including hospitals, schools, hotels/motels, and residential neighborhoods.
Responsible Agency: Planning Department, CVAG, SCAQMD
Schedule: On-going

AQ-4 Sensitive Receptor Buffer Zones
AQCS Program 3.B: Buffer zones between sensitive receptors and potential air pollutant emitters shall be incorporated into new and proposed residential developments and other developments, to the greatest extent feasible.
Responsible Agency: Planning Department
Schedule: On-going

AQ-5 CEQA Air Quality Analysis

AQCS Program 4.A: The City shall conduct an Initial Study and, where appropriate, require a detailed air quality analysis for all proposals that have the potential to adversely affect local or regional air quality.
Responsible Agency: Planning Department
Schedule: On-going

AQ-6 CEQA Analysis and Mitigation

AQCS Program 4.B: Projects that may generate significant levels of air pollution shall be required to conduct detailed impact analyses and incorporate mitigation measures into their designs using the most advanced technological methods practicable. All proposed mitigation measures shall be reviewed and approved by the City prior to the issuance of grading or demolition permits.
Responsible Agency: Planning, Public Works
Schedule: On-going

AQ-7 Fugitive Dust Control Plans

AQCS Program 4.C: The City shall continue to enforce a Fugitive Dust Emissions Ordinance to reduce and control local PM_{10} emissions. All dust control mitigation plans prepared by contractors, developers, and other responsible parties shall be reviewed and approved by the City prior to the issuance of grading or demolition permits.
Responsible Agency: Building and Public Works Departments, Planning Department
Schedule: On-going

AQ-8 Code Enforcement: Fugitive Dust and Blowsand

AQCS Program 4.D: Provide consistent and effective code enforcement of construction and grading activities and off-road vehicle use to assure that the impacts of blowing sand and fugitive dust emissions are avoided or minimized.
Responsible Agency: Code Enforcement Department; Police Department
Schedule: On-going

AQ-9 Alternative Fuels: City Fleet

AQCS Program 5.A: Where cost-effective, vehicles that use alternative fuel sources, such as compressed natural gas and electricity, shall be purchased and maintained for use in the City's vehicle fleet.
Responsible Agency: City Manager's Office
Schedule: On-going

AQ-10 Energy Efficient Design

AQCS Program 5.B: Site plans shall incorporate energy-efficient design elements, including appropriate site orientation, possibility for incorporation of active and/or passive solar design, and the use of shade and windbreak trees, to reduce fuel consumption for heating and cooling.
Responsible Agency: Planning Department, Public Works Department
Schedule: On-going

AQ-11 Solar Systems

AQCS Program 5.C: The City shall support and promote the use of roof-top solar electric systems in new and existing development, and shall review the City Zoning Ordinance to ensure that City regulations do not create an undue burden on those who wish to install solar electric systems.
Responsible Agency: Planning Department, Building Department
Schedule: On-going

AQ-12 Alternative Energy: Community Wide

AQCS Program 5.D: To encourage the use of alternative energy sources, installation of electric vehicle charging stations shall be encouraged in all new development and in major retrofits.
Responsible Agency: Planning Department, Public Works Department
Schedule: On-going

AQ-13 Alternative Modes of Transportation Planning

AQCS Program 6.A: The General Plan Circulation and Mobility Element shall encourage the incorporation of appropriate alternatives to motor vehicles in the transportation network, and shall be periodically reviewed and updated to assure the future expanded use of such alternatives.
Responsible Agency: Planning Department, Public Works Department
Schedule: On-going

AQ-14 Non-Motorized Transportation Planning

AQCS Program 6.B: The City shall pursue land use patterns and mechanisms, including Mixed-Use development and a balance of employment and housing opportunities that encourage pedestrian and other non-motorized transportation and minimize vehicle miles traveled.
Responsible Agency: Economic Development Department, Planning Department
Schedule: On-going

AQ-15 Active Transportation/NEV Plan

AQCS Program 6.C: The City Active Transportation/NEV Plan shall be funded and implemented to the maximum extent practicable in order to make safe and convenient alternative modes of travel the norm in the City
Responsible Agency: Planning Department, Public Works Department
Schedule: On-going

AQ-16 LSEV Planning

AQCS Program 6D: LSEV Revise ordinance to allow to the greatest extent practicable
Responsible Agency: Planning Department, Public Works Department
Schedule: On-going

AQ-17 Regional Mass Transportation Planning

AQCS Program 7.A: Coordinate with CVAG, SCAG, Sunline Transit Agency and other public and private service providers to improve, expand, and optimize cost-effective regional mass transportation services.
Responsible Agency: Planning Department, Public Works Department, Sunline Transit Authority
Schedule: On-going

AQ-18 Ridesharing Programs

AQCS Program 7.B: Promote and support the development of ridesharing, carpooling, flexible work scheduling, telecommuting, and Park and Ride programs among public and private employers to decrease existing and future traffic levels in the Coachella Valley.
Responsible Agency: Planning Department, Public Works Department, Sunline Transit Authority, Major Employers
Schedule: On-going

AQ-19 TDM Planning

AQCS Program 7.C: The City shall consider adopting a Transportation Demand Management (TDM) Ordinance that applies to new or change-of-use non-residential developments employing 100 or more persons, and which requires the project proponent to demonstrate how the development will reduce the number of project-generated vehicle trips.
Responsible Agency: Planning Department, Public Works Department
Schedule: On-going

AQ-20 Air Quality Management Manual

AQCS Program 9.A: Prepare and distribute to developers, contractors, consultants and others an air quality management manual that describes effective and appropriate methods of controlling and reducing development-related air pollutants, particularly PM_{10} emissions.
Responsible Agency: Building Department, Public Works Department
Schedule: On-going

AQ-21 CAP, GHG Inventory, EAP, GFL Updates

AQCS Program 10.A: Update the City's Climate Action Plan, Greenhouse Gas Inventory, Energy Action Plan and Green for Life program materials to include current trends in technology, climate regulations, and to track the City's efforts to reduce overall greenhouse gas emissions.
Responsible Agency: Planning Department
Schedule: Every 3-5 years

AQ-22 CEQA Analysis: CAP Measures

AQCS Program 10.B: Projects that require CEQA analysis shall be required to conduct detailed impact analyses and incorporate mitigation measures into their designs using the City's current Climate Action Plan prescribed reduction measures for achieving greenhouse gas emission reduction targets. All proposed mitigation measures shall be reviewed and approved by the City prior to the issuance of grading or demolition permits.
Responsible Agency: Building and Public Works Department, Planning Department
Schedule: On-going

AQ-23 Land Use Planning: Reduce Vehicular Trips

EJ Program 6.1.1: To the greatest extent practicable, require that development be located and designed to reduce vehicular trips (and associated air pollution) by utilizing compact development patterns while maintaining community character.
Responsible Parties: City Council, Community Development
Schedule: Immediate; Ongoing

AQ-24 Sensitive Use Pollution Minimization

EJ Program 6.1.2: The city shall require new development with sensitive uses located adjacent to pollution sources be designed with consideration of site and building orientation, location of trees, and incorporation of ventilation and filtration to lessen and minimize any potential health risks.
Responsible Parties: City Council, Community Development, Environmental Conservation Manager
Schedule: Immediate; Ongoing

AQ-25 Energy and Resource Conservation

HSC Program 2.2.2: Continue to work collaboratively with local utility providers and regulatory agencies to assure the City is implementing the most appropriate and effective energy and resource conservation strategies.
Responsible Parties: City Council, City Engineer/Public Works, Community Development**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

AQ-26 Energy and Water Efficiency Incentives

HSC Program 2.2.3: Provide permitting-related and other incentives for energy- and water-efficient building projects, e.g. by giving green projects priority in plan review, processing, and field inspection services.
Responsible Parties: City Council, City Engineer/Public Works, Community Development**,** Environmental Conservation Manager
Schedule: Immediate; Ongoing

AQ-27 Low Income Energy Efficiency Projects

HSC Program 2.2.4: Partner with community services agencies to fund energy-efficiency projects, including heating/ventilation/air conditioning (HVAC), lighting, water heating equipment, insulation, and weatherization projects, for low income residents.

Responsible Parties: City Council, City Engineer/Public Works, Community Development**,** Environmental Conservation Manager

Schedule: Immediate; Ongoing

AQ-28 Energy Efficient Affordable Housing

HSC Program 2.2.5: Target local funding, including utility programs and Community Development Block Grant resources, to assist affordable housing developers in incorporating energy efficient designs and features.

Responsible Parties: City Council, City Engineer/Public Works, Community Development**,** Environmental Conservation Manager, Public Utilities

Schedule: Immediate; Ongoing

AQ-29 Green Building Information

HSC Program 2.2.6: Develop and make available to developers, designers, and other interested parties informational materials about green building strategies and programs, including LEED and LEED-ND rating systems and certification programs.

Responsible Parties: City Council, City Engineer/Public Works, Community Development**,** Environmental Conservation Manager

Schedule: Immediate; Ongoing

AQ-30 Sustainability Plan

CD Program 3.1.1: The City design review process, whether for public or private development projects, shall include a thorough assessment of how and to what extent projects are sustainable, and a sustainability check list derived from the City Sustainability Plan, this element and other regulatory and policy documents, shall be developed and used to assess all project's sustainability.

Responsible Agency: Planning, Public Works, Planning Commission, City Council

Schedule: 2020; Ongoing

AQ-31 Active Transportation/Complete Streets

CD Program 5.1.2: The City shall implement its *Active Transportation Plan* and *Complete Streets* principles in a manner that encourages pedestrian and bicycle use and shall be spatially defined by buildings, trees and lighting, and discourages high speed traffic

Responsible Agency: Public Works, Planning

Schedule: On-going

AQ-32 Energy Efficient and Energy Conserving Design

OSC Program 1.A: The City shall provide developers with available data on energy efficient and conserving building design and technologies. This information, such as the City's *Green for Life* handbooks and may also include information from utilities, trade organizations, state agencies and other system resources that can enhance overall energy conservation.

Responsible Agency: City Manager's Office

Schedule: Continuous

AQ-33 Energy Education

OSC Program 1.B: Encourage Southern California Edison and other providers to facilitate the transfer of data, information and technologies to enhance public education on energy conservation.

Responsible Agency: City Manager's Office

Schedule: Continuous

AQ-34 SunLine Energy Management and Conservation
OSC Program 1.C: The City shall participate in the energy management and conservation efforts of SunLine Transit and encourage the expanded use of compressed natural gas, hydrogen fuel cell and other alternative-fuel buses with bike racks and other system improvements that enhance overall energy efficiency and conservation.
Responsible Agency: City Manager's office, Economic Development Department, City Council.
Schedule: Continuous

AQ-35 Minimize Travel via Land Use Planning
OSC Program 2.A: Amendments to the land use map and Land Use Element shall consider the provision of convenient neighborhood shopping, medical and other professional services appropriately located to minimize travel and facilitate the use of alternative means of transportation.
Responsible Agency: Community Development
Schedule: Continuous

AQ-36 Commercial and Industrial Energy Management Systems
OSC Program 4.A As a part of *Green for Life*, *Energy Action Plan* and other City programs, continue to evaluate the use of co-generation and other energy management systems for new larger industrial and commercial businesses in the City as they arise.
Responsible Agency: Community Development; Building Department
Schedule: Continuous

AQ-37 Community and Regional Multi-Modal Path
QSC Program 5.A: Facilitate the development of a community-wide and regional multi-modal path system to provide residents and visitors with alternatives to motor vehicle transportation.
Responsible Agency: Community Development; City Council
Schedule: Ongoing

AQ-38 Ridesharing Information
QSC Program 5.B: The City shall make available information on ridesharing, ride-booking and SunLine Transit services available to residents and businesses, throughout the City.
Responsible Agency: Public Works, SunLine Transit
Schedule: Ongoing

AQ-39 Internal Efficiency Upgrades
QSC Program 6.A: Establish a revolving loan fund for internal efficiency upgrades. Rules for use of the fund and its reimbursement will be established.
Responsible Agency: Public Works
Schedule: Ongoing

AQ-40 Workspace Energy and Cost Efficiencies
QSC Program 6.B: Implement the City's Commissioning/Retro-Commissioning practice and procedures to identify and plan for maintenance and enhancement of energy and cost efficiencies, as well as ensuring optimal comfort and human satisfaction in City workspaces.
Responsible Agency: Public Works, Building Department
Schedule: Ongoing

AQ-41 State and Federal Incentives for Energy Efficiency
QSC Program 6.C: The City will leverage state and federal incentives for energy efficiency to augment incentives provided by Southern California Edison, Southern California Gas, and others. Consider energy efficiency in capital improvement budget discussions.
Responsible Agency: Public Works, Building and Safety
Schedule: Ongoing

AQ-42 Municipal Solar and Alternative Energy

QSC Program 6.D: The City shall seek grants and partnerships to increase the development of solar PV systems, and the continued market growth in Electric Vehicle and Compressed Natural Gas vehicles, and associated charging/refueling stations at City facilities and elsewhere throughout the community.

Responsible Agency: Community Development, Public Works

Schedule: Ongoing

DOCUMENTS REFERENCED

1. "Final 2016 Air Quality Management Plan," prepared by South Coast Air Quality Management District, 2016.

2. "CEQA Air Quality Handbook," prepared by South Coast Air Quality Management District, April 1993.

3. "Final Localized Significance Threshold Methodology, prepared by the South Coast Air Quality Management District, Revised, July 2008.

4. "South Coast Air Quality Management District Rules and Regulations," adopted February 4, 1977.

5. "Annual Air Quality Site Monitoring Reports," prepared by the South Coast Air Quality Management District.

6. "The California Almanac of Emissions and Air Quality, 2006 Edition," California Air Resources Board, Planning and Technical Support Division, March 2006.

7. "Climate Change 2007: The Physical Science Basis," Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, edited by S. Solomon, D. Qin, and M. Manning, April 2007.

8. "Working Group III Contribution to the Intergovernmental Panel on Climate Change Fourth Assessment Report, Climate Change 2007: Mitigation of Climate Change," prepared by the Intergovernmental Panel on Climate Change, May 2007.

9. "2003 Coachella Valley PM10 State Implementation Plan," August 1, 2003.

APPENDIX A

CalEEMod Version 2016.3.2 Outputs

Cathedral City 2040 General Plan Update

Cathedral City GP 2040: Existing Land Use

Salton Sea Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	4,871.44	1000sqft	1,000.00	4,871,437.00	0
General Light Industry	9,555.37	1000sqft	1,000.00	9,555,374.00	0
Apartments Mid Rise	28,500.00	Dwelling Unit	2,257.00	28,500,000.00	83252
Single Family Housing	25,553.00	Dwelling Unit	8,000.00	45,995,400.00	72530
Regional Shopping Center	13,651.60	1000sqft	2,300.00	13,651,604.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Cathedral City GP 2040: Existing Land Use - Salton Sea Air Basin, Annual

Project Characteristics -

Land Use - Based on "Existing Land Use Table," acreages have been adjusted to account for open/public spaces.

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment -

Vehicle Trips - Trip rates/daily trip totals based on results of Traffic Report.

Road Dust - All roadways will be paved at buildout.

Cathedral City GP 2040: Existing Land Use - Salton Sea Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	4,871,440.00	4,871,437.00
tblLandUse	LandUseSquareFeet	9,555,370.00	9,555,374.00
tblLandUse	LandUseSquareFeet	13,651,600.00	13,651,604.00
tblLandUse	LotAcreage	111.83	1,000.00
tblLandUse	LotAcreage	219.36	1,000.00
tblLandUse	LotAcreage	750.00	2,257.00
tblLandUse	LotAcreage	8,296.43	8,000.00
tblLandUse	LotAcreage	313.40	2,300.00
tblLandUse	Population	92,055.00	83,252.00
tblLandUse	Population	82,536.00	72,530.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	HS_TL	3.50	5.00
tblVehicleTrips	HS_TL	3.50	5.00
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	36.75
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

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					
2019					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
2019					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	478.8273	5.6006	400.2626	0.0275		2.3063	2.3063		2.3063	2.3063	0.0000	1,798.0655	1,798.0655	0.6472	0.0209	1,820.4845
Energy	8.4034	72.8545	38.2142	0.4584		5.8060	5.8060		5.8060	5.8060	0.0000	296,830.1276	296,830.1276	10.4151	3.3497	298,088.7273
Mobile	232.6356	2,295.2238	2,697.5774	13.6270	1,036.3286	4.1849	1,040.5134	278.1839	3.9239	282.1078	0.0000	1,274,075.8857	1,274,075.8857	56.8878	0.0000	1,275,498.0803
Waste						0.0000	0.0000		0.0000	0.0000	14,932.1330	0.0000	14,932.1330	882.4638	0.0000	36,993.7274
Water						0.0000	0.0000		0.0000	0.0000	2,413.8189	43,497.6471	45,911.4661	249.7181	6.2255	54,009.6262
Total	**719.8663**	**2,373.6790**	**3,136.0541**	**14.1129**	**1,036.3286**	**12.2972**	**1,048.6257**	**278.1839**	**12.0361**	**290.2200**	**17,345.9519**	**1,616,201.7260**	**1,633,547.6779**	**1,200.1320**	**9.5962**	**1,666,410.6457**

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	478.8273	5.6006	400.2626	0.0275		2.3063	2.3063		2.3063	2.3063	0.0000	1,798.0655	1,798.0655	0.6472	0.0209	1,820.4845
Energy	8.4034	72.8545	38.2142	0.4584		5.8060	5.8060		5.8060	5.8060	0.0000	296,830.1276	296,830.1276	10.4151	3.3497	298,088.7273
Mobile	232.6356	2,295.2238	2,697.5774	13.6270	1,036.3286	4.1849	1,040.5134	278.1839	3.9239	282.1078	0.0000	1,274,075.8857	1,274,075.8857	56.8878	0.0000	1,275,498.0803
Waste						0.0000	0.0000		0.0000	0.0000	14,932.1330	0.0000	14,932.1330	882.4638	0.0000	36,993.7274
Water						0.0000	0.0000		0.0000	0.0000	2,413.8189	43,497.6471	45,911.4661	249.7181	6.2255	54,009.6262
Total	**719.8663**	**2,373.6790**	**3,136.0541**	**14.1129**	**1,036.3286**	**12.2972**	**1,048.6257**	**278.1839**	**12.0361**	**290.2200**	**17,345.9519**	**1,616,201.7260**	**1,633,547.6779**	**1,200.1320**	**9.5962**	**1,666,410.6457**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	6/5/2019	6/4/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			10,380.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2019

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	232.6356	2,295.2238	2,697.5774	13.6270	1,036.3286	4.1849	1,040.5134	278.1839	3.9239	282.1078	0.0000	1,274,075.8857	1,274,075.8857	56.8878	0.0000	1,275,498.0803
Unmitigated	232.6356	2,295.2238	2,697.5774	13.6270	1,036.3286	4.1849	1,040.5134	278.1839	3.9239	282.1078	0.0000	1,274,075.8857	1,274,075.8857	56.8878	0.0000	1,275,498.0803

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	208,620.00	182,115.00	167010.00	463,403,971	463,403,971
General Light Industry	47,394.64	12,613.09	6497.65	150,055,876	150,055,876
Office Park	60,600.71	7,989.16	3702.29	168,646,590	168,646,590
Regional Shopping Center	501,696.30	477,806.00	344566.38	1,340,435,622	1,340,435,622
Single Family Housing	241,220.32	253,230.23	220266.86	559,056,691	559,056,691
Total	1,059,531.97	933,753.48	742,043.19	2,681,598,750	2,681,598,750

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	5.00	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	14.30	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	14.30	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	14.30	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	5.00	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Cathedral City GP 2040: Existing Land Use - Salton Sea Air Basin, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	213,665.8365	213,665.8365	8.8211	1.8251	214,430.2324
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	213,665.8365	213,665.8365	8.8211	1.8251	214,430.2324
NaturalGas Mitigated	8.4034	72.8545	38.2142	0.4584		5.8060	5.8060		5.8060	5.8060	0.0000	83,164.2911	83,164.2911	1.5940	1.5247	83,658.4949
NaturalGas Unmitigated	8.4034	72.8545	38.2142	0.4584		5.8060	5.8060		5.8060	5.8060	0.0000	83,164.2911	83,164.2911	1.5940	1.5247	83,658.4949

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					
Apartments Mid Rise	4.21631e+008	2.2735	19.4281	8.2673	0.1240		1.5708	1.5708		1.5708	1.5708	0.0000	22,499.8508	22,499.8508	0.4313	0.4125	22,633.5561
General Light Industry	3.10454e+008	1.6740	15.2183	12.7834	0.0913		1.1566	1.1566		1.1566	1.1566	0.0000	16,567.0131	16,567.0131	0.3175	0.3037	16,665.4626
Office Park	1.42246e+007	0.0767	0.6973	0.5857	4.1800e-003		0.0530	0.0530		0.0530	0.0530	0.0000	759.0786	759.0786	0.0146	0.0139	763.5894
Regional Shopping Center	3.03066e+007	0.1634	1.4856	1.2479	8.9100e-003		0.1129	0.1129		0.1129	0.1129	0.0000	1,617.2735	1,617.2735	0.0310	0.0297	1,626.8842
Single Family Housing	7.81823e+008	4.2157	36.0252	15.3299	0.2300		2.9127	2.9127		2.9127	2.9127	0.0000	41,721.0751	41,721.0751	0.7997	0.7649	41,969.0026
Total		**8.4034**	**72.8546**	**38.2142**	**0.4584**		**5.8060**	**5.8060**		**5.8060**	**5.8060**	**0.0000**	**83,164.2911**	**83,164.2911**	**1.5940**	**1.5247**	**83,658.4949**

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					
Apartments Mid Rise	4.21631e+008	2.2735	19.4281	8.2673	0.1240		1.5708	1.5708		1.5708	1.5708	0.0000	22,499.8508	22,499.8508	0.4313	0.4125	22,633.5561
General Light Industry	3.10454e+008	1.6740	15.2183	12.7834	0.0913		1.1566	1.1566		1.1566	1.1566	0.0000	16,567.0131	16,567.0131	0.3175	0.3037	16,665.4626
Office Park	1.42246e+007	0.0767	0.6973	0.5857	4.1800e-003		0.0530	0.0530		0.0530	0.0530	0.0000	759.0786	759.0786	0.0146	0.0139	763.5894
Regional Shopping Center	3.03066e+007	0.1634	1.4856	1.2479	8.9100e-003		0.1129	0.1129		0.1129	0.1129	0.0000	1,617.2735	1,617.2735	0.0310	0.0297	1,626.8842
Single Family Housing	7.81823e+008	4.2157	36.0252	15.3299	0.2300		2.9127	2.9127		2.9127	2.9127	0.0000	41,721.0751	41,721.0751	0.7997	0.7649	41,969.0026
Total		**8.4034**	**72.8546**	**38.2142**	**0.4584**		**5.8060**	**5.8060**		**5.8060**	**5.8060**	**0.0000**	**83,164.2911**	**83,164.2911**	**1.5940**	**1.5247**	**83,658.4949**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.3018e+008	41,478.0526	1.7124	0.3543	41,626.4416
General Light Industry	9.6987e+007	30,902.1508	1.2758	0.2640	31,012.7041
Office Park	4.82759e+007	15,381.7490	0.6350	0.1314	15,436.7776
Regional Shopping Center	1.7242e+008	54,936.6291	2.2680	0.4693	55,133.1665
Single Family Housing	2.22732e+008	70,967.2551	2.9299	0.6062	71,221.1426
Total		**213,665.8365**	**8.8211**	**1.8251**	**214,430.2324**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.3018e+008	41,478.0526	1.7124	0.3543	41,626.4416
General Light Industry	9.6987e+007	30,902.1508	1.2758	0.2640	31,012.7041
Office Park	4.82759e+007	15,381.7490	0.6350	0.1314	15,436.7776
Regional Shopping Center	1.7242e+008	54,936.6291	2.2680	0.4693	55,133.1665
Single Family Housing	2.22732e+008	70,967.2551	2.9299	0.6062	71,221.1426
Total		**213,665.8365**	**8.8211**	**1.8251**	**214,430.2324**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	478.8273	5.6006	400.2626	0.0275		2.3063	2.3063		2.3063	2.3063	0.0000	1,798.0655	1,798.0655	0.6472	0.0209	1,820.4845
Unmitigated	478.8273	5.6006	400.2626	0.0275		2.3063	2.3063		2.3063	2.3063	0.0000	1,798.0655	1,798.0655	0.6472	0.0209	1,820.4845

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	66.1352					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	400.6020					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1154	0.9861	0.4196	6.2900e-003		0.0797	0.0797		0.0797	0.0797	0.0000	1,141.9661	1,141.9661	0.0219	0.0209	1,148.7523
Landscaping	11.9748	4.6146	399.8430	0.0212		2.2266	2.2266		2.2266	2.2266	0.0000	656.0994	656.0994	0.6253	0.0000	671.7323
Total	**478.8273**	**5.6006**	**400.2626**	**0.0275**		**2.3063**	**2.3063**		**2.3063**	**2.3063**	**0.0000**	**1,798.0655**	**1,798.0655**	**0.6472**	**0.0209**	**1,820.4846**

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	66.1352					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	400.6020					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1154	0.9861	0.4196	6.2900e-003		0.0797	0.0797		0.0797	0.0797	0.0000	1,141.9661	1,141.9661	0.0219	0.0209	1,148.7523
Landscaping	11.9748	4.6146	399.8430	0.0212		2.2266	2.2266		2.2266	2.2266	0.0000	656.0994	656.0994	0.6253	0.0000	671.7323
Total	**478.8273**	**5.6006**	**400.2626**	**0.0275**		**2.3063**	**2.3063**		**2.3063**	**2.3063**	**0.0000**	**1,798.0655**	**1,798.0655**	**0.6472**	**0.0209**	**1,820.4846**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	45,911.4661	249.7181	6.2255	54,009.6262
Unmitigated	45,911.4661	249.7181	6.2255	54,009.6262

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	1856.89 / 1170.65	12,436.8708	60.9959	1.5299	14,417.6774
General Light Industry	2209.68 / 0	9,868.4796	72.3809	1.7784	12,207.9770
Office Park	865.819 / 530.663	5,745.2563	28.4386	0.7129	6,668.6625
Regional Shopping Center	1011.21 / 619.773	6,710.0048	33.2140	0.8326	7,788.4703
Single Family Housing	1664.88 / 1049.6	11,150.8547	54.6887	1.3717	12,926.8390
Total		**45,911.4661**	**249.7181**	**6.2255**	**54,009.6262**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	1856.89 / 1170.65	12,436.8708	60.9959	1.5299	14,417.6774
General Light Industry	2209.68 / 0	9,868.4796	72.3809	1.7784	12,207.9770
Office Park	865.819 / 530.663	5,745.2563	28.4386	0.7129	6,668.6625
Regional Shopping Center	1011.21 / 619.773	6,710.0048	33.2140	0.8326	7,788.4703
Single Family Housing	1664.88 / 1049.6	11,150.8547	54.6887	1.3717	12,926.8390
Total		**45,911.4661**	**249.7181**	**6.2255**	**54,009.6262**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	14,932.1330	882.4638	0.0000	36,993.7274
Unmitigated	14,932.1330	882.4638	0.0000	36,993.7274

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	13110	2,661.2115	157.2731	0.0000	6,593.0389
General Light Industry	11848.7	2,405.1709	142.1415	0.0000	5,958.7091
Office Park	4530.44	919.6384	54.3491	0.0000	2,278.3652
Regional Shopping Center	14334.2	2,909.7090	171.9589	0.0000	7,208.6809
Single Family Housing	29737.3	6,036.4032	356.7412	0.0000	14,954.9333
Total		**14,932.1330**	**882.4638**	**0.0000**	**36,993.7274**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	13110	2,661.2115	157.2731	0.0000	6,593.0389
General Light Industry	11848.7	2,405.1709	142.1415	0.0000	5,958.7091
Office Park	4530.44	919.6384	54.3491	0.0000	2,278.3652
Regional Shopping Center	14334.2	2,909.7090	171.9589	0.0000	7,208.6809
Single Family Housing	29737.3	6,036.4032	356.7412	0.0000	14,954.9333
Total		**14,932.1330**	**882.4638**	**0.0000**	**36,993.7274**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Cathedral City GP 2040: Existing Land Use

Salton Sea Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	4,871.44	1000sqft	1,000.00	4,871,437.00	0
General Light Industry	9,555.37	1000sqft	1,000.00	9,555,374.00	0
Apartments Mid Rise	28,500.00	Dwelling Unit	2,257.00	28,500,000.00	83252
Single Family Housing	25,553.00	Dwelling Unit	8,000.00	45,995,400.00	72530
Regional Shopping Center	13,651.60	1000sqft	2,300.00	13,651,604.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Cathedral City GP 2040: Existing Land Use - Salton Sea Air Basin, Summer

Project Characteristics -

Land Use - Based on "Existing Land Use Table," acreages have been adjusted to account for open/public spaces.

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment -

Vehicle Trips - Trip rates/daily trip totals based on results of Traffic Report.

Road Dust - All roadways will be paved at buildout.

Cathedral City GP 2040: Existing Land Use - Salton Sea Air Basin, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	4,871,440.00	4,871,437.00
tblLandUse	LandUseSquareFeet	9,555,370.00	9,555,374.00
tblLandUse	LandUseSquareFeet	13,651,600.00	13,651,604.00
tblLandUse	LotAcreage	111.83	1,000.00
tblLandUse	LotAcreage	219.36	1,000.00
tblLandUse	LotAcreage	750.00	2,257.00
tblLandUse	LotAcreage	8,296.43	8,000.00
tblLandUse	LotAcreage	313.40	2,300.00
tblLandUse	Population	92,055.00	83,252.00
tblLandUse	Population	82,536.00	72,530.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	HS_TL	3.50	5.00
tblVehicleTrips	HS_TL	3.50	5.00
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	36.75
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,744.1868	509.9064	4,637.8625	3.1631		61.8211	61.8211		61.8211	61.8211	0.0000	593,525.2201	593,525.2201	18.8807	10.7340	597,195.9606
Energy	46.0458	399.2030	209.3928	2.5116		31.8134	31.8134		31.8134	31.8134		502,317.4727	502,317.4727	9.6278	9.2092	505,302.4943
Mobile	1,633.1052	13,637.6066	18,901.7767	85.6771	6,253.8804	24.8775	6,278.7579	1,677.0784	23.3246	1,700.4030		8,817,048.6468	8,817,048.6468	379.5856		8,826,538.2857
Total	**4,423.3378**	**14,546.7159**	**23,749.0320**	**91.3518**	**6,253.8804**	**118.5120**	**6,372.3924**	**1,677.0784**	**116.9591**	**1,794.0375**	**0.0000**	**9,912,891.3397**	**9,912,891.3397**	**408.0940**	**19.9431**	**9,929,036.7406**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,744.1868	509.9064	4,637.8625	3.1631		61.8211	61.8211		61.8211	61.8211	0.0000	593,525.2201	593,525.2201	18.8807	10.7340	597,195.9606
Energy	46.0458	399.2030	209.3928	2.5116		31.8134	31.8134		31.8134	31.8134		502,317.4727	502,317.4727	9.6278	9.2092	505,302.4943
Mobile	1,633.1052	13,637.6066	18,901.7767	85.6771	6,253.8804	24.8775	6,278.7579	1,677.0784	23.3246	1,700.4030		8,817,048.6468	8,817,048.6468	379.5856		8,826,538.2857
Total	**4,423.3378**	**14,546.7159**	**23,749.0320**	**91.3518**	**6,253.8804**	**118.5120**	**6,372.3924**	**1,677.0784**	**116.9591**	**1,794.0375**	**0.0000**	**9,912,891.3397**	**9,912,891.3397**	**408.0940**	**19.9431**	**9,929,036.7406**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	6/5/2019	6/4/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			10,380.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2019

Unmitigated Construction Off-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1,633.1052	13,637.6066	18,901.7767	85.6771	6,253.8804	24.8775	6,278.7579	1,677.0784	23.3246	1,700.4030		8,817,048.6468	8,817,048.6468	379.5856		8,826,538.2857
Unmitigated	1,633.1052	13,637.6066	18,901.7767	85.6771	6,253.8804	24.8775	6,278.7579	1,677.0784	23.3246	1,700.4030		8,817,048.6468	8,817,048.6468	379.5856		8,826,538.2857

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	208,620.00	182,115.00	167010.00	463,403,971	463,403,971
General Light Industry	47,394.64	12,613.09	6497.65	150,055,876	150,055,876
Office Park	60,600.71	7,989.16	3702.29	168,646,590	168,646,590
Regional Shopping Center	501,696.30	477,806.00	344566.38	1,340,435,622	1,340,435,622
Single Family Housing	241,220.32	253,230.23	220266.86	559,056,691	559,056,691
Total	1,059,531.97	933,753.48	742,043.19	2,681,598,750	2,681,598,750

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	5.00	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	14.30	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	14.30	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	14.30	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	5.00	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	46.0458	399.2030	209.3928	2.5116		31.8134	31.8134		31.8134	31.8134		502,317.4727	502,317.4727	9.6278	9.2092	505,302.4943
NaturalGas Unmitigated	46.0458	399.2030	209.3928	2.5116		31.8134	31.8134		31.8134	31.8134		502,317.4727	502,317.4727	9.6278	9.2092	505,302.4943

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1.15515e+006	12.4576	106.4554	45.3002	0.6795		8.6070	8.6070		8.6070	8.6070		135,900.4932	135,900.4932	2.6048	2.4915	136,708.0818
General Light Industry	850559	9.1727	83.3882	70.0461	0.5003		6.3375	6.3375		6.3375	6.3375		100,065.7861	100,065.7861	1.9179	1.8345	100,660.4270
Office Park	38971.5	0.4203	3.8207	3.2094	0.0229		0.2904	0.2904		0.2904	0.2904		4,584.8819	4,584.8819	0.0879	0.0841	4,612.1275
Regional Shopping Center	83031.7	0.8954	8.1404	6.8379	0.0488		0.6187	0.6187		0.6187	0.6187		9,768.4322	9,768.4322	0.1872	0.1791	9,826.4811
Single Family Housing	2.14198e+006	23.0998	197.3983	83.9993	1.2600		15.9599	15.9599		15.9599	15.9599		251,997.8794	251,997.8794	4.8300	4.6200	253,495.3768
Total		**46.0458**	**399.2030**	**209.3928**	**2.5116**		**31.8135**	**31.8135**		**31.8135**	**31.8135**		**502,317.4727**	**502,317.4727**	**9.6278**	**9.2092**	**505,302.4943**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1155.15	12.4576	106.4554	45.3002	0.6795		8.6070	8.6070		8.6070	8.6070		135,900.4932	135,900.4932	2.6048	2.4915	136,708.0818
General Light Industry	850.559	9.1727	83.3882	70.0461	0.5003		6.3375	6.3375		6.3375	6.3375		100,065.7861	100,065.7861	1.9179	1.8345	100,660.4270
Office Park	38.9715	0.4203	3.8207	3.2094	0.0229		0.2904	0.2904		0.2904	0.2904		4,584.8819	4,584.8819	0.0879	0.0841	4,612.1275
Regional Shopping Center	83.0317	0.8954	8.1404	6.8379	0.0488		0.6187	0.6187		0.6187	0.6187		9,768.4322	9,768.4322	0.1872	0.1791	9,826.4811
Single Family Housing	2141.98	23.0998	197.3983	83.9993	1.2600		15.9599	15.9599		15.9599	15.9599		251,997.8794	251,997.8794	4.8300	4.6200	253,495.3768
Total		**46.0458**	**399.2030**	**209.3928**	**2.5116**		**31.8135**	**31.8135**		**31.8135**	**31.8135**		**502,317.4727**	**502,317.4727**	**9.6278**	**9.2092**	**505,302.4943**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,744.1868	509.9064	4,637.8625	3.1631		61.8211	61.8211		61.8211	61.8211	0.0000	593,525.2201	593,525.2201	18.8807	10.7340	597,195.9606
Unmitigated	2,744.1868	509.9064	4,637.8625	3.1631		61.8211	61.8211		61.8211	61.8211	0.0000	593,525.2201	593,525.2201	18.8807	10.7340	597,195.9606

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	362.3844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,195.0796					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	53.6699	458.6334	195.1631	2.9275		37.0810	37.0810		37.0810	37.0810	0.0000	585,489.3777	585,489.3777	11.2219	10.7340	588,968.6483
Landscaping	133.0529	51.2730	4,442.6994	0.2357		24.7401	24.7401		24.7401	24.7401		8,035.8425	8,035.8425	7.6588		8,227.3124
Total	**2,744.1868**	**509.9064**	**4,637.8625**	**3.1632**		**61.8211**	**61.8211**		**61.8211**	**61.8211**	**0.0000**	**593,525.2201**	**593,525.2201**	**18.8807**	**10.7340**	**597,195.9606**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	362.3844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,195.0796					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	53.6699	458.6334	195.1631	2.9275		37.0810	37.0810		37.0810	37.0810	0.0000	585,489.3777	585,489.3777	11.2219	10.7340	588,968.6483
Landscaping	133.0529	51.2730	4,442.6994	0.2357		24.7401	24.7401		24.7401	24.7401		8,035.8425	8,035.8425	7.6588		8,227.3124
Total	**2,744.1868**	**509.9064**	**4,637.8625**	**3.1632**		**61.8211**	**61.8211**		**61.8211**	**61.8211**	**0.0000**	**593,525.2201**	**593,525.2201**	**18.8807**	**10.7340**	**597,195.9606**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Cathedral City GP 2040: Existing Land Use

Salton Sea Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	4,871.44	1000sqft	1,000.00	4,871,437.00	0
General Light Industry	9,555.37	1000sqft	1,000.00	9,555,374.00	0
Apartments Mid Rise	28,500.00	Dwelling Unit	2,257.00	28,500,000.00	83252
Single Family Housing	25,553.00	Dwelling Unit	8,000.00	45,995,400.00	72530
Regional Shopping Center	13,651.60	1000sqft	2,300.00	13,651,604.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Cathedral City GP 2040: Existing Land Use - Salton Sea Air Basin, Winter

Project Characteristics -

Land Use - Based on "Existing Land Use Table," acreages have been adjusted to account for open/public spaces.

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment -

Vehicle Trips - Trip rates/daily trip totals based on results of Traffic Report.

Road Dust - All roadways will be paved at buildout.

Cathedral City GP 2040: Existing Land Use - Salton Sea Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	4,871,440.00	4,871,437.00
tblLandUse	LandUseSquareFeet	9,555,370.00	9,555,374.00
tblLandUse	LandUseSquareFeet	13,651,600.00	13,651,604.00
tblLandUse	LotAcreage	111.83	1,000.00
tblLandUse	LotAcreage	219.36	1,000.00
tblLandUse	LotAcreage	750.00	2,257.00
tblLandUse	LotAcreage	8,296.43	8,000.00
tblLandUse	LotAcreage	313.40	2,300.00
tblLandUse	Population	92,055.00	83,252.00
tblLandUse	Population	82,536.00	72,530.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	HS_TL	3.50	5.00
tblVehicleTrips	HS_TL	3.50	5.00
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	36.75
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,744.1868	509.9064	4,637.8625	3.1631		61.8211	61.8211		61.8211	61.8211	0.0000	593,525.2201	593,525.2201	18.8807	10.7340	597,195.9606
Energy	46.0458	399.2030	209.3928	2.5116		31.8134	31.8134		31.8134	31.8134		502,317.4727	502,317.4727	9.6278	9.2092	505,302.4943
Mobile	1,277.6817	13,420.6178	15,191.9058	77.4861	6,253.8804	25.0856	6,278.9659	1,677.0784	23.5236	1,700.6020		7,991,267.2703	7,991,267.2703	377.9323		8,000,715.5780
Total	**4,067.9142**	**14,329.7271**	**20,039.1612**	**83.1609**	**6,253.8804**	**118.7201**	**6,372.6004**	**1,677.0784**	**117.1581**	**1,794.2365**	**0.0000**	**9,087,109.9631**	**9,087,109.9631**	**406.4407**	**19.9431**	**9,103,214.0329**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,744.1868	509.9064	4,637.8625	3.1631		61.8211	61.8211		61.8211	61.8211	0.0000	593,525.2201	593,525.2201	18.8807	10.7340	597,195.9606
Energy	46.0458	399.2030	209.3928	2.5116		31.8134	31.8134		31.8134	31.8134		502,317.4727	502,317.4727	9.6278	9.2092	505,302.4943
Mobile	1,277.6817	13,420.6178	15,191.9058	77.4861	6,253.8804	25.0856	6,278.9659	1,677.0784	23.5236	1,700.6020		7,991,267.2703	7,991,267.2703	377.9323		8,000,715.5780
Total	**4,067.9142**	**14,329.7271**	**20,039.1612**	**83.1609**	**6,253.8804**	**118.7201**	**6,372.6004**	**1,677.0784**	**117.1581**	**1,794.2365**	**0.0000**	**9,087,109.9631**	**9,087,109.9631**	**406.4407**	**19.9431**	**9,103,214.0329**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	6/5/2019	6/4/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			10,380.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2019

Unmitigated Construction Off-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1,277.6817	13,420.6178	15,191.9058	77.4861	6,253.8804	25.0856	6,278.9659	1,677.0784	23.5236	1,700.6020		7,991,267.2703	7,991,267.2703	377.9323		8,000,715.5780
Unmitigated	1,277.6817	13,420.6178	15,191.9058	77.4861	6,253.8804	25.0856	6,278.9659	1,677.0784	23.5236	1,700.6020		7,991,267.2703	7,991,267.2703	377.9323		8,000,715.5780

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	208,620.00	182,115.00	167010.00	463,403,971	463,403,971
General Light Industry	47,394.64	12,613.09	6497.65	150,055,876	150,055,876
Office Park	60,600.71	7,989.16	3702.29	168,646,590	168,646,590
Regional Shopping Center	501,696.30	477,806.00	344566.38	1,340,435,622	1,340,435,622
Single Family Housing	241,220.32	253,230.23	220266.86	559,056,691	559,056,691
Total	1,059,531.97	933,753.48	742,043.19	2,681,598,750	2,681,598,750

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	5.00	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	14.30	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	14.30	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	14.30	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	5.00	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	46.0458	399.2030	209.3928	2.5116		31.8134	31.8134		31.8134	31.8134		502,317.4727	502,317.4727	9.6278	9.2092	505,302.4943
NaturalGas Unmitigated	46.0458	399.2030	209.3928	2.5116		31.8134	31.8134		31.8134	31.8134		502,317.4727	502,317.4727	9.6278	9.2092	505,302.4943

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1.15515e+006	12.4576	106.4554	45.3002	0.6795		8.6070	8.6070		8.6070	8.6070		135,900.4932	135,900.4932	2.6048	2.4915	136,708.0818
General Light Industry	850559	9.1727	83.3882	70.0461	0.5003		6.3375	6.3375		6.3375	6.3375		100,065.7861	100,065.7861	1.9179	1.8345	100,660.4270
Office Park	38971.5	0.4203	3.8207	3.2094	0.0229		0.2904	0.2904		0.2904	0.2904		4,584.8819	4,584.8819	0.0879	0.0841	4,612.1275
Regional Shopping Center	83031.7	0.8954	8.1404	6.8379	0.0488		0.6187	0.6187		0.6187	0.6187		9,768.4322	9,768.4322	0.1872	0.1791	9,826.4811
Single Family Housing	2.14198e+006	23.0998	197.3983	83.9993	1.2600		15.9599	15.9599		15.9599	15.9599		251,997.8794	251,997.8794	4.8300	4.6200	253,495.3768
Total		**46.0458**	**399.2030**	**209.3928**	**2.5116**		**31.8135**	**31.8135**		**31.8135**	**31.8135**		**502,317.4727**	**502,317.4727**	**9.6278**	**9.2092**	**505,302.4943**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1155.15	12.4576	106.4554	45.3002	0.6795		8.6070	8.6070		8.6070	8.6070		135,900.4932	135,900.4932	2.6048	2.4915	136,708.0818
General Light Industry	850.559	9.1727	83.3882	70.0461	0.5003		6.3375	6.3375		6.3375	6.3375		100,065.7861	100,065.7861	1.9179	1.8345	100,660.4270
Office Park	38.9715	0.4203	3.8207	3.2094	0.0229		0.2904	0.2904		0.2904	0.2904		4,584.8819	4,584.8819	0.0879	0.0841	4,612.1275
Regional Shopping Center	83.0317	0.8954	8.1404	6.8379	0.0488		0.6187	0.6187		0.6187	0.6187		9,768.4322	9,768.4322	0.1872	0.1791	9,826.4811
Single Family Housing	2141.98	23.0998	197.3983	83.9993	1.2600		15.9599	15.9599		15.9599	15.9599		251,997.8794	251,997.8794	4.8300	4.6200	253,495.3768
Total		**46.0458**	**399.2030**	**209.3928**	**2.5116**		**31.8135**	**31.8135**		**31.8135**	**31.8135**		**502,317.4727**	**502,317.4727**	**9.6278**	**9.2092**	**505,302.4943**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,744.1868	509.9064	4,637.8625	3.1631		61.8211	61.8211		61.8211	61.8211	0.0000	593,525.2201	593,525.2201	18.8807	10.7340	597,195.9606
Unmitigated	2,744.1868	509.9064	4,637.8625	3.1631		61.8211	61.8211		61.8211	61.8211	0.0000	593,525.2201	593,525.2201	18.8807	10.7340	597,195.9606

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	362.3844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,195.0796					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	53.6699	458.6334	195.1631	2.9275		37.0810	37.0810		37.0810	37.0810	0.0000	585,489.3777	585,489.3777	11.2219	10.7340	588,968.6483
Landscaping	133.0529	51.2730	4,442.6994	0.2357		24.7401	24.7401		24.7401	24.7401		8,035.8425	8,035.8425	7.6588		8,227.3124
Total	**2,744.1868**	**509.9064**	**4,637.8625**	**3.1632**		**61.8211**	**61.8211**		**61.8211**	**61.8211**	**0.0000**	**593,525.2201**	**593,525.2201**	**18.8807**	**10.7340**	**597,195.9606**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	362.3844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,195.0796					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	53.6699	458.6334	195.1631	2.9275		37.0810	37.0810		37.0810	37.0810	0.0000	585,489.3777	585,489.3777	11.2219	10.7340	588,968.6483
Landscaping	133.0529	51.2730	4,442.6994	0.2357		24.7401	24.7401		24.7401	24.7401		8,035.8425	8,035.8425	7.6588		8,227.3124
Total	**2,744.1868**	**509.9064**	**4,637.8625**	**3.1632**		**61.8211**	**61.8211**		**61.8211**	**61.8211**	**0.0000**	**593,525.2201**	**593,525.2201**	**18.8807**	**10.7340**	**597,195.9606**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Cathedral City GP 2040: Proposed Land Use

Salton Sea Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	6,505.62	1000sqft	1,000.00	6,505,616.00	0
General Light Industry	11,276.34	1000sqft	1,000.00	11,276,342.00	0
Apartments Mid Rise	29,797.00	Dwelling Unit	2,257.00	29,797,000.00	85000
Single Family Housing	24,818.00	Dwelling Unit	8,000.00	44,672,400.00	72530
Regional Shopping Center	13,116.38	1000sqft	2,300.00	13,116,382.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Cathedral City GP 2040: Proposed Land Use - Salton Sea Air Basin, Annual

Project Characteristics -

Land Use - Based on "Proposed Land Use Table," acreages have been adjusted to account for open/public spaces.

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment -

Vehicle Trips - Trip rates/daily trip totals based on results of Traffic Report.

Road Dust - All roadways will be paved at buildout.

Cathedral City GP 2040: Proposed Land Use - Salton Sea Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	6,505,620.00	6,505,616.00
tblLandUse	LandUseSquareFeet	11,276,300.00	11,276,342.00
tblLandUse	LandUseSquareFeet	13,116,400.00	13,116,382.00
tblLandUse	LotAcreage	149.35	1,000.00
tblLandUse	LotAcreage	258.87	1,000.00
tblLandUse	LotAcreage	784.13	2,257.00
tblLandUse	LotAcreage	8,057.79	8,000.00
tblLandUse	LotAcreage	301.11	2,300.00
tblLandUse	Population	96,244.00	85,000.00
tblLandUse	Population	80,162.00	72,530.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	13.80
tblVehicleTrips	CC_TL	4.20	13.80
tblVehicleTrips	CC_TL	4.20	13.80
tblVehicleTrips	HS_TL	3.50	5.30
tblVehicleTrips	HS_TL	3.50	5.30
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	35.33
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

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					
2140					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
2140					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

Cathedral City GP 2040: Proposed Land Use - Salton Sea Air Basin, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	491.8111	5.6591	404.4472	0.0278		2.3304	2.3304		2.3304	2.3304	0.0000	1,816.8056	1,816.8056	0.6541	0.0212	1,839.4606
Energy	8.7064	75.6190	40.5994	0.4749		6.0153	6.0153		6.0153	6.0153	0.0000	308,247.1492	308,247.1492	10.8201	3.4766	309,553.6860
Mobile	230.3501	2,274.7655	2,667.4758	13.4741	1,023.7444	4.1360	1,027.8804	274.8059	3.8780	278.6839	0.0000	1,259,794.9751	1,259,794.9751	56.3074	0.0000	1,261,202.6592
Waste						0.0000	0.0000		0.0000	0.0000	15,680.8448	0.0000	15,680.8448	926.7114	0.0000	38,848.6294
Water						0.0000	0.0000		0.0000	0.0000	2,631.2606	46,967.0244	49,598.2850	272.1947	6.7825	58,424.3374
Total	**730.8676**	**2,356.0436**	**3,112.5225**	**13.9768**	**1,023.7444**	**12.4817**	**1,036.2261**	**274.8059**	**12.2237**	**287.0296**	**18,312.1054**	**1,616,825.9543**	**1,635,138.0597**	**1,266.6876**	**10.2803**	**1,669,868.7725**

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	491.8111	5.6591	404.4472	0.0278		2.3304	2.3304		2.3304	2.3304	0.0000	1,816.8056	1,816.8056	0.6541	0.0212	1,839.4606
Energy	8.7064	75.6190	40.5994	0.4749		6.0153	6.0153		6.0153	6.0153	0.0000	308,247.1492	308,247.1492	10.8201	3.4766	309,553.6860
Mobile	230.3501	2,274.7655	2,667.4758	13.4741	1,023.7444	4.1360	1,027.8804	274.8059	3.8780	278.6839	0.0000	1,259,794.9751	1,259,794.9751	56.3074	0.0000	1,261,202.6592
Waste						0.0000	0.0000		0.0000	0.0000	15,680.8448	0.0000	15,680.8448	926.7114	0.0000	38,848.6294
Water						0.0000	0.0000		0.0000	0.0000	2,631.2606	46,967.0244	49,598.2850	272.1947	6.7825	58,424.3374
Total	**730.8676**	**2,356.0436**	**3,112.5225**	**13.9768**	**1,023.7444**	**12.4817**	**1,036.2261**	**274.8059**	**12.2237**	**287.0296**	**18,312.1054**	**1,616,825.9543**	**1,635,138.0597**	**1,266.6876**	**10.2803**	**1,669,868.7725**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/2/2140	3/1/2140	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			10,903.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2140

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	230.3501	2,274.7655	2,667.4758	13.4741	1,023.7444	4.1360	1,027.8804	274.8059	3.8780	278.6839	0.0000	1,259,794.9751	1,259,794.9751	56.3074	0.0000	1,261,202.6592
Unmitigated	230.3501	2,274.7655	2,667.4758	13.4741	1,023.7444	4.1360	1,027.8804	274.8059	3.8780	278.6839	0.0000	1,259,794.9751	1,259,794.9751	56.3074	0.0000	1,261,202.6592

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	218,114.04	190,402.83	174610.42	488,362,207	488,362,207
General Light Industry	55,930.65	14,884.77	7667.91	175,030,136	175,030,136
Office Park	80,929.91	10,669.22	4944.27	220,723,521	220,723,521
Regional Shopping Center	463,401.71	459,073.30	331057.43	1,217,607,783	1,217,607,783
Single Family Housing	234,281.92	245,946.38	213931.16	547,312,480	547,312,480
Total	1,052,658.22	920,976.50	732,211.19	2,649,036,126	2,649,036,126

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	5.30	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	13.80	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	13.80	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	13.80	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	5.30	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Cathedral City GP 2040: Proposed Land Use - Salton Sea Air Basin, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	222,083.9395	222,083.9395	9.1687	1.8970	222,878.4514
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	222,083.9395	222,083.9395	9.1687	1.8970	222,878.4514
NaturalGas Mitigated	8.7064	75.6190	40.5994	0.4749		6.0153	6.0153		6.0153	6.0153	0.0000	86,163.2097	86,163.2097	1.6515	1.5797	86,675.2346
NaturalGas Unmitigated	8.7064	75.6190	40.5994	0.4749		6.0153	6.0153		6.0153	6.0153	0.0000	86,163.2097	86,163.2097	1.6515	1.5797	86,675.2346

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					
Apartments Mid Rise	4.40819e+008	2.3770	20.3123	8.6435	0.1297		1.6423	1.6423		1.6423	1.6423	0.0000	23,523.7914	23,523.7914	0.4509	0.4313	23,663.5815
General Light Industry	3.66368e+008	1.9755	17.9592	15.0858	0.1078		1.3649	1.3649		1.3649	1.3649	0.0000	19,550.8105	19,550.8105	0.3747	0.3584	19,666.9912
Office Park	1.89964e+007	0.1024	0.9312	0.7822	5.5900e-003		0.0708	0.0708		0.0708	0.0708	0.0000	1,013.7202	1,013.7202	0.0194	0.0186	1,019.7442
Regional Shopping Center	2.91184e+007	0.1570	1.4274	1.1990	8.5600e-003		0.1085	0.1085		0.1085	0.1085	0.0000	1,553.8670	1,553.8670	0.0298	0.0285	1,563.1009
Single Family Housing	7.59335e+008	4.0945	34.9890	14.8889	0.2233		2.8289	2.8289		2.8289	2.8289	0.0000	40,521.0207	40,521.0207	0.7767	0.7429	40,761.8169
Total		**8.7064**	**75.6190**	**40.5994**	**0.4749**		**6.0153**	**6.0153**		**6.0153**	**6.0153**	**0.0000**	**86,163.2097**	**86,163.2097**	**1.6515**	**1.5797**	**86,675.2346**

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					
Apartments Mid Rise	4.40819e+008	2.3770	20.3123	8.6435	0.1297		1.6423	1.6423		1.6423	1.6423	0.0000	23,523.7914	23,523.7914	0.4509	0.4313	23,663.5815
General Light Industry	3.66368e+008	1.9755	17.9592	15.0858	0.1078		1.3649	1.3649		1.3649	1.3649	0.0000	19,550.8105	19,550.8105	0.3747	0.3584	19,666.9912
Office Park	1.89964e+007	0.1024	0.9312	0.7822	5.5900e-003		0.0708	0.0708		0.0708	0.0708	0.0000	1,013.7202	1,013.7202	0.0194	0.0186	1,019.7442
Regional Shopping Center	2.91184e+007	0.1570	1.4274	1.1990	8.5600e-003		0.1085	0.1085		0.1085	0.1085	0.0000	1,553.8670	1,553.8670	0.0298	0.0285	1,563.1009
Single Family Housing	7.59335e+008	4.0945	34.9890	14.8889	0.2233		2.8289	2.8289		2.8289	2.8289	0.0000	40,521.0207	40,521.0207	0.7767	0.7429	40,761.8169
Total		**8.7064**	**75.6190**	**40.5994**	**0.4749**		**6.0153**	**6.0153**		**6.0153**	**6.0153**	**0.0000**	**86,163.2097**	**86,163.2097**	**1.6515**	**1.5797**	**86,675.2346**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.36104e+008	43,365.6678	1.7903	0.3704	43,520.8098
General Light Industry	1.14455e+008	36,467.7741	1.5056	0.3115	36,598.2387
Office Park	6.44707e+007	20,541.7318	0.8481	0.1755	20,615.2204
Regional Shopping Center	1.6566e+008	52,782.7948	2.1791	0.4509	52,971.6268
Single Family Housing	2.16326e+008	68,925.9710	2.8456	0.5887	69,172.5557
Total		**222,083.9395**	**9.1687**	**1.8970**	**222,878.4514**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.36104e+008	43,365.6678	1.7903	0.3704	43,520.8098
General Light Industry	1.14455e+008	36,467.7741	1.5056	0.3115	36,598.2387
Office Park	6.44707e+007	20,541.7318	0.8481	0.1755	20,615.2204
Regional Shopping Center	1.6566e+008	52,782.7948	2.1791	0.4509	52,971.6268
Single Family Housing	2.16326e+008	68,925.9710	2.8456	0.5887	69,172.5557
Total		**222,083.9395**	**9.1687**	**1.8970**	**222,878.4514**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	491.8111	5.6591	404.4472	0.0278		2.3304	2.3304		2.3304	2.3304	0.0000	1,816.8056	1,816.8056	0.6541	0.0212	1,839.4606
Unmitigated	491.8111	5.6591	404.4472	0.0278		2.3304	2.3304		2.3304	2.3304	0.0000	1,816.8056	1,816.8056	0.6541	0.0212	1,839.4606

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	68.0794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	411.5137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1166	0.9963	0.4240	6.3600e-003		0.0806	0.0806		0.0806	0.0806	0.0000	1,153.8394	1,153.8394	0.0221	0.0212	1,160.6961
Landscaping	12.1014	4.6628	404.0233	0.0214		2.2498	2.2498		2.2498	2.2498	0.0000	662.9662	662.9662	0.6319	0.0000	678.7645
Total	**491.8111**	**5.6591**	**404.4472**	**0.0278**		**2.3304**	**2.3304**		**2.3304**	**2.3304**	**0.0000**	**1,816.8056**	**1,816.8056**	**0.6541**	**0.0212**	**1,839.4606**

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	68.0794					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	411.5137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1166	0.9963	0.4240	6.3600e-003		0.0806	0.0806		0.0806	0.0806	0.0000	1,153.8394	1,153.8394	0.0221	0.0212	1,160.6961
Landscaping	12.1014	4.6628	404.0233	0.0214		2.2498	2.2498		2.2498	2.2498	0.0000	662.9662	662.9662	0.6319	0.0000	678.7645
Total	**491.8111**	**5.6591**	**404.4472**	**0.0278**		**2.3304**	**2.3304**		**2.3304**	**2.3304**	**0.0000**	**1,816.8056**	**1,816.8056**	**0.6541**	**0.0212**	**1,839.4606**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	49,598.2850	272.1947	6.7825	58,424.3374
Unmitigated	49,598.2850	272.1947	6.7825	58,424.3374

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	1941.39 / 1223.92	13,002.8575	63.7718	1.5995	15,073.8082
General Light Industry	2607.64 / 0	11,645.8009	85.4168	2.0987	14,406.6437
Office Park	1156.27 / 708.681	7,672.5679	37.9786	0.9520	8,905.7413
Regional Shopping Center	971.565 / 595.475	6,446.9445	31.9119	0.8000	7,483.1296
Single Family Housing	1616.99 / 1019.41	10,830.1143	53.1157	1.3322	12,555.0147
Total		**49,598.2850**	**272.1947**	**6.7825**	**58,424.3374**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	1941.39 / 1223.92	13,002.8575	63.7718	1.5995	15,073.8082
General Light Industry	2607.64 / 0	11,645.8009	85.4168	2.0987	14,406.6437
Office Park	1156.27 / 708.681	7,672.5679	37.9786	0.9520	8,905.7413
Regional Shopping Center	971.565 / 595.475	6,446.9445	31.9119	0.8000	7,483.1296
Single Family Housing	1616.99 / 1019.41	10,830.1143	53.1157	1.3322	12,555.0147
Total		**49,598.2850**	**272.1947**	**6.7825**	**58,424.3374**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15,680.8448	926.7114	0.0000	38,848.6294
Unmitigated	15,680.8448	926.7114	0.0000	38,848.6294

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	13706.6	2,782.3200	164.4304	0.0000	6,893.0800
General Light Industry	13982.6	2,838.3435	167.7413	0.0000	7,031.8758
Office Park	6050.23	1,228.1420	72.5811	0.0000	3,042.6699
Regional Shopping Center	13772.2	2,795.6362	165.2174	0.0000	6,926.0704
Single Family Housing	29737.3	6,036.4032	356.7412	0.0000	14,954.9333
Total		**15,680.8448**	**926.7114**	**0.0000**	**38,848.6293**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	13706.6	2,782.3200	164.4304	0.0000	6,893.0800
General Light Industry	13982.6	2,838.3435	167.7413	0.0000	7,031.8758
Office Park	6050.23	1,228.1420	72.5811	0.0000	3,042.6699
Regional Shopping Center	13772.2	2,795.6362	165.2174	0.0000	6,926.0704
Single Family Housing	29737.3	6,036.4032	356.7412	0.0000	14,954.9333
Total		**15,680.8448**	**926.7114**	**0.0000**	**38,848.6293**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Cathedral City GP 2040: Proposed Land Use

Salton Sea Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	6,505.62	1000sqft	1,000.00	6,505,616.00	0
General Light Industry	11,276.34	1000sqft	1,000.00	11,276,342.00	0
Apartments Mid Rise	29,797.00	Dwelling Unit	2,257.00	29,797,000.00	85000
Single Family Housing	24,818.00	Dwelling Unit	8,000.00	44,672,400.00	72530
Regional Shopping Center	13,116.38	1000sqft	2,300.00	13,116,382.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Cathedral City GP 2040: Proposed Land Use - Salton Sea Air Basin, Summer

Project Characteristics -

Land Use - Based on "Proposed Land Use Table," acreages have been adjusted to account for open/public spaces.

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment -

Vehicle Trips - Trip rates/daily trip totals based on results of Traffic Report.

Road Dust - All roadways will be paved at buildout.

Cathedral City GP 2040: Proposed Land Use - Salton Sea Air Basin, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	6,505,620.00	6,505,616.00
tblLandUse	LandUseSquareFeet	11,276,300.00	11,276,342.00
tblLandUse	LandUseSquareFeet	13,116,400.00	13,116,382.00
tblLandUse	LotAcreage	149.35	1,000.00
tblLandUse	LotAcreage	258.87	1,000.00
tblLandUse	LotAcreage	784.13	2,257.00
tblLandUse	LotAcreage	8,057.79	8,000.00
tblLandUse	LotAcreage	301.11	2,300.00
tblLandUse	Population	96,244.00	85,000.00
tblLandUse	Population	80,162.00	72,530.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	13.80
tblVehicleTrips	CC_TL	4.20	13.80
tblVehicleTrips	CC_TL	4.20	13.80
tblVehicleTrips	HS_TL	3.50	5.30
tblVehicleTrips	HS_TL	3.50	5.30
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	35.33
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,816.5952	515.2103	4,686.3398	3.1961		62.4647	62.4647		62.4647	62.4647	0.0000	599,696.7755	599,696.7755	19.0784	10.8456	603,405.7170
Energy	47.7062	414.3509	222.4624	2.6022		32.9606	32.9606		32.9606	32.9606		520,431.1268	520,431.1268	9.9749	9.5412	523,523.7887
Mobile	1,620.7888	13,540.5910	18,742.4372	84.9602	6,198.5003	24.6631	6,223.1634	1,662.2273	23.1235	1,685.3509		8,743,343.9699	8,743,343.9699	376.5867		8,752,758.6383
Total	**4,485.0902**	**14,470.1522**	**23,651.2394**	**90.7584**	**6,198.5003**	**120.0885**	**6,318.5888**	**1,662.2273**	**118.5489**	**1,780.7762**	**0.0000**	**9,863,471.8721**	**9,863,471.8721**	**405.6401**	**20.3868**	**9,879,688.1441**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,816.5952	515.2103	4,686.3398	3.1961		62.4647	62.4647		62.4647	62.4647	0.0000	599,696.7755	599,696.7755	19.0784	10.8456	603,405.7170
Energy	47.7062	414.3509	222.4624	2.6022		32.9606	32.9606		32.9606	32.9606		520,431.1268	520,431.1268	9.9749	9.5412	523,523.7887
Mobile	1,620.7888	13,540.5910	18,742.4372	84.9602	6,198.5003	24.6631	6,223.1634	1,662.2273	23.1235	1,685.3509		8,743,343.9699	8,743,343.9699	376.5867		8,752,758.6383
Total	**4,485.0902**	**14,470.1522**	**23,651.2394**	**90.7584**	**6,198.5003**	**120.0885**	**6,318.5888**	**1,662.2273**	**118.5489**	**1,780.7762**	**0.0000**	**9,863,471.8721**	**9,863,471.8721**	**405.6401**	**20.3868**	**9,879,688.1441**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/2/2140	3/1/2140	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			10,903.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2140

Unmitigated Construction Off-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1,620.7888	13,540.5910	18,742.4372	84.9602	6,198.5003	24.6631	6,223.1634	1,662.2273	23.1235	1,685.3509		8,743,343.9699	8,743,343.9699	376.5867		8,752,758.6383
Unmitigated	1,620.7888	13,540.5910	18,742.4372	84.9602	6,198.5003	24.6631	6,223.1634	1,662.2273	23.1235	1,685.3509		8,743,343.9699	8,743,343.9699	376.5867		8,752,758.6383

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	218,114.04	190,402.83	174610.42	488,362,207	488,362,207
General Light Industry	55,930.65	14,884.77	7667.91	175,030,136	175,030,136
Office Park	80,929.91	10,669.22	4944.27	220,723,521	220,723,521
Regional Shopping Center	463,401.71	459,073.30	331057.43	1,217,607,783	1,217,607,783
Single Family Housing	234,281.92	245,946.38	213931.16	547,312,480	547,312,480
Total	1,052,658.22	920,976.50	732,211.19	2,649,036,126	2,649,036,126

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	5.30	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	13.80	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	13.80	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	13.80	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	5.30	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	47.7062	414.3509	222.4624	2.6022		32.9606	32.9606		32.9606	32.9606		520,431.1268	520,431.1268	9.9749	9.5412	523,523.7887
NaturalGas Unmitigated	47.7062	414.3509	222.4624	2.6022		32.9606	32.9606		32.9606	32.9606		520,431.1268	520,431.1268	9.9749	9.5412	523,523.7887

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1.20772e+006	13.0245	111.3000	47.3617	0.7104		8.9987	8.9987		8.9987	8.9987		142,085.1577	142,085.1577	2.7233	2.6049	142,929.4988
General Light Industry	1.00375e+006	10.8247	98.4068	82.6617	0.5904		7.4789	7.4789		7.4789	7.4789		118,088.1069	118,088.1069	2.2634	2.1650	118,789.8455
Office Park	52044.9	0.5613	5.1024	4.2861	0.0306		0.3878	0.3878		0.3878	0.3878		6,122.9327	6,122.9327	0.1174	0.1123	6,159.3182
Regional Shopping Center	79776.4	0.8603	7.8212	6.5698	0.0469		0.5944	0.5944		0.5944	0.5944		9,385.4530	9,385.4530	0.1799	0.1721	9,441.2261
Single Family Housing	2.08037e+006	22.4354	191.7204	81.5832	1.2238		15.5008	15.5008		15.5008	15.5008		244,749.4765	244,749.4765	4.6910	4.4871	246,203.9002
Total		**47.7062**	**414.3509**	**222.4624**	**2.6022**		**32.9606**	**32.9606**		**32.9606**	**32.9606**		**520,431.1268**	**520,431.1268**	**9.9749**	**9.5412**	**523,523.7887**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1207.72	13.0245	111.3000	47.3617	0.7104		8.9987	8.9987		8.9987	8.9987		142,085.1577	142,085.1577	2.7233	2.6049	142,929.4988
General Light Industry	1003.75	10.8247	98.4068	82.6617	0.5904		7.4789	7.4789		7.4789	7.4789		118,088.1069	118,088.1069	2.2634	2.1650	118,789.8455
Office Park	52.0449	0.5613	5.1024	4.2861	0.0306		0.3878	0.3878		0.3878	0.3878		6,122.9327	6,122.9327	0.1174	0.1123	6,159.3182
Regional Shopping Center	79.7764	0.8603	7.8212	6.5698	0.0469		0.5944	0.5944		0.5944	0.5944		9,385.4530	9,385.4530	0.1799	0.1721	9,441.2261
Single Family Housing	2080.37	22.4354	191.7204	81.5832	1.2238		15.5008	15.5008		15.5008	15.5008		244,749.4765	244,749.4765	4.6910	4.4871	246,203.9002
Total		**47.7062**	**414.3509**	**222.4624**	**2.6022**		**32.9606**	**32.9606**		**32.9606**	**32.9606**		**520,431.1268**	**520,431.1268**	**9.9749**	**9.5412**	**523,523.7887**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,816.5952	515.2103	4,686.3398	3.1961		62.4647	62.4647		62.4647	62.4647	0.0000	599,696.7755	599,696.7755	19.0784	10.8456	603,405.7170
Unmitigated	2,816.5952	515.2103	4,686.3398	3.1961		62.4647	62.4647		62.4647	62.4647	0.0000	599,696.7755	599,696.7755	19.0784	10.8456	603,405.7170

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	373.0379					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,254.8696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	54.2279	463.4019	197.1923	2.9579		37.4665	37.4665		37.4665	37.4665	0.0000	591,576.8294	591,576.8294	11.3386	10.8456	595,092.2747
Landscaping	134.4598	51.8084	4,489.1475	0.2382		24.9982	24.9982		24.9982	24.9982		8,119.9460	8,119.9460	7.7399		8,313.4423
Total	**2,816.5952**	**515.2103**	**4,686.3398**	**3.1961**		**62.4647**	**62.4647**		**62.4647**	**62.4647**	**0.0000**	**599,696.7755**	**599,696.7755**	**19.0784**	**10.8456**	**603,405.7170**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	373.0379					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,254.8696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	54.2279	463.4019	197.1923	2.9579		37.4665	37.4665		37.4665	37.4665	0.0000	591,576.8294	591,576.8294	11.3386	10.8456	595,092.2747
Landscaping	134.4598	51.8084	4,489.1475	0.2382		24.9982	24.9982		24.9982	24.9982		8,119.9460	8,119.9460	7.7399		8,313.4423
Total	**2,816.5952**	**515.2103**	**4,686.3398**	**3.1961**		**62.4647**	**62.4647**		**62.4647**	**62.4647**	**0.0000**	**599,696.7755**	**599,696.7755**	**19.0784**	**10.8456**	**603,405.7170**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Cathedral City GP 2040: Proposed Land Use

Salton Sea Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	6,505.62	1000sqft	1,000.00	6,505,616.00	0
General Light Industry	11,276.34	1000sqft	1,000.00	11,276,342.00	0
Apartments Mid Rise	29,797.00	Dwelling Unit	2,257.00	29,797,000.00	85000
Single Family Housing	24,818.00	Dwelling Unit	8,000.00	44,672,400.00	72530
Regional Shopping Center	13,116.38	1000sqft	2,300.00	13,116,382.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Cathedral City GP 2040: Proposed Land Use - Salton Sea Air Basin, Winter

Project Characteristics -

Land Use - Based on "Proposed Land Use Table," acreages have been adjusted to account for open/public spaces.

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment -

Vehicle Trips - Trip rates/daily trip totals based on results of Traffic Report.

Road Dust - All roadways will be paved at buildout.

Cathedral City GP 2040: Proposed Land Use - Salton Sea Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	6,505,620.00	6,505,616.00
tblLandUse	LandUseSquareFeet	11,276,300.00	11,276,342.00
tblLandUse	LandUseSquareFeet	13,116,400.00	13,116,382.00
tblLandUse	LotAcreage	149.35	1,000.00
tblLandUse	LotAcreage	258.87	1,000.00
tblLandUse	LotAcreage	784.13	2,257.00
tblLandUse	LotAcreage	8,057.79	8,000.00
tblLandUse	LotAcreage	301.11	2,300.00
tblLandUse	Population	96,244.00	85,000.00
tblLandUse	Population	80,162.00	72,530.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	13.80
tblVehicleTrips	CC_TL	4.20	13.80
tblVehicleTrips	CC_TL	4.20	13.80
tblVehicleTrips	HS_TL	3.50	5.30
tblVehicleTrips	HS_TL	3.50	5.30
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	35.33
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,816.5952	515.2103	4,686.3398	3.1961		62.4647	62.4647		62.4647	62.4647	0.0000	599,696.7755	599,696.7755	19.0784	10.8456	603,405.7170
Energy	47.7062	414.3509	222.4624	2.6022		32.9606	32.9606		32.9606	32.9606		520,431.1268	520,431.1268	9.9749	9.5412	523,523.7887
Mobile	1,267.8995	13,324.6961	15,067.2094	76.8365	6,198.5003	24.8697	6,223.3700	1,662.2273	23.3212	1,685.5485		7,924,318.5023	7,924,318.5023	375.0012		7,933,693.5330
Total	**4,132.2009**	**14,254.2572**	**19,976.0116**	**82.6347**	**6,198.5003**	**120.2951**	**6,318.7954**	**1,662.2273**	**118.7465**	**1,780.9739**	**0.0000**	**9,044,446.4045**	**9,044,446.4045**	**404.0546**	**20.3868**	**9,060,623.0387**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,816.5952	515.2103	4,686.3398	3.1961		62.4647	62.4647		62.4647	62.4647	0.0000	599,696.7755	599,696.7755	19.0784	10.8456	603,405.7170
Energy	47.7062	414.3509	222.4624	2.6022		32.9606	32.9606		32.9606	32.9606		520,431.1268	520,431.1268	9.9749	9.5412	523,523.7887
Mobile	1,267.8995	13,324.6961	15,067.2094	76.8365	6,198.5003	24.8697	6,223.3700	1,662.2273	23.3212	1,685.5485		7,924,318.5023	7,924,318.5023	375.0012		7,933,693.5330
Total	**4,132.2009**	**14,254.2572**	**19,976.0116**	**82.6347**	**6,198.5003**	**120.2951**	**6,318.7954**	**1,662.2273**	**118.7465**	**1,780.9739**	**0.0000**	**9,044,446.4045**	**9,044,446.4045**	**404.0546**	**20.3868**	**9,060,623.0387**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/2/2140	3/1/2140	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			10,903.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2140

Unmitigated Construction Off-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1,267.8995	13,324.6961	15,067.2094	76.8365	6,198.5003	24.8697	6,223.3700	1,662.2273	23.3212	1,685.5485		7,924,318.5023	7,924,318.5023	375.0012		7,933,693.5330
Unmitigated	1,267.8995	13,324.6961	15,067.2094	76.8365	6,198.5003	24.8697	6,223.3700	1,662.2273	23.3212	1,685.5485		7,924,318.5023	7,924,318.5023	375.0012		7,933,693.5330

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	218,114.04	190,402.83	174610.42	488,362,207	488,362,207
General Light Industry	55,930.65	14,884.77	7667.91	175,030,136	175,030,136
Office Park	80,929.91	10,669.22	4944.27	220,723,521	220,723,521
Regional Shopping Center	463,401.71	459,073.30	331057.43	1,217,607,783	1,217,607,783
Single Family Housing	234,281.92	245,946.38	213931.16	547,312,480	547,312,480
Total	1,052,658.22	920,976.50	732,211.19	2,649,036,126	2,649,036,126

4.3 Trip Type Information

Cathedral City GP 2040: Proposed Land Use - Salton Sea Air Basin, Winter

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	5.30	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	13.80	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	13.80	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	13.80	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	5.30	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	47.7062	414.3509	222.4624	2.6022		32.9606	32.9606		32.9606	32.9606		520,431.1268	520,431.1268	9.9749	9.5412	523,523.7887
NaturalGas Unmitigated	47.7062	414.3509	222.4624	2.6022		32.9606	32.9606		32.9606	32.9606		520,431.1268	520,431.1268	9.9749	9.5412	523,523.7887

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1.20772e+006	13.0245	111.3000	47.3617	0.7104		8.9987	8.9987		8.9987	8.9987		142,085.1577	142,085.1577	2.7233	2.6049	142,929.4988
General Light Industry	1.00375e+006	10.8247	98.4068	82.6617	0.5904		7.4789	7.4789		7.4789	7.4789		118,088.1069	118,088.1069	2.2634	2.1650	118,789.8455
Office Park	52044.9	0.5613	5.1024	4.2861	0.0306		0.3878	0.3878		0.3878	0.3878		6,122.9327	6,122.9327	0.1174	0.1123	6,159.3182
Regional Shopping Center	79776.4	0.8603	7.8212	6.5698	0.0469		0.5944	0.5944		0.5944	0.5944		9,385.4530	9,385.4530	0.1799	0.1721	9,441.2261
Single Family Housing	2.08037e+006	22.4354	191.7204	81.5832	1.2238		15.5008	15.5008		15.5008	15.5008		244,749.4765	244,749.4765	4.6910	4.4871	246,203.9002
Total		**47.7062**	**414.3509**	**222.4624**	**2.6022**		**32.9606**	**32.9606**		**32.9606**	**32.9606**		**520,431.1268**	**520,431.1268**	**9.9749**	**9.5412**	**523,523.7887**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1207.72	13.0245	111.3000	47.3617	0.7104		8.9987	8.9987		8.9987	8.9987		142,085.1577	142,085.1577	2.7233	2.6049	142,929.4988
General Light Industry	1003.75	10.8247	98.4068	82.6617	0.5904		7.4789	7.4789		7.4789	7.4789		118,088.1069	118,088.1069	2.2634	2.1650	118,789.8455
Office Park	52.0449	0.5613	5.1024	4.2861	0.0306		0.3878	0.3878		0.3878	0.3878		6,122.9327	6,122.9327	0.1174	0.1123	6,159.3182
Regional Shopping Center	79.7764	0.8603	7.8212	6.5698	0.0469		0.5944	0.5944		0.5944	0.5944		9,385.4530	9,385.4530	0.1799	0.1721	9,441.2261
Single Family Housing	2080.37	22.4354	191.7204	81.5832	1.2238		15.5008	15.5008		15.5008	15.5008		244,749.4765	244,749.4765	4.6910	4.4871	246,203.9002
Total		**47.7062**	**414.3509**	**222.4624**	**2.6022**		**32.9606**	**32.9606**		**32.9606**	**32.9606**		**520,431.1268**	**520,431.1268**	**9.9749**	**9.5412**	**523,523.7887**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,816.5952	515.2103	4,686.3398	3.1961		62.4647	62.4647		62.4647	62.4647	0.0000	599,696.7755	599,696.7755	19.0784	10.8456	603,405.7170
Unmitigated	2,816.5952	515.2103	4,686.3398	3.1961		62.4647	62.4647		62.4647	62.4647	0.0000	599,696.7755	599,696.7755	19.0784	10.8456	603,405.7170

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	373.0379					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,254.8696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	54.2279	463.4019	197.1923	2.9579		37.4665	37.4665		37.4665	37.4665	0.0000	591,576.8294	591,576.8294	11.3386	10.8456	595,092.2747
Landscaping	134.4598	51.8084	4,489.1475	0.2382		24.9982	24.9982		24.9982	24.9982		8,119.9460	8,119.9460	7.7399		8,313.4423
Total	**2,816.5952**	**515.2103**	**4,686.3398**	**3.1961**		**62.4647**	**62.4647**		**62.4647**	**62.4647**	**0.0000**	**599,696.7755**	**599,696.7755**	**19.0784**	**10.8456**	**603,405.7170**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	373.0379					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,254.8696					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	54.2279	463.4019	197.1923	2.9579		37.4665	37.4665		37.4665	37.4665	0.0000	591,576.8294	591,576.8294	11.3386	10.8456	595,092.2747
Landscaping	134.4598	51.8084	4,489.1475	0.2382		24.9982	24.9982		24.9982	24.9982		8,119.9460	8,119.9460	7.7399		8,313.4423
Total	**2,816.5952**	**515.2103**	**4,686.3398**	**3.1961**		**62.4647**	**62.4647**		**62.4647**	**62.4647**	**0.0000**	**599,696.7755**	**599,696.7755**	**19.0784**	**10.8456**	**603,405.7170**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Cathedral City GP 2040: Alternative 1

Salton Sea Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	5,645.87	1000sqft	1,000.00	5,645,873.00	0
General Light Industry	11,406.23	1000sqft	1,000.00	11,406,230.00	0
Apartments Mid Rise	34,187.00	Dwelling Unit	2,257.00	34,187,000.00	108030
Single Family Housing	23,613.00	Dwelling Unit	8,000.00	42,503,400.00	76270
Regional Shopping Center	13,639.34	1000sqft	2,300.00	13,639,337.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on "Alternative 1 Land Use Table," acreages have been adjusted to account for open/public spaces.

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment -

Vehicle Trips - Trip rates/daily trip totals based on results of Traffic Report.

Road Dust - All roadways will be paved at buildout.

Cathedral City GP 2040: Alternative 1 - Salton Sea Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	5,645,870.00	5,645,873.00
tblLandUse	LandUseSquareFeet	11,406,200.00	11,406,230.00
tblLandUse	LandUseSquareFeet	13,639,300.00	13,639,337.00
tblLandUse	LotAcreage	129.61	1,000.00
tblLandUse	LotAcreage	261.85	1,000.00
tblLandUse	LotAcreage	899.66	2,257.00
tblLandUse	LotAcreage	7,666.56	8,000.00
tblLandUse	LotAcreage	313.12	2,300.00
tblLandUse	Population	110,424.00	108,030.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	14.70
tblVehicleTrips	CC_TL	4.20	14.70
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

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					
2140					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
2140					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	501.6339	5.9889	428.0152	0.0294		2.4662	2.4662		2.4662	2.4662	0.0000	1,922.7209	1,922.7209	0.6921	0.0224	1,946.6948
Energy	8.8733	77.0535	41.2681	0.4840		6.1306	6.1306		6.1306	6.1306	0.0000	312,751.0015	312,751.0015	10.9695	3.5313	314,077.5567
Mobile	235.7929	2,332.3470	2,723.9017	13.7575	1,043.5270	4.2194	1,047.7465	280.1162	3.9562	284.0724	0.0000	1,286,326.5340	1,286,326.5340	57.5983	0.0000	1,287,766.4914
Waste						0.0000	0.0000		0.0000	0.0000	16,383.8736	0.0000	16,383.8736	968.2592	0.0000	40,590.3533
Water						0.0000	0.0000		0.0000	0.0000	2,670.4354	47,694.9277	50,365.3631	276.2484	6.8837	59,322.9222
Total	**746.3001**	**2,415.3895**	**3,193.1850**	**14.2709**	**1,043.5270**	**12.8163**	**1,056.3433**	**280.1162**	**12.5531**	**292.6693**	**19,054.3090**	**1,648,695.1841**	**1,667,749.4931**	**1,313.7675**	**10.4374**	**1,703,704.0184**

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	501.6339	5.9889	428.0152	0.0294		2.4662	2.4662		2.4662	2.4662	0.0000	1,922.7209	1,922.7209	0.6921	0.0224	1,946.6948
Energy	8.8733	77.0535	41.2681	0.4840		6.1306	6.1306		6.1306	6.1306	0.0000	312,751.0015	312,751.0015	10.9695	3.5313	314,077.5567
Mobile	235.7929	2,332.3470	2,723.9017	13.7575	1,043.5270	4.2194	1,047.7465	280.1162	3.9562	284.0724	0.0000	1,286,326.5340	1,286,326.5340	57.5983	0.0000	1,287,766.4914
Waste						0.0000	0.0000		0.0000	0.0000	16,383.8736	0.0000	16,383.8736	968.2592	0.0000	40,590.3533
Water						0.0000	0.0000		0.0000	0.0000	2,670.4354	47,694.9277	50,365.3631	276.2484	6.8837	59,322.9222
Total	**746.3001**	**2,415.3895**	**3,193.1850**	**14.2709**	**1,043.5270**	**12.8163**	**1,056.3433**	**280.1162**	**12.5531**	**292.6693**	**19,054.3090**	**1,648,695.1841**	**1,667,749.4931**	**1,313.7675**	**10.4374**	**1,703,704.0184**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/2/2140	3/1/2140	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			11,209.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2140

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	235.7929	2,332.3470	2,723.9017	13.7575	1,043.5270	4.2194	1,047.7465	280.1162	3.9562	284.0724	0.0000	1,286,326.5340	1,286,326.5340	57.5983	0.0000	1,287,766.4914
Unmitigated	235.7929	2,332.3470	2,723.9017	13.7575	1,043.5270	4.2194	1,047.7465	280.1162	3.9562	284.0724	0.0000	1,286,326.5340	1,286,326.5340	57.5983	0.0000	1,287,766.4914

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	250,248.84	218,454.93	200335.82	533,676,619	533,676,619
General Light Industry	56,574.90	15,056.22	7756.24	180,781,611	180,781,611
Office Park	70,234.62	9,259.23	4290.86	198,579,430	198,579,430
Regional Shopping Center	477,376.90	477,376.90	344256.94	1,291,204,126	1,291,204,126
Single Family Housing	222,906.72	234,004.83	203544.06	495,983,713	495,983,713
Total	1,077,341.98	954,152.11	760,183.92	2,700,225,499	2,700,225,499

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	14.70	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	14.70	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	14.30	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Cathedral City GP 2040: Alternative 1 - Salton Sea Air Basin, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	224,936.2768	224,936.2768	9.2864	1.9213	225,740.9931
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	224,936.2768	224,936.2768	9.2864	1.9213	225,740.9931
NaturalGas Mitigated	8.8733	77.0535	41.2681	0.4840		6.1306	6.1306		6.1306	6.1306	0.0000	87,814.7247	87,814.7247	1.6831	1.6099	88,336.5637
NaturalGas Unmitigated	8.8733	77.0535	41.2681	0.4840		6.1306	6.1306		6.1306	6.1306	0.0000	87,814.7247	87,814.7247	1.6831	1.6099	88,336.5637

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					
Apartments Mid Rise	5.05765e+008	2.7272	23.3049	9.9170	0.1488		1.8842	1.8842		1.8842	1.8842	0.0000	26,989.5578	26,989.5578	0.5173	0.4948	27,149.9433
General Light Industry	3.70588e+008	1.9983	18.1661	15.2595	0.1090		1.3806	1.3806		1.3806	1.3806	0.0000	19,776.0090	19,776.0090	0.3790	0.3626	19,893.5279
Office Park	1.64859e+007	0.0889	0.8081	0.6788	4.8500e-003		0.0614	0.0614		0.0614	0.0614	0.0000	879.7530	879.7530	0.0169	0.0161	884.9810
Regional Shopping Center	3.02793e+007	0.1633	1.4843	1.2468	8.9100e-003		0.1128	0.1128		0.1128	0.1128	0.0000	1,615.8203	1,615.8203	0.0310	0.0296	1,625.4223
Single Family Housing	7.22467e+008	3.8957	33.2901	14.1660	0.2125		2.6915	2.6915		2.6915	2.6915	0.0000	38,553.5846	38,553.5846	0.7389	0.7068	38,782.6893
Total		**8.8733**	**77.0535**	**41.2681**	**0.4840**		**6.1306**	**6.1306**		**6.1306**	**6.1306**	**0.0000**	**87,814.7247**	**87,814.7247**	**1.6831**	**1.6099**	**88,336.5637**

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					
Apartments Mid Rise	5.05765e+008	2.7272	23.3049	9.9170	0.1488		1.8842	1.8842		1.8842	1.8842	0.0000	26,989.5578	26,989.5578	0.5173	0.4948	27,149.9433
General Light Industry	3.70588e+008	1.9983	18.1661	15.2595	0.1090		1.3806	1.3806		1.3806	1.3806	0.0000	19,776.0090	19,776.0090	0.3790	0.3626	19,893.5279
Office Park	1.64859e+007	0.0889	0.8081	0.6788	4.8500e-003		0.0614	0.0614		0.0614	0.0614	0.0000	879.7530	879.7530	0.0169	0.0161	884.9810
Regional Shopping Center	3.02793e+007	0.1633	1.4843	1.2468	8.9100e-003		0.1128	0.1128		0.1128	0.1128	0.0000	1,615.8203	1,615.8203	0.0310	0.0296	1,625.4223
Single Family Housing	7.22467e+008	3.8957	33.2901	14.1660	0.2125		2.6915	2.6915		2.6915	2.6915	0.0000	38,553.5846	38,553.5846	0.7389	0.7068	38,782.6893
Total		**8.8733**	**77.0535**	**41.2681**	**0.4840**		**6.1306**	**6.1306**		**6.1306**	**6.1306**	**0.0000**	**87,814.7247**	**87,814.7247**	**1.6831**	**1.6099**	**88,336.5637**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.56156e+008	49,754.7433	2.0541	0.4250	49,932.7424
General Light Industry	1.15773e+008	36,887.8329	1.5229	0.3151	37,019.8002
Office Park	5.59506e+007	17,827.0603	0.7360	0.1523	17,890.8372
Regional Shopping Center	1.72265e+008	54,887.2643	2.2660	0.4688	55,083.6252
Single Family Housing	2.05822e+008	65,579.3760	2.7074	0.5602	65,813.9882
Total		**224,936.2768**	**9.2864**	**1.9213**	**225,740.9930**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.56156e+008	49,754.7433	2.0541	0.4250	49,932.7424
General Light Industry	1.15773e+008	36,887.8329	1.5229	0.3151	37,019.8002
Office Park	5.59506e+007	17,827.0603	0.7360	0.1523	17,890.8372
Regional Shopping Center	1.72265e+008	54,887.2643	2.2660	0.4688	55,083.6252
Single Family Housing	2.05822e+008	65,579.3760	2.7074	0.5602	65,813.9882
Total		**224,936.2768**	**9.2864**	**1.9213**	**225,740.9930**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	501.6339	5.9889	428.0152	0.0294		2.4662	2.4662		2.4662	2.4662	0.0000	1,922.7209	1,922.7209	0.6921	0.0224	1,946.6948
Unmitigated	501.6339	5.9889	428.0152	0.0294		2.4662	2.4662		2.4662	2.4662	0.0000	1,922.7209	1,922.7209	0.6921	0.0224	1,946.6948

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	69.3253					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	419.3798					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1234	1.0544	0.4487	6.7300e-003		0.0853	0.0853		0.0853	0.0853	0.0000	1,221.1282	1,221.1282	0.0234	0.0224	1,228.3847
Landscaping	12.8054	4.9345	427.5665	0.0227		2.3810	2.3810		2.3810	2.3810	0.0000	701.5927	701.5927	0.6687	0.0000	718.3100
Total	**501.6339**	**5.9889**	**428.0152**	**0.0294**		**2.4662**	**2.4662**		**2.4662**	**2.4662**	**0.0000**	**1,922.7209**	**1,922.7209**	**0.6921**	**0.0224**	**1,946.6948**

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	69.3253					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	419.3798					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1234	1.0544	0.4487	6.7300e-003		0.0853	0.0853		0.0853	0.0853	0.0000	1,221.1282	1,221.1282	0.0234	0.0224	1,228.3847
Landscaping	12.8054	4.9345	427.5665	0.0227		2.3810	2.3810		2.3810	2.3810	0.0000	701.5927	701.5927	0.6687	0.0000	718.3100
Total	**501.6339**	**5.9889**	**428.0152**	**0.0294**		**2.4662**	**2.4662**		**2.4662**	**2.4662**	**0.0000**	**1,922.7209**	**1,922.7209**	**0.6921**	**0.0224**	**1,946.6948**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	50,365.3631	276.2484	6.8837	59,322.9222
Unmitigated	50,365.3631	276.2484	6.8837	59,322.9222

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	2227.42 / 1404.24	14,918.5719	73.1673	1.8352	17,294.6364
General Light Industry	2637.68 / 0	11,779.9574	86.4008	2.1229	14,572.6044
Office Park	1003.46 / 615.025	6,658.5999	32.9596	0.8262	7,728.8034
Regional Shopping Center	1010.3 / 619.215	6,703.9591	33.1841	0.8319	7,781.4529
Single Family Housing	1538.48 / 969.913	10,304.2747	50.5367	1.2676	11,945.4251
Total		**50,365.3631**	**276.2484**	**6.8837**	**59,322.9222**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	2227.42 / 1404.24	14,918.5719	73.1673	1.8352	17,294.6364
General Light Industry	2637.68 / 0	11,779.9574	86.4008	2.1229	14,572.6044
Office Park	1003.46 / 615.025	6,658.5999	32.9596	0.8262	7,728.8034
Regional Shopping Center	1010.3 / 619.215	6,703.9591	33.1841	0.8319	7,781.4529
Single Family Housing	1538.48 / 969.913	10,304.2747	50.5367	1.2676	11,945.4251
Total		**50,365.3631**	**276.2484**	**6.8837**	**59,322.9222**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	16,383.8736	968.2592	0.0000	40,590.3533
Unmitigated	16,383.8736	968.2592	0.0000	40,590.3533

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	15726	3,192.2399	188.6560	0.0000	7,908.6393
General Light Industry	14143.7	2,871.0413	169.6737	0.0000	7,112.8832
Office Park	5250.66	1,065.8365	62.9891	0.0000	2,640.5649
Regional Shopping Center	14321.3	2,907.0864	171.8039	0.0000	7,202.1834
Single Family Housing	31270.7	6,347.6695	375.1365	0.0000	15,726.0825
Total		**16,383.8736**	**968.2592**	**0.0000**	**40,590.3533**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	15726	3,192.2399	188.6560	0.0000	7,908.6393
General Light Industry	14143.7	2,871.0413	169.6737	0.0000	7,112.8832
Office Park	5250.66	1,065.8365	62.9891	0.0000	2,640.5649
Regional Shopping Center	14321.3	2,907.0864	171.8039	0.0000	7,202.1834
Single Family Housing	31270.7	6,347.6695	375.1365	0.0000	15,726.0825
Total		**16,383.8736**	**968.2592**	**0.0000**	**40,590.3533**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Cathedral City GP 2040: Alternative 1

Salton Sea Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	5,645.87	1000sqft	1,000.00	5,645,873.00	0
General Light Industry	11,406.23	1000sqft	1,000.00	11,406,230.00	0
Apartments Mid Rise	34,187.00	Dwelling Unit	2,257.00	34,187,000.00	108030
Single Family Housing	23,613.00	Dwelling Unit	8,000.00	42,503,400.00	76270
Regional Shopping Center	13,639.34	1000sqft	2,300.00	13,639,337.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on "Alternative 1 Land Use Table," acreages have been adjusted to account for open/public spaces.

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment -

Vehicle Trips - Trip rates/daily trip totals based on results of Traffic Report.

Road Dust - All roadways will be paved at buildout.

Cathedral City GP 2040: Alternative 1 - Salton Sea Air Basin, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	5,645,870.00	5,645,873.00
tblLandUse	LandUseSquareFeet	11,406,200.00	11,406,230.00
tblLandUse	LandUseSquareFeet	13,639,300.00	13,639,337.00
tblLandUse	LotAcreage	129.61	1,000.00
tblLandUse	LotAcreage	261.85	1,000.00
tblLandUse	LotAcreage	899.66	2,257.00
tblLandUse	LotAcreage	7,666.56	8,000.00
tblLandUse	LotAcreage	313.12	2,300.00
tblLandUse	Population	110,424.00	108,030.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	14.70
tblVehicleTrips	CC_TL	4.20	14.70
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,877.5086	545.2541	4,959.4307	3.3824		66.1068	66.1068		66.1068	66.1068	0.0000	634,669.0398	634,669.0398	20.1899	11.4781	638,594.2486
Energy	48.6206	422.2111	226.1268	2.6520		33.5924	33.5924		33.5924	33.5924		530,406.3797	530,406.3797	10.1661	9.7241	533,558.3196
Mobile	1,653.0814	13,830.0842	19,059.1568	86.4140	6,294.2506	25.0640	6,319.3146	1,687.9043	23.4992	1,711.4035		8,893,196.0722	8,893,196.0722	383.6302		8,902,786.8265
Total	**4,579.2106**	**14,797.5494**	**24,244.7143**	**92.4484**	**6,294.2506**	**124.7632**	**6,419.0138**	**1,687.9043**	**123.1983**	**1,811.1027**	**0.0000**	**10,058,271.4917**	**10,058,271.4917**	**413.9862**	**21.2022**	**10,074,939.3947**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,877.5086	545.2541	4,959.4307	3.3824		66.1068	66.1068		66.1068	66.1068	0.0000	634,669.0398	634,669.0398	20.1899	11.4781	638,594.2486
Energy	48.6206	422.2111	226.1268	2.6520		33.5924	33.5924		33.5924	33.5924		530,406.3797	530,406.3797	10.1661	9.7241	533,558.3196
Mobile	1,653.0814	13,830.0842	19,059.1568	86.4140	6,294.2506	25.0640	6,319.3146	1,687.9043	23.4992	1,711.4035		8,893,196.0722	8,893,196.0722	383.6302		8,902,786.8265
Total	**4,579.2106**	**14,797.5494**	**24,244.7143**	**92.4484**	**6,294.2506**	**124.7632**	**6,419.0138**	**1,687.9043**	**123.1983**	**1,811.1027**	**0.0000**	**10,058,271.4917**	**10,058,271.4917**	**413.9862**	**21.2022**	**10,074,939.3947**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/2/2140	3/1/2140	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			11,209.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2140

Unmitigated Construction Off-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1,653.0814	13,830.0842	19,059.1568	86.4140	6,294.2506	25.0640	6,319.3146	1,687.9043	23.4992	1,711.4035		8,893,196.0722	8,893,196.0722	383.6302		8,902,786.8265
Unmitigated	1,653.0814	13,830.0842	19,059.1568	86.4140	6,294.2506	25.0640	6,319.3146	1,687.9043	23.4992	1,711.4035		8,893,196.0722	8,893,196.0722	383.6302		8,902,786.8265

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	250,248.84	218,454.93	200335.82	533,676,619	533,676,619
General Light Industry	56,574.90	15,056.22	7756.24	180,781,611	180,781,611
Office Park	70,234.62	9,259.23	4290.86	198,579,430	198,579,430
Regional Shopping Center	477,376.90	477,376.90	344256.94	1,291,204,126	1,291,204,126
Single Family Housing	222,906.72	234,004.83	203544.06	495,983,713	495,983,713
Total	1,077,341.98	954,152.11	760,183.92	2,700,225,499	2,700,225,499

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	14.70	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	14.70	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	14.30	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	48.6206	422.2111	226.1268	2.6520		33.5924	33.5924		33.5924	33.5924		530,406.3797	530,406.3797	10.1661	9.7241	533,558.3196
NaturalGas Unmitigated	48.6206	422.2111	226.1268	2.6520		33.5924	33.5924		33.5924	33.5924		530,406.3797	530,406.3797	10.1661	9.7241	533,558.3196

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1.38566e+006	14.9434	127.6979	54.3395	0.8151		10.3245	10.3245		10.3245	10.3245		163,018.6021	163,018.6021	3.1245	2.9887	163,987.3401
General Light Industry	1.01531e+006	10.9494	99.5403	83.6138	0.5972		7.5651	7.5651		7.5651	7.5651		119,448.3200	119,448.3200	2.2894	2.1899	120,158.1416
Office Park	45167	0.4871	4.4281	3.7196	0.0266		0.3365	0.3365		0.3365	0.3365		5,313.7628	5,313.7628	0.1019	0.0974	5,345.3399
Regional Shopping Center	82957.1	0.8946	8.1331	6.8318	0.0488		0.6181	0.6181		0.6181	0.6181		9,759.6545	9,759.6545	0.1871	0.1789	9,817.6513
Single Family Housing	1.97936e+006	21.3461	182.4117	77.6220	1.1643		14.7482	14.7482		14.7482	14.7482		232,866.0403	232,866.0403	4.4633	4.2692	234,249.8467
Total		**48.6206**	**422.2111**	**226.1268**	**2.6520**		**33.5924**	**33.5924**		**33.5924**	**33.5924**		**530,406.3797**	**530,406.3797**	**10.1661**	**9.7241**	**533,558.3196**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1385.66	14.9434	127.6979	54.3395	0.8151		10.3245	10.3245		10.3245	10.3245		163,018.6021	163,018.6021	3.1245	2.9887	163,987.3401
General Light Industry	1015.31	10.9494	99.5403	83.6138	0.5972		7.5651	7.5651		7.5651	7.5651		119,448.3200	119,448.3200	2.2894	2.1899	120,158.1416
Office Park	45.167	0.4871	4.4281	3.7196	0.0266		0.3365	0.3365		0.3365	0.3365		5,313.7628	5,313.7628	0.1019	0.0974	5,345.3399
Regional Shopping Center	82.9571	0.8946	8.1331	6.8318	0.0488		0.6181	0.6181		0.6181	0.6181		9,759.6545	9,759.6545	0.1871	0.1789	9,817.6513
Single Family Housing	1979.36	21.3461	182.4117	77.6220	1.1643		14.7482	14.7482		14.7482	14.7482		232,866.0403	232,866.0403	4.4633	4.2692	234,249.8467
Total		**48.6206**	**422.2111**	**226.1268**	**2.6520**		**33.5924**	**33.5924**		**33.5924**	**33.5924**		**530,406.3797**	**530,406.3797**	**10.1661**	**9.7241**	**533,558.3196**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,877.5086	545.2541	4,959.4307	3.3824		66.1068	66.1068		66.1068	66.1068	0.0000	634,669.0398	634,669.0398	20.1899	11.4781	638,594.2486
Unmitigated	2,877.5086	545.2541	4,959.4307	3.3824		66.1068	66.1068		66.1068	66.1068	0.0000	634,669.0398	634,669.0398	20.1899	11.4781	638,594.2486

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	379.8645					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,297.9714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	57.3903	490.4262	208.6920	3.1304		39.6515	39.6515		39.6515	39.6515	0.0000	626,076.0000	626,076.0000	11.9998	11.4781	629,796.4566
Landscaping	142.2824	54.8279	4,750.7387	0.2520		26.4553	26.4553		26.4553	26.4553		8,593.0398	8,593.0398	8.1901		8,797.7919
Total	**2,877.5086**	**545.2541**	**4,959.4307**	**3.3824**		**66.1068**	**66.1068**		**66.1068**	**66.1068**	**0.0000**	**634,669.0398**	**634,669.0398**	**20.1899**	**11.4781**	**638,594.2486**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	379.8645					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,297.9714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	57.3903	490.4262	208.6920	3.1304		39.6515	39.6515		39.6515	39.6515	0.0000	626,076.0000	626,076.0000	11.9998	11.4781	629,796.4566
Landscaping	142.2824	54.8279	4,750.7387	0.2520		26.4553	26.4553		26.4553	26.4553		8,593.0398	8,593.0398	8.1901		8,797.7919
Total	**2,877.5086**	**545.2541**	**4,959.4307**	**3.3824**		**66.1068**	**66.1068**		**66.1068**	**66.1068**	**0.0000**	**634,669.0398**	**634,669.0398**	**20.1899**	**11.4781**	**638,594.2486**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Cathedral City GP 2040: Alternative 1

Salton Sea Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	5,645.87	1000sqft	1,000.00	5,645,873.00	0
General Light Industry	11,406.23	1000sqft	1,000.00	11,406,230.00	0
Apartments Mid Rise	34,187.00	Dwelling Unit	2,257.00	34,187,000.00	108030
Single Family Housing	23,613.00	Dwelling Unit	8,000.00	42,503,400.00	76270
Regional Shopping Center	13,639.34	1000sqft	2,300.00	13,639,337.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Based on "Alternative 1 Land Use Table," acreages have been adjusted to account for open/public spaces.

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment -

Vehicle Trips - Trip rates/daily trip totals based on results of Traffic Report.

Road Dust - All roadways will be paved at buildout.

Cathedral City GP 2040: Alternative 1 - Salton Sea Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	5,645,870.00	5,645,873.00
tblLandUse	LandUseSquareFeet	11,406,200.00	11,406,230.00
tblLandUse	LandUseSquareFeet	13,639,300.00	13,639,337.00
tblLandUse	LotAcreage	129.61	1,000.00
tblLandUse	LotAcreage	261.85	1,000.00
tblLandUse	LotAcreage	899.66	2,257.00
tblLandUse	LotAcreage	7,666.56	8,000.00
tblLandUse	LotAcreage	313.12	2,300.00
tblLandUse	Population	110,424.00	108,030.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	14.70
tblVehicleTrips	CC_TL	4.20	14.70
tblVehicleTrips	CC_TL	4.20	14.30
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2140	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,877.5086	545.2541	4,959.4307	3.3824		66.1068	66.1068		66.1068	66.1068	0.0000	634,669.0398	634,669.0398	20.1899	11.4781	638,594.2486
Energy	48.6206	422.2111	226.1268	2.6520		33.5924	33.5924		33.5924	33.5924		530,406.3797	530,406.3797	10.1661	9.7241	533,558.3196
Mobile	1,292.6670	13,608.0550	15,333.2141	78.1470	6,294.2506	25.2753	6,319.5259	1,687.9043	23.7013	1,711.6056		8,059,636.1402	8,059,636.1402	382.1998		8,069,191.1338
Total	**4,218.7962**	**14,575.5202**	**20,518.7716**	**84.1814**	**6,294.2506**	**124.9745**	**6,419.2251**	**1,687.9043**	**123.4005**	**1,811.3048**	**0.0000**	**9,224,711.5597**	**9,224,711.5597**	**412.5557**	**21.2022**	**9,241,343.7020**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,877.5086	545.2541	4,959.4307	3.3824		66.1068	66.1068		66.1068	66.1068	0.0000	634,669.0398	634,669.0398	20.1899	11.4781	638,594.2486
Energy	48.6206	422.2111	226.1268	2.6520		33.5924	33.5924		33.5924	33.5924		530,406.3797	530,406.3797	10.1661	9.7241	533,558.3196
Mobile	1,292.6670	13,608.0550	15,333.2141	78.1470	6,294.2506	25.2753	6,319.5259	1,687.9043	23.7013	1,711.6056		8,059,636.1402	8,059,636.1402	382.1998		8,069,191.1338
Total	**4,218.7962**	**14,575.5202**	**20,518.7716**	**84.1814**	**6,294.2506**	**124.9745**	**6,419.2251**	**1,687.9043**	**123.4005**	**1,811.3048**	**0.0000**	**9,224,711.5597**	**9,224,711.5597**	**412.5557**	**21.2022**	**9,241,343.7020**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	3/2/2140	3/1/2140	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			11,209.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2140

Unmitigated Construction Off-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1,292.6670	13,608.0550	15,333.2141	78.1470	6,294.2506	25.2753	6,319.5259	1,687.9043	23.7013	1,711.6056		8,059,636.1402	8,059,636.1402	382.1998		8,069,191.1338
Unmitigated	1,292.6670	13,608.0550	15,333.2141	78.1470	6,294.2506	25.2753	6,319.5259	1,687.9043	23.7013	1,711.6056		8,059,636.1402	8,059,636.1402	382.1998		8,069,191.1338

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	250,248.84	218,454.93	200335.82	533,676,619	533,676,619
General Light Industry	56,574.90	15,056.22	7756.24	180,781,611	180,781,611
Office Park	70,234.62	9,259.23	4290.86	198,579,430	198,579,430
Regional Shopping Center	477,376.90	477,376.90	344256.94	1,291,204,126	1,291,204,126
Single Family Housing	222,906.72	234,004.83	203544.06	495,983,713	495,983,713
Total	1,077,341.98	954,152.11	760,183.92	2,700,225,499	2,700,225,499

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	14.70	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	14.70	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	14.30	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	48.6206	422.2111	226.1268	2.6520		33.5924	33.5924		33.5924	33.5924		530,406.3797	530,406.3797	10.1661	9.7241	533,558.3196
NaturalGas Unmitigated	48.6206	422.2111	226.1268	2.6520		33.5924	33.5924		33.5924	33.5924		530,406.3797	530,406.3797	10.1661	9.7241	533,558.3196

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1.38566e+006	14.9434	127.6979	54.3395	0.8151		10.3245	10.3245		10.3245	10.3245		163,018.6021	163,018.6021	3.1245	2.9887	163,987.3401
General Light Industry	1.01531e+006	10.9494	99.5403	83.6138	0.5972		7.5651	7.5651		7.5651	7.5651		119,448.3200	119,448.3200	2.2894	2.1899	120,158.1416
Office Park	45167	0.4871	4.4281	3.7196	0.0266		0.3365	0.3365		0.3365	0.3365		5,313.7628	5,313.7628	0.1019	0.0974	5,345.3399
Regional Shopping Center	82957.1	0.8946	8.1331	6.8318	0.0488		0.6181	0.6181		0.6181	0.6181		9,759.6545	9,759.6545	0.1871	0.1789	9,817.6513
Single Family Housing	1.97936e+006	21.3461	182.4117	77.6220	1.1643		14.7482	14.7482		14.7482	14.7482		232,866.0403	232,866.0403	4.4633	4.2692	234,249.8467
Total		**48.6206**	**422.2111**	**226.1268**	**2.6520**		**33.5924**	**33.5924**		**33.5924**	**33.5924**		**530,406.3797**	**530,406.3797**	**10.1661**	**9.7241**	**533,558.3196**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	1385.66	14.9434	127.6979	54.3395	0.8151		10.3245	10.3245		10.3245	10.3245		163,018.6021	163,018.6021	3.1245	2.9887	163,987.3401
General Light Industry	1015.31	10.9494	99.5403	83.6138	0.5972		7.5651	7.5651		7.5651	7.5651		119,448.3200	119,448.3200	2.2894	2.1899	120,158.1416
Office Park	45.167	0.4871	4.4281	3.7196	0.0266		0.3365	0.3365		0.3365	0.3365		5,313.7628	5,313.7628	0.1019	0.0974	5,345.3399
Regional Shopping Center	82.9571	0.8946	8.1331	6.8318	0.0488		0.6181	0.6181		0.6181	0.6181		9,759.6545	9,759.6545	0.1871	0.1789	9,817.6513
Single Family Housing	1979.36	21.3461	182.4117	77.6220	1.1643		14.7482	14.7482		14.7482	14.7482		232,866.0403	232,866.0403	4.4633	4.2692	234,249.8467
Total		**48.6206**	**422.2111**	**226.1268**	**2.6520**		**33.5924**	**33.5924**		**33.5924**	**33.5924**		**530,406.3797**	**530,406.3797**	**10.1661**	**9.7241**	**533,558.3196**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,877.5086	545.2541	4,959.4307	3.3824		66.1068	66.1068		66.1068	66.1068	0.0000	634,669.0398	634,669.0398	20.1899	11.4781	638,594.2486
Unmitigated	2,877.5086	545.2541	4,959.4307	3.3824		66.1068	66.1068		66.1068	66.1068	0.0000	634,669.0398	634,669.0398	20.1899	11.4781	638,594.2486

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	379.8645					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,297.9714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	57.3903	490.4262	208.6920	3.1304		39.6515	39.6515		39.6515	39.6515	0.0000	626,076.0000	626,076.0000	11.9998	11.4781	629,796.4566
Landscaping	142.2824	54.8279	4,750.7387	0.2520		26.4553	26.4553		26.4553	26.4553		8,593.0398	8,593.0398	8.1901		8,797.7919
Total	**2,877.5086**	**545.2541**	**4,959.4307**	**3.3824**		**66.1068**	**66.1068**		**66.1068**	**66.1068**	**0.0000**	**634,669.0398**	**634,669.0398**	**20.1899**	**11.4781**	**638,594.2486**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	379.8645					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,297.9714					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	57.3903	490.4262	208.6920	3.1304		39.6515	39.6515		39.6515	39.6515	0.0000	626,076.0000	626,076.0000	11.9998	11.4781	629,796.4566
Landscaping	142.2824	54.8279	4,750.7387	0.2520		26.4553	26.4553		26.4553	26.4553		8,593.0398	8,593.0398	8.1901		8,797.7919
Total	**2,877.5086**	**545.2541**	**4,959.4307**	**3.3824**		**66.1068**	**66.1068**		**66.1068**	**66.1068**	**0.0000**	**634,669.0398**	**634,669.0398**	**20.1899**	**11.4781**	**638,594.2486**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Cathedral City GP 2040: Alternative 2

Salton Sea Air Basin, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	6,304.34	1000sqft	1,000.00	6,304,343.00	0
General Light Industry	10,766.27	1000sqft	1,000.00	10,766,272.00	0
Apartments Mid Rise	22,232.00	Dwelling Unit	2,257.00	22,232,000.00	71809
Single Family Housing	25,075.00	Dwelling Unit	8,000.00	45,135,000.00	80992
Regional Shopping Center	13,135.74	1000sqft	2,300.00	13,135,740.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment - Analysis does not consider construction emissions.

Vehicle Trips - Trip rates based on Traffic Report.

Road Dust - All roads will be paved.

Area Coating -

Cathedral City GP 2040: Alternative 2 - Salton Sea Air Basin, Annual

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	6,304,340.00	6,304,343.00
tblLandUse	LandUseSquareFeet	10,766,300.00	10,766,272.00
tblLandUse	LandUseSquareFeet	13,135,700.00	13,135,740.00
tblLandUse	LotAcreage	144.73	1,000.00
tblLandUse	LotAcreage	247.16	1,000.00
tblLandUse	LotAcreage	585.05	2,257.00
tblLandUse	LotAcreage	8,141.23	8,000.00
tblLandUse	LotAcreage	301.55	2,300.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	15.20
tblVehicleTrips	CC_TL	4.20	15.10
tblVehicleTrips	CC_TL	4.20	14.90
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

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					
2019					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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					
2019					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum					**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

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	454.8129	4.9021	350.3598	0.0241		2.0187	2.0187		2.0187	2.0187	0.0000	1,573.7614	1,573.7614	0.5667	0.0183	1,593.3889
Energy	8.0530	69.9853	37.8543	0.4393		5.5639	5.5639		5.5639	5.5639	0.0000	289,277.6893	289,277.6893	10.1800	3.2513	290,501.0701
Mobile	219.2070	2,153.5151	2,557.7470	12.9245	987.1096	3.9776	991.0873	264.9720	3.7296	268.7016	0.0000	1,208,315.0769	1,208,315.0769	53.6991	0.0000	1,209,657.5543
Waste						0.0000	0.0000		0.0000	0.0000	15,516.4628	0.0000	15,516.4628	916.9967	0.0000	38,441.3797
Water						0.0000	0.0000		0.0000	0.0000	2,431.8894	43,222.7100	45,654.5995	251.5628	6.2670	53,811.2361
Total	**682.0729**	**2,228.4025**	**2,945.9611**	**13.3878**	**987.1096**	**11.5602**	**998.6698**	**264.9720**	**11.3122**	**276.2842**	**17,948.3522**	**1,542,389.2377**	**1,560,337.5899**	**1,233.0053**	**9.5366**	**1,594,004.6291**

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	454.8129	4.9021	350.3598	0.0241		2.0187	2.0187		2.0187	2.0187	0.0000	1,573.7614	1,573.7614	0.5667	0.0183	1,593.3889
Energy	8.0530	69.9853	37.8543	0.4393		5.5639	5.5639		5.5639	5.5639	0.0000	289,277.6893	289,277.6893	10.1800	3.2513	290,501.0701
Mobile	219.2070	2,153.5151	2,557.7470	12.9245	987.1096	3.9776	991.0873	264.9720	3.7296	268.7016	0.0000	1,208,315.0769	1,208,315.0769	53.6991	0.0000	1,209,657.5543
Waste						0.0000	0.0000		0.0000	0.0000	15,516.4628	0.0000	15,516.4628	916.9967	0.0000	38,441.3797
Water						0.0000	0.0000		0.0000	0.0000	2,431.8894	43,222.7100	45,654.5995	251.5628	6.2670	53,811.2361
Total	**682.0729**	**2,228.4025**	**2,945.9611**	**13.3878**	**987.1096**	**11.5602**	**998.6698**	**264.9720**	**11.3122**	**276.2842**	**17,948.3522**	**1,542,389.2377**	**1,560,337.5899**	**1,233.0053**	**9.5366**	**1,594,004.6291**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	6/5/2019	6/4/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			10,008.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2019

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	219.2070	2,153.5151	2,557.7470	12.9245	987.1096	3.9776	991.0873	264.9720	3.7296	268.7016	0.0000	1,208,315.0769	1,208,315.0769	53.6991	0.0000	1,209,657.5543
Unmitigated	219.2070	2,153.5151	2,557.7470	12.9245	987.1096	3.9776	991.0873	264.9720	3.7296	268.7016	0.0000	1,208,315.0769	1,208,315.0769	53.6991	0.0000	1,209,657.5543

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	162,738.24	142,062.48	130279.52	347,052,932	347,052,932
General Light Industry	53,400.70	14,211.48	7321.06	172,597,401	172,597,401
Office Park	78,425.99	10,339.12	4791.30	225,226,144	225,226,144
Regional Shopping Center	459,750.90	459,750.90	331546.08	1,282,671,080	1,282,671,080
Single Family Housing	236,708.00	248,493.25	216146.50	526,692,568	526,692,568
Total	991,023.83	874,857.22	690,084.46	2,554,240,125	2,554,240,125

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	15.20	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	15.10	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	14.90	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Cathedral City GP 2040: Alternative 2 - Salton Sea Air Basin, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	209,580.6214	209,580.6214	8.6525	1.7902	210,330.4023
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	209,580.6214	209,580.6214	8.6525	1.7902	210,330.4023
NaturalGas Mitigated	8.0530	69.9853	37.8543	0.4393		5.5639	5.5639		5.5639	5.5639	0.0000	79,697.0679	79,697.0679	1.5275	1.4611	80,170.6677
NaturalGas Unmitigated	8.0530	69.9853	37.8543	0.4393		5.5639	5.5639		5.5639	5.5639	0.0000	79,697.0679	79,697.0679	1.5275	1.4611	80,170.6677

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					
Apartments Mid Rise	3.28902e+008	1.7735	15.1553	6.4491	0.0967		1.2253	1.2253		1.2253	1.2253	0.0000	17,551.4625	17,551.4625	0.3364	0.3218	17,655.7621
General Light Industry	3.49796e+008	1.8862	17.1469	14.4034	0.1029		1.3032	1.3032		1.3032	1.3032	0.0000	18,666.4561	18,666.4561	0.3578	0.3422	18,777.3815
Office Park	1.84087e+007	0.0993	0.9024	0.7580	5.4100e-003		0.0686	0.0686		0.0686	0.0686	0.0000	982.3574	982.3574	0.0188	0.0180	988.1950
Regional Shopping Center	2.91613e+007	0.1572	1.4295	1.2008	8.5800e-003		0.1086	0.1086		0.1086	0.1086	0.0000	1,556.1603	1,556.1603	0.0298	0.0285	1,565.4078
Single Family Housing	7.67198e+008	4.1369	35.3513	15.0431	0.2257		2.8582	2.8582		2.8582	2.8582	0.0000	40,940.6316	40,940.6316	0.7847	0.7506	41,183.9213
Total		**8.0530**	**69.9853**	**37.8543**	**0.4393**		**5.5639**	**5.5639**		**5.5639**	**5.5639**	**0.0000**	**79,697.0679**	**79,697.0679**	**1.5275**	**1.4611**	**80,170.6677**

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					
Apartments Mid Rise	3.28902e+008	1.7735	15.1553	6.4491	0.0967		1.2253	1.2253		1.2253	1.2253	0.0000	17,551.4625	17,551.4625	0.3364	0.3218	17,655.7621
General Light Industry	3.49796e+008	1.8862	17.1469	14.4034	0.1029		1.3032	1.3032		1.3032	1.3032	0.0000	18,666.4561	18,666.4561	0.3578	0.3422	18,777.3815
Office Park	1.84087e+007	0.0993	0.9024	0.7580	5.4100e-003		0.0686	0.0686		0.0686	0.0686	0.0000	982.3574	982.3574	0.0188	0.0180	988.1950
Regional Shopping Center	2.91613e+007	0.1572	1.4295	1.2008	8.5800e-003		0.1086	0.1086		0.1086	0.1086	0.0000	1,556.1603	1,556.1603	0.0298	0.0285	1,565.4078
Single Family Housing	7.67198e+008	4.1369	35.3513	15.0431	0.2257		2.8582	2.8582		2.8582	2.8582	0.0000	40,940.6316	40,940.6316	0.7847	0.7506	41,183.9213
Total		**8.0530**	**69.9853**	**37.8543**	**0.4393**		**5.5639**	**5.5639**		**5.5639**	**5.5639**	**0.0000**	**79,697.0679**	**79,697.0679**	**1.5275**	**1.4611**	**80,170.6677**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.01549e+008	32,355.7918	1.3358	0.2764	32,471.5456
General Light Industry	1.09278e+008	34,818.2039	1.4375	0.2974	34,942.7671
Office Park	6.2476e+007	19,906.2046	0.8218	0.1700	19,977.4196
Regional Shopping Center	1.65904e+008	52,860.6950	2.1823	0.4515	53,049.8057
Single Family Housing	2.18566e+008	69,639.7261	2.8751	0.5948	69,888.8643
Total		**209,580.6214**	**8.6525**	**1.7902**	**210,330.4024**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.01549e+008	32,355.7918	1.3358	0.2764	32,471.5456
General Light Industry	1.09278e+008	34,818.2039	1.4375	0.2974	34,942.7671
Office Park	6.2476e+007	19,906.2046	0.8218	0.1700	19,977.4196
Regional Shopping Center	1.65904e+008	52,860.6950	2.1823	0.4515	53,049.8057
Single Family Housing	2.18566e+008	69,639.7261	2.8751	0.5948	69,888.8643
Total		**209,580.6214**	**8.6525**	**1.7902**	**210,330.4024**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	454.8129	4.9021	350.3598	0.0241		2.0187	2.0187		2.0187	2.0187	0.0000	1,573.7614	1,573.7614	0.5667	0.0183	1,593.3889
Unmitigated	454.8129	4.9021	350.3598	0.0241		2.0187	2.0187		2.0187	2.0187	0.0000	1,573.7614	1,573.7614	0.5667	0.0183	1,593.3889

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	63.1542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	381.0727					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1010	0.8630	0.3672	5.5100e-003		0.0698	0.0698		0.0698	0.0698	0.0000	999.4448	999.4448	0.0192	0.0183	1,005.3840
Landscaping	10.4850	4.0391	349.9926	0.0186		1.9489	1.9489		1.9489	1.9489	0.0000	574.3166	574.3166	0.5475	0.0000	588.0049
Total	**454.8129**	**4.9021**	**350.3598**	**0.0241**		**2.0187**	**2.0187**		**2.0187**	**2.0187**	**0.0000**	**1,573.7614**	**1,573.7614**	**0.5667**	**0.0183**	**1,593.3889**

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	63.1542					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	381.0727					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.1010	0.8630	0.3672	5.5100e-003		0.0698	0.0698		0.0698	0.0698	0.0000	999.4448	999.4448	0.0192	0.0183	1,005.3840
Landscaping	10.4850	4.0391	349.9926	0.0186		1.9489	1.9489		1.9489	1.9489	0.0000	574.3166	574.3166	0.5475	0.0000	588.0049
Total	**454.8129**	**4.9021**	**350.3598**	**0.0241**		**2.0187**	**2.0187**		**2.0187**	**2.0187**	**0.0000**	**1,573.7614**	**1,573.7614**	**0.5667**	**0.0183**	**1,593.3889**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	45,654.5995	251.5628	6.2670	53,811.2361
Unmitigated	45,654.5995	251.5628	6.2670	53,811.2361

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	1448.5 / 913.187	9,701.6320	47.5811	1.1934	11,246.8001
General Light Industry	2489.71 / 0	11,119.0892	81.5536	2.0038	13,755.0657
Office Park	1120.49 / 686.754	7,435.1832	36.8036	0.9226	8,630.2030
Regional Shopping Center	972.994 / 596.351	6,456.4307	31.9588	0.8011	7,494.1406
Single Family Housing	1633.74 / 1029.96	10,942.2644	53.6657	1.3460	12,685.0267
Total		**45,654.5995**	**251.5628**	**6.2670**	**53,811.2361**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	1448.5 / 913.187	9,701.6320	47.5811	1.1934	11,246.8001
General Light Industry	2489.71 / 0	11,119.0892	81.5536	2.0038	13,755.0657
Office Park	1120.49 / 686.754	7,435.1832	36.8036	0.9226	8,630.2030
Regional Shopping Center	972.994 / 596.351	6,456.4307	31.9588	0.8011	7,494.1406
Single Family Housing	1633.74 / 1029.96	10,942.2644	53.6657	1.3460	12,685.0267
Total		**45,654.5995**	**251.5628**	**6.2670**	**53,811.2361**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	15,516.4628	916.9967	0.0000	38,441.3797
Unmitigated	15,516.4628	916.9967	0.0000	38,441.3797

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	10226.7	2,075.9317	122.6841	0.0000	5,143.0330
General Light Industry	13350.2	2,709.9720	160.1548	0.0000	6,713.8409
Office Park	5863.04	1,190.1441	70.3355	0.0000	2,948.5317
Regional Shopping Center	13792.5	2,799.7508	165.4605	0.0000	6,936.2642
Single Family Housing	33206.7	6,740.6641	398.3618	0.0000	16,699.7099
Total		**15,516.4627**	**916.9967**	**0.0000**	**38,441.3797**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	10226.7	2,075.9317	122.6841	0.0000	5,143.0330
General Light Industry	13350.2	2,709.9720	160.1548	0.0000	6,713.8409
Office Park	5863.04	1,190.1441	70.3355	0.0000	2,948.5317
Regional Shopping Center	13792.5	2,799.7508	165.4605	0.0000	6,936.2642
Single Family Housing	33206.7	6,740.6641	398.3618	0.0000	16,699.7099
Total		**15,516.4627**	**916.9967**	**0.0000**	**38,441.3797**

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Cathedral City GP 2040: Alternative 2

Salton Sea Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	6,304.34	1000sqft	1,000.00	6,304,343.00	0
General Light Industry	10,766.27	1000sqft	1,000.00	10,766,272.00	0
Apartments Mid Rise	22,232.00	Dwelling Unit	2,257.00	22,232,000.00	71809
Single Family Housing	25,075.00	Dwelling Unit	8,000.00	45,135,000.00	80992
Regional Shopping Center	13,135.74	1000sqft	2,300.00	13,135,740.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment - Analysis does not consider construction emissions.

Vehicle Trips - Trip rates based on Traffic Report.

Road Dust - All roads will be paved.

Area Coating -

Cathedral City GP 2040: Alternative 2 - Salton Sea Air Basin, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	6,304,340.00	6,304,343.00
tblLandUse	LandUseSquareFeet	10,766,300.00	10,766,272.00
tblLandUse	LandUseSquareFeet	13,135,700.00	13,135,740.00
tblLandUse	LotAcreage	144.73	1,000.00
tblLandUse	LotAcreage	247.16	1,000.00
tblLandUse	LotAcreage	585.05	2,257.00
tblLandUse	LotAcreage	8,141.23	8,000.00
tblLandUse	LotAcreage	301.55	2,300.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	15.20
tblVehicleTrips	CC_TL	4.20	15.10
tblVehicleTrips	CC_TL	4.20	14.90
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,597.5915	446.2735	4,059.6127	2.7684		54.1076	54.1076		54.1076	54.1076	0.0000	519,452.4673	519,452.4673	16.5275	9.3943	522,665.1662
Energy	44.1261	383.4812	207.4208	2.4069		30.4871	30.4871		30.4871	30.4871		481,375.2295	481,375.2295	9.2264	8.8252	484,235.8018
Mobile	1,540.8394	12,811.6562	17,993.4404	81.5090	5,978.6354	23.7267	6,002.3621	1,603.2670	22.2462	1,625.5133		8,387,429.2594	8,387,429.2594	359.4335		8,396,415.0973
Total	**4,182.5569**	**13,641.4109**	**22,260.4740**	**86.6843**	**5,978.6354**	**108.3214**	**6,086.9568**	**1,603.2670**	**106.8409**	**1,710.1080**	**0.0000**	**9,388,256.9563**	**9,388,256.9563**	**385.1874**	**18.2196**	**9,403,316.0653**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,597.5915	446.2735	4,059.6127	2.7684		54.1076	54.1076		54.1076	54.1076	0.0000	519,452.4673	519,452.4673	16.5275	9.3943	522,665.1662
Energy	44.1261	383.4812	207.4208	2.4069		30.4871	30.4871		30.4871	30.4871		481,375.2295	481,375.2295	9.2264	8.8252	484,235.8018
Mobile	1,540.8394	12,811.6562	17,993.4404	81.5090	5,978.6354	23.7267	6,002.3621	1,603.2670	22.2462	1,625.5133		8,387,429.2594	8,387,429.2594	359.4335		8,396,415.0973
Total	**4,182.5569**	**13,641.4109**	**22,260.4740**	**86.6843**	**5,978.6354**	**108.3214**	**6,086.9568**	**1,603.2670**	**106.8409**	**1,710.1080**	**0.0000**	**9,388,256.9563**	**9,388,256.9563**	**385.1874**	**18.2196**	**9,403,316.0653**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	6/5/2019	6/4/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			10,008.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2019

Unmitigated Construction Off-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1,540.8394	12,811.6562	17,993.4404	81.5090	5,978.6354	23.7267	6,002.3621	1,603.2670	22.2462	1,625.5133		8,387,429.2594	8,387,429.2594	359.4335		8,396,415.0973
Unmitigated	1,540.8394	12,811.6562	17,993.4404	81.5090	5,978.6354	23.7267	6,002.3621	1,603.2670	22.2462	1,625.5133		8,387,429.2594	8,387,429.2594	359.4335		8,396,415.0973

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	162,738.24	142,062.48	130279.52	347,052,932	347,052,932
General Light Industry	53,400.70	14,211.48	7321.06	172,597,401	172,597,401
Office Park	78,425.99	10,339.12	4791.30	225,226,144	225,226,144
Regional Shopping Center	459,750.90	459,750.90	331546.08	1,282,671,080	1,282,671,080
Single Family Housing	236,708.00	248,493.25	216146.50	526,692,568	526,692,568
Total	991,023.83	874,857.22	690,084.46	2,554,240,125	2,554,240,125

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	15.20	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	15.10	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	14.90	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	44.1261	383.4812	207.4208	2.4069		30.4871	30.4871		30.4871	30.4871		481,375.2295	481,375.2295	9.2264	8.8252	484,235.8018
NaturalGas Unmitigated	44.1261	383.4812	207.4208	2.4069		30.4871	30.4871		30.4871	30.4871		481,375.2295	481,375.2295	9.2264	8.8252	484,235.8018

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	901101	9.7178	83.0427	35.3373	0.5301		6.7141	6.7141		6.7141	6.7141		106,011.9215	106,011.9215	2.0319	1.9436	106,641.8974
General Light Industry	958346	10.3351	93.9555	78.9226	0.5637		7.1406	7.1406		7.1406	7.1406		112,746.5519	112,746.5519	2.1610	2.0670	113,416.5483
Office Park	50434.7	0.5439	4.9446	4.1535	0.0297		0.3758	0.3758		0.3758	0.3758		5,933.4993	5,933.4993	0.1137	0.1088	5,968.7591
Regional Shopping Center	79894.1	0.8616	7.8328	6.5795	0.0470		0.5953	0.5953		0.5953	0.5953		9,399.3047	9,399.3047	0.1802	0.1723	9,455.1601
Single Family Housing	2.10191e+006	22.6677	193.7058	82.4280	1.2364		15.6613	15.6613		15.6613	15.6613		247,283.9521	247,283.9521	4.7396	4.5335	248,753.4369
Total		**44.1261**	**383.4812**	**207.4208**	**2.4069**		**30.4871**	**30.4871**		**30.4871**	**30.4871**		**481,375.2295**	**481,375.2295**	**9.2264**	**8.8252**	**484,235.8018**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	901.101	9.7178	83.0427	35.3373	0.5301		6.7141	6.7141		6.7141	6.7141		106,011.9215	106,011.9215	2.0319	1.9436	106,641.8974
General Light Industry	958.346	10.3351	93.9555	78.9226	0.5637		7.1406	7.1406		7.1406	7.1406		112,746.5519	112,746.5519	2.1610	2.0670	113,416.5483
Office Park	50.4347	0.5439	4.9446	4.1535	0.0297		0.3758	0.3758		0.3758	0.3758		5,933.4993	5,933.4993	0.1137	0.1088	5,968.7591
Regional Shopping Center	79.8941	0.8616	7.8328	6.5795	0.0470		0.5953	0.5953		0.5953	0.5953		9,399.3047	9,399.3047	0.1802	0.1723	9,455.1601
Single Family Housing	2101.91	22.6677	193.7058	82.4280	1.2364		15.6613	15.6613		15.6613	15.6613		247,283.9521	247,283.9521	4.7396	4.5335	248,753.4369
Total		**44.1261**	**383.4812**	**207.4208**	**2.4069**		**30.4871**	**30.4871**		**30.4871**	**30.4871**		**481,375.2295**	**481,375.2295**	**9.2264**	**8.8252**	**484,235.8018**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,597.5915	446.2735	4,059.6127	2.7684		54.1076	54.1076		54.1076	54.1076	0.0000	519,452.4673	519,452.4673	16.5275	9.3943	522,665.1662
Unmitigated	2,597.5915	446.2735	4,059.6127	2.7684		54.1076	54.1076		54.1076	54.1076	0.0000	519,452.4673	519,452.4673	16.5275	9.3943	522,665.1662

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	346.0503					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,088.0698					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	46.9717	401.3943	170.8061	2.5621		32.4532	32.4532		32.4532	32.4532	0.0000	512,418.2929	512,418.2929	9.8214	9.3943	515,463.3387
Landscaping	116.4997	44.8791	3,888.8066	0.2063		21.6545	21.6545		21.6545	21.6545		7,034.1744	7,034.1744	6.7061		7,201.8275
Total	**2,597.5915**	**446.2735**	**4,059.6127**	**2.7684**		**54.1076**	**54.1076**		**54.1076**	**54.1076**	**0.0000**	**519,452.4673**	**519,452.4673**	**16.5275**	**9.3943**	**522,665.1662**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	346.0503					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,088.0698					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	46.9717	401.3943	170.8061	2.5621		32.4532	32.4532		32.4532	32.4532	0.0000	512,418.2929	512,418.2929	9.8214	9.3943	515,463.3387
Landscaping	116.4997	44.8791	3,888.8066	0.2063		21.6545	21.6545		21.6545	21.6545		7,034.1744	7,034.1744	6.7061		7,201.8275
Total	**2,597.5915**	**446.2735**	**4,059.6127**	**2.7684**		**54.1076**	**54.1076**		**54.1076**	**54.1076**	**0.0000**	**519,452.4673**	**519,452.4673**	**16.5275**	**9.3943**	**522,665.1662**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Cathedral City GP 2040: Alternative 2

Salton Sea Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Office Park	6,304.34	1000sqft	1,000.00	6,304,343.00	0
General Light Industry	10,766.27	1000sqft	1,000.00	10,766,272.00	0
Apartments Mid Rise	22,232.00	Dwelling Unit	2,257.00	22,232,000.00	71809
Single Family Housing	25,075.00	Dwelling Unit	8,000.00	45,135,000.00	80992
Regional Shopping Center	13,135.74	1000sqft	2,300.00	13,135,740.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	3.4	**Precipitation Freq (Days)**	20
Climate Zone	10			**Operational Year**	2040
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Construction Phase - Analysis does not consider construction emissions.

Off-road Equipment - Analysis does not consider construction emissions.

Vehicle Trips - Trip rates based on Traffic Report.

Road Dust - All roads will be paved.

Area Coating -

Cathedral City GP 2040: Alternative 2 - Salton Sea Air Basin, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	155,000.00	0.00
tblLandUse	LandUseSquareFeet	6,304,340.00	6,304,343.00
tblLandUse	LandUseSquareFeet	10,766,300.00	10,766,272.00
tblLandUse	LandUseSquareFeet	13,135,700.00	13,135,740.00
tblLandUse	LotAcreage	144.73	1,000.00
tblLandUse	LotAcreage	247.16	1,000.00
tblLandUse	LotAcreage	585.05	2,257.00
tblLandUse	LotAcreage	8,141.23	8,000.00
tblLandUse	LotAcreage	301.55	2,300.00
tblRoadDust	RoadPercentPave	50	100
tblVehicleTrips	CC_TL	4.20	15.20
tblVehicleTrips	CC_TL	4.20	15.10
tblVehicleTrips	CC_TL	4.20	14.90
tblVehicleTrips	ST_TR	49.97	35.00
tblVehicleTrips	WD_TR	6.65	7.32
tblVehicleTrips	WD_TR	6.97	4.96
tblVehicleTrips	WD_TR	11.42	12.44
tblVehicleTrips	WD_TR	42.70	35.00
tblVehicleTrips	WD_TR	9.52	9.44

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

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

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,597.5915	446.2735	4,059.6127	2.7684		54.1076	54.1076		54.1076	54.1076	0.0000	519,452.4673	519,452.4673	16.5275	9.3943	522,665.1662
Energy	44.1261	383.4812	207.4208	2.4069		30.4871	30.4871		30.4871	30.4871		481,375.2295	481,375.2295	9.2264	8.8252	484,235.8018
Mobile	1,206.8866	12,612.0841	14,429.8252	73.7287	5,978.6354	23.9214	6,002.5567	1,603.2670	22.4324	1,625.6995		7,603,282.7978	7,603,282.7978	357.3484		7,612,216.5076
Total	**3,848.6042**	**13,441.8388**	**18,696.8588**	**78.9040**	**5,978.6354**	**108.5161**	**6,087.1514**	**1,603.2670**	**107.0272**	**1,710.2942**	**0.0000**	**8,604,110.4946**	**8,604,110.4946**	**383.1022**	**18.2196**	**8,619,117.4755**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	2,597.5915	446.2735	4,059.6127	2.7684		54.1076	54.1076		54.1076	54.1076	0.0000	519,452.4673	519,452.4673	16.5275	9.3943	522,665.1662
Energy	44.1261	383.4812	207.4208	2.4069		30.4871	30.4871		30.4871	30.4871		481,375.2295	481,375.2295	9.2264	8.8252	484,235.8018
Mobile	1,206.8866	12,612.0841	14,429.8252	73.7287	5,978.6354	23.9214	6,002.5567	1,603.2670	22.4324	1,625.6995		7,603,282.7978	7,603,282.7978	357.3484		7,612,216.5076
Total	**3,848.6042**	**13,441.8388**	**18,696.8588**	**78.9040**	**5,978.6354**	**108.5161**	**6,087.1514**	**1,603.2670**	**107.0272**	**1,710.2942**	**0.0000**	**8,604,110.4946**	**8,604,110.4946**	**383.1022**	**18.2196**	**8,619,117.4755**

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction	Building Construction	6/5/2019	6/4/2019	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor

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
Building Construction			10,008.00	0.00	11.00	5.40				

3.1 Mitigation Measures Construction

3.2 Building Construction - 2019

Unmitigated Construction Off-Site

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

Mitigated Construction Off-Site

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

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1,206.8866	12,612.0841	14,429.8252	73.7287	5,978.6354	23.9214	6,002.5567	1,603.2670	22.4324	1,625.6995		7,603,282.7978	7,603,282.7978	357.3484		7,612,216.5076
Unmitigated	1,206.8866	12,612.0841	14,429.8252	73.7287	5,978.6354	23.9214	6,002.5567	1,603.2670	22.4324	1,625.6995		7,603,282.7978	7,603,282.7978	357.3484		7,612,216.5076

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	162,738.24	142,062.48	130279.52	347,052,932	347,052,932
General Light Industry	53,400.70	14,211.48	7321.06	172,597,401	172,597,401
Office Park	78,425.99	10,339.12	4791.30	225,226,144	225,226,144
Regional Shopping Center	459,750.90	459,750.90	331546.08	1,282,671,080	1,282,671,080
Single Family Housing	236,708.00	248,493.25	216146.50	526,692,568	526,692,568
Total	991,023.83	874,857.22	690,084.46	2,554,240,125	2,554,240,125

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Mid Rise	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3
General Light Industry	12.50	15.20	5.40	59.00	28.00	13.00	92	5	3
Office Park	12.50	15.10	5.40	33.00	48.00	19.00	82	15	3
Regional Shopping Center	12.50	14.90	5.40	16.30	64.70	19.00	54	35	11
Single Family Housing	11.00	3.50	4.50	40.20	19.20	40.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
General Light Industry	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Office Park	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Regional Shopping Center	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570
Single Family Housing	0.506734	0.033982	0.193222	0.107287	0.009866	0.004548	0.023033	0.108481	0.003314	0.001785	0.006458	0.000721	0.000570

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	44.1261	383.4812	207.4208	2.4069		30.4871	30.4871		30.4871	30.4871		481,375.2295	481,375.2295	9.2264	8.8252	484,235.8018
NaturalGas Unmitigated	44.1261	383.4812	207.4208	2.4069		30.4871	30.4871		30.4871	30.4871		481,375.2295	481,375.2295	9.2264	8.8252	484,235.8018

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	901101	9.7178	83.0427	35.3373	0.5301		6.7141	6.7141		6.7141	6.7141		106,011.9215	106,011.9215	2.0319	1.9436	106,641.8974
General Light Industry	958346	10.3351	93.9555	78.9226	0.5637		7.1406	7.1406		7.1406	7.1406		112,746.5519	112,746.5519	2.1610	2.0670	113,416.5483
Office Park	50434.7	0.5439	4.9446	4.1535	0.0297		0.3758	0.3758		0.3758	0.3758		5,933.4993	5,933.4993	0.1137	0.1088	5,968.7591
Regional Shopping Center	79894.1	0.8616	7.8328	6.5795	0.0470		0.5953	0.5953		0.5953	0.5953		9,399.3047	9,399.3047	0.1802	0.1723	9,455.1601
Single Family Housing	2.10191e+006	22.6677	193.7058	82.4280	1.2364		15.6613	15.6613		15.6613	15.6613		247,283.9521	247,283.9521	4.7396	4.5335	248,753.4369
Total		**44.1261**	**383.4812**	**207.4208**	**2.4069**		**30.4871**	**30.4871**		**30.4871**	**30.4871**		**481,375.2295**	**481,375.2295**	**9.2264**	**8.8252**	**484,235.8018**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	901.101	9.7178	83.0427	35.3373	0.5301		6.7141	6.7141		6.7141	6.7141		106,011.9215	106,011.9215	2.0319	1.9436	106,641.8974
General Light Industry	958.346	10.3351	93.9555	78.9226	0.5637		7.1406	7.1406		7.1406	7.1406		112,746.5519	112,746.5519	2.1610	2.0670	113,416.5483
Office Park	50.4347	0.5439	4.9446	4.1535	0.0297		0.3758	0.3758		0.3758	0.3758		5,933.4993	5,933.4993	0.1137	0.1088	5,968.7591
Regional Shopping Center	79.8941	0.8616	7.8328	6.5795	0.0470		0.5953	0.5953		0.5953	0.5953		9,399.3047	9,399.3047	0.1802	0.1723	9,455.1601
Single Family Housing	2101.91	22.6677	193.7058	82.4280	1.2364		15.6613	15.6613		15.6613	15.6613		247,283.9521	247,283.9521	4.7396	4.5335	248,753.4369
Total		**44.1261**	**383.4812**	**207.4208**	**2.4069**		**30.4871**	**30.4871**		**30.4871**	**30.4871**		**481,375.2295**	**481,375.2295**	**9.2264**	**8.8252**	**484,235.8018**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2,597.5915	446.2735	4,059.6127	2.7684		54.1076	54.1076		54.1076	54.1076	0.0000	519,452.4673	519,452.4673	16.5275	9.3943	522,665.1662
Unmitigated	2,597.5915	446.2735	4,059.6127	2.7684		54.1076	54.1076		54.1076	54.1076	0.0000	519,452.4673	519,452.4673	16.5275	9.3943	522,665.1662

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	346.0503					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,088.0698					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	46.9717	401.3943	170.8061	2.5621		32.4532	32.4532		32.4532	32.4532	0.0000	512,418.2929	512,418.2929	9.8214	9.3943	515,463.3387
Landscaping	116.4997	44.8791	3,888.8066	0.2063		21.6545	21.6545		21.6545	21.6545		7,034.1744	7,034.1744	6.7061		7,201.8275
Total	**2,597.5915**	**446.2735**	**4,059.6127**	**2.7684**		**54.1076**	**54.1076**		**54.1076**	**54.1076**	**0.0000**	**519,452.4673**	**519,452.4673**	**16.5275**	**9.3943**	**522,665.1662**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	346.0503					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	2,088.0698					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	46.9717	401.3943	170.8061	2.5621		32.4532	32.4532		32.4532	32.4532	0.0000	512,418.2929	512,418.2929	9.8214	9.3943	515,463.3387
Landscaping	116.4997	44.8791	3,888.8066	0.2063		21.6545	21.6545		21.6545	21.6545		7,034.1744	7,034.1744	6.7061		7,201.8275
Total	**2,597.5915**	**446.2735**	**4,059.6127**	**2.7684**		**54.1076**	**54.1076**		**54.1076**	**54.1076**	**0.0000**	**519,452.4673**	**519,452.4673**	**16.5275**	**9.3943**	**522,665.1662**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

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

User Defined Equipment

Equipment Type	Number

11.0 Vegetation