

Las Lomas Grading Project, City of Vista Air Quality Technical Report

Submitted to:

City of Vista
Planning Division
200 Civic Center Drive
Vista, CA 92084

Prepared by:



July 2023

TABLE OF CONTENTS

LAS LOMAS GRADING PROJECT, CITY OF VISTA AIR QUALITY TECHNICAL REPORT

	<u>Page</u>
1.1 Introduction	1
1.2 Existing Conditions	2
1.3 Thresholds of Significance	6
1.4 Impact Analysis	7
1.4.1 Conflict with Applicable Air Quality Plans	7
1.4.2 Compliance with Air Quality Standards	7
1.4.3 Impacts to Sensitive Receptors	10
1.4.4 Odor Impacts	10
1.5 Conclusions	10
1.6 References	11
Table AQ-1 – Screening-Level Criteria for Air Quality Impacts	6
Table AQ-2 –Estimated Construction Emissions	8
Appendix A	
I. CalEEMod Annual Emissions Output	
II. CalEEMod Summer Daily Emissions Output	
III. CalEEMod Winter Daily Emissions Output	

AIR QUALITY TECHNICAL REPORT

LAS LOMAS GRADING PROJECT, CITY OF VISTA

1.1 INTRODUCTION AND PROJECT OVERVIEW

This report presents an analysis of potential air quality impacts associated with the Las Lomas Grading Project (the “Project”) in the City of Vista, CA. The Project consists of grading a site for a single-family residence on a single parcel (APN 174-260-15, also referred to as Lot 7 in this report), and improving a road that provides fire access to the wider area. The grading for the single-family residence is proposed to occur on a property/parcel controlled by the proponent, while the fire access road passes along this parcel and passes between several other, privately-owned parcels south of APN 174-260-15 (Lot 7).

Access will be from Las Lomas, which will be widened to 24 ft in width to provide fire and traffic access i.e., the Fire Access Road portion of the project, to service the Lot 7 portion of the project, the other residences off Las Lomas, and because further development is planned to the north of this parcel across Las Lomas. The northeast end of the section of road which will be widened is at an elevation of 870 ft AMSL and is north of the Lot 7 parcel. From this point the road heads downhill to the west and turns into Tierra Del Cielo, where shortly after running along the west side of the Lot 7 parcel it has a “hairpin” turn which will be widened to provide better road visibility. It then continues south and crosses a steep gully where the road reaches its lowest elevation of 692 ft AMSL and will narrow to 20 ft in width to prevent any input of fill into the gully. The road then will widen back to 24 ft width and ends about 100 ft north of the intersection with Camino Culebra at an elevation of 709 ft AMSL. The road widening fits entirely within the existing easement for the road. Both the single-family residence pad and the road widening will make use of the local crystalline bedrock as a retaining wall to significantly reduce cut slope area.

The property (APN 174-260-15) is adjacent to the City’s Warmland Highlands Specific Plan, within an Open Space Residential General Plan designation allowing 0.4 dwelling units per acre, in an Open Space zone as identified in the City’s Zoning Map.

This report presents an overview of the existing air quality conditions at the Project site, an overview of regulations applicable to the Project, and an analysis of potential air quality impacts that would result from implementation of the Project. All air quality impacts were found to be **less than significant**.

1.2 EXISTING CONDITIONS

1.2.1 CLIMATE AND METEOROLOGY

The Project site is within the San Diego Air Basin (SDAB). The climate of the SDAB is dominated by a semi-permanent high-pressure cell located over the Pacific Ocean. This cell influences the direction of prevailing winds (westerly to northwesterly) and maintains clear skies for much of the year. The high-pressure cell also creates two types of temperature inversions that may act to degrade local air quality.

The climate of the Vista area is characterized by a repetitive pattern of frequent early morning cloudiness, hazy afternoon sunshine, clean daytime onshore breezes and little temperature change throughout the year. Most of the annual rainfall occurs in the winter while summers are often completely dry. An average of 13.09 inches of rain falls each year, mainly occurring from mid-November to early April. The average maximum temperature is 74 degrees F, while the average minimum temperature is 51.9 degrees F.

Unfortunately, the same atmospheric conditions that create a desirable living climate combine to limit the ability of the atmosphere to disperse the air pollution generated by the large population attracted by the climate. The onshore winds across the coastline diminish quickly when they reach the foothill communities east of San Diego, and the sinking air within the offshore high-pressure system forms a massive temperature inversion that traps all air pollutants near the ground. The resulting horizontal and vertical stagnation, in conjunction with ample sunshine, cause several reactive pollutants to undergo photochemical reactions and form smog that degrades visibility and irritates tear ducts and nasal membranes. High smog levels in coastal communities occasionally occur when polluted air from the South Coast Air Basin drifts seaward and southward at night, and then blows onshore the next day. Such weather patterns are particularly frustrating because no matter what San Diego County does to achieve clean air, interbasin transport will cause occasionally unhealthy air over much of the County despite its best air pollution control efforts.

1.2.2 REGULATORY SETTING

Ambient Air Quality Standards

Pollutants of concern include criteria pollutants¹ and precursors such as carbon monoxide (CO)², nitrogen oxides (NOx)³, sulfur dioxide (SO₂)⁴, volatile organic compounds (VOC)⁵, particulate matter less than 10 micrometers (PM10), and particulate matter less than 2.5 micrometers (PM2.5).⁶

Regulation of air pollutants is achieved through both national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS) and emissions limits for individual sources. Regulations implementing the federal Clean Air Act (CAA) and its subsequent amendments established NAAQS for the six criteria pollutants. California has adopted more stringent CAAQS for most of the criteria air pollutants. In addition, California has established CAAQS for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. Because of the meteorological conditions in the state, there is considerable difference between state and federal standards in California.

The NAAQS and CAAQS are intended to protect the public health and welfare, and they incorporate an adequate margin of safety. They are designed to protect those segments of the public most susceptible to respiratory distress, known as sensitive receptors, including asthmatics, the very young, elderly, people weak from other illness or disease, or persons engaged in strenuous work or exercise. Healthy adults can tolerate occasional exposure to air pollution levels somewhat above the ambient air quality standards before adverse health effects are observed.

Under amendments to the federal CAA, United States Environmental Protection Agency (USEPA) has classified air basins or portions thereof, as either “attainment” or “non-attainment” for each criteria air pollutant, based on whether the NAAQS have been achieved. The California CAA, which is patterned after the federal CAA, also requires areas to be designated as “attainment” or “non-attainment” for the state standards. Thus, areas in California have two sets of attainment / non-attainment designations: one set with respect to the NAAQS and one set with respect to the CAAQS.

¹ Criteria air pollutants refer to those air pollutants for which the USEPA and CARB has established National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) under the Federal Clean Air Act (CAA).

² CO is a non-reactive pollutant that is a product of incomplete combustion of organic material, and is mostly associated with motor vehicle traffic, and in wintertime, with wood-burning stoves and fireplaces.

³ When combustion temperatures are extremely high, as in aircraft, truck and automobile engines, atmospheric nitrogen combines with oxygen to form various oxides of nitrogen (NOx). Nitric oxide (NO) and NO₂ are the most significant air pollutants generally referred to as NOx. Nitric oxide is a colorless and odorless gas that is relatively harmless to humans, quickly converts to NO₂ and can be measured. Nitrogen dioxide has been found to be a lung irritant capable of producing pulmonary edema.

⁴ SO₂ is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. SO₂ is also a precursor to the formation of atmospheric sulfate and particulate matter, and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain.

⁵ VOC means any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, which participates in atmospheric photochemical reactions and thus, a precursor of ozone formation.

⁶ PM10 and PM2.5 consists of airborne particles that measure 10 micrometers or less in diameter and 2.5 micrometers or less in diameter, respectively. PM10 and PM2.5 represent fractions of particulate matter that can be inhaled into the air passages and the lungs, causing adverse health effects.

The California Air Resources Board (CARB) is the state regulatory agency with authority to enforce regulations to both achieve and maintain the NAAQS and CAAQS. The CARB is responsible for the development, adoption, and enforcement of the state's motor vehicle emissions program, as well as the adoption of the CAAQS. The CARB also reviews operations and programs of the local air districts and requires each air district with jurisdiction over a nonattainment area to develop its own strategy for achieving the NAAQS and CAAQS. The local air district has the primary responsibility for the development and implementation of rules and regulations designed to attain the NAAQS and CAAQS, as well as the permitting of new or modified sources, development of air quality management plans, and adoption and enforcement of air pollution regulations. The San Diego Air Pollution Control District (SDAPCD) is the local agency responsible for the administration and enforcement of air quality regulations for San Diego County.

Regional Air Quality Strategy

The SDAPCD and the San Diego Association of Governments (SANDAG) are responsible for developing and implementing the clean air plan for attainment and maintenance of the ambient air quality standards in the SDAB. The San Diego County Regional Air Quality Strategy (RAQS) was initially adopted in 1991 and is updated on a triennial basis. The RAQS was updated in 1995, 1998, 2001, 2004, 2009, and most recently in 2016 (SDAPCD, 2016). The SDAPCD is in the process of preparing an update to the RAQS. The RAQS outlines SDAPCD's plans and control measures designed to attain the CAAQS for ozone. The RAQS does not address the CAAQS for PM10 or PM2.5.

State Implementation Plan

The SDAPCD has also developed the air basin's input to the State Implementation Plan (SIP), which is required under the Federal CAA for areas that are out of attainment of air quality standards. The SIP includes the SDAPCD's plans and control measures for attaining the ozone NAAQS. The SIP is also updated on a triennial basis. The Attainment Plan forms the basis for the SIP update, as it contains documentation on emission inventories and trends, the SDAPCD's emission control strategy, and an attainment demonstration that shows that the SDAB will meet the NAAQS for ozone. Emission inventories, projections, and trends in the Attainment Plan are based on the latest ozone SIP planning emission projections compiled and maintained by CARB. Supporting data were developed jointly by stakeholder agencies, including CARB, the SDAPCD, the South Coast Air Quality Management District (SCAQMD), the Southern California Association of Governments (SCAG), and SANDAG. Each agency plays a role in collecting and reviewing data as necessary to generate comprehensive emission inventories. The supporting data include socio-economic projections, industrial and travel activity levels, emission factors, and emission speciation profiles. These projections are based on data submitted by stakeholder agencies including projections in municipal General Plans.

City of Vista General Plan 2030

The City of Vista has adopted a Resource Conservation and Sustainability Element in its updated General Plan (City of Vista, 2011). The following policy from the Element applies to the Project:

RCS Policy 1.4 Amend the Grading Ordinance as needed to reduce fugitive dust generated as a result of construction projects. Require implementation of best management practices (BMPs) to stabilize disturbed land, including but not limited to short-term methods during construction (e.g., watering active construction areas, covering open stockpiles, and applying non-toxic soil stabilizers on unpaved access roads and temporary parking areas) and permanent methods post-construction (e.g., vegetation or revegetation, installation of landscape, etc.).

1.2.3 LOCAL AIR QUALITY

The SDAB is designated as a state standard nonattainment area for PM₁₀, PM_{2.5}, 1-hour and 8-hour ozone, and as a federal standard nonattainment area for 8-hour ozone. The SDAB is designated as attainment or unclassified for all other state and federal pollutant standards. The SDAPCD operates a regional monitoring network for ambient concentrations of air pollutants.

The closest air quality monitoring station to the Project that monitors 8-hour and 1-hour ozone, PM_{2.5} and NO₂ is the Camp Pendleton station at 21441 W. B Street (approximately eight miles northwest of the Project). Measurements at the Camp Pendleton station show three exceedances of the federal standard and three exceedances of the state standard for 8-hour ozone in 2020. No other air quality standards were exceeded at the Camp Pendleton station between 2018 and 2020.

1.2.4 SENSITIVE RECEPTORS

Land uses such as schools, children's daycare centers, hospitals, and convalescent homes are more sensitive than the general public to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress. Persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality. The CARB has identified the following people as most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and those with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive population groups.

Residential areas are considered more sensitive to air quality conditions than commercial and industrial areas because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational uses are also considered sensitive, due to the greater exposure to ambient air quality conditions and because the presence of pollution detracts from the recreational experience. Workers are not considered sensitive receptors because all employers must follow regulations set forth by the Occupation Safety and Health Administration to ensure the health and well-being of their employees.

There are several sensitive receptors within 1,000 feet of the Project site. There are two existing residences immediately south/southeast of the Project site. There is one residence that is currently being re-built after being destroyed in a wildfire event. There are several residences west of the Project site (opposite of Tierra del Cielo) and four residences along Tierra Del Cielo to the to the south. No schools, daycare centers, hospitals, convalescent homes, or other sensitive receptor types are within 1,000 feet of the Project site.

1.3 THRESHOLDS OF SIGNIFICANCE

The significance of potential impacts was determined based on State CEQA Guidelines, Appendix G. Using Appendix G evaluation thresholds, the Project would be considered to have significant air quality impacts if it were to:

- 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.

The SDAPCD has not adopted any CEQA guidelines for projects in the SDAB. The SDAPCD has established screening-level criteria for non-major stationary sources under SDAPCD Rule 20.2. For CEQA purposes, these screening-level criteria can be used as thresholds to demonstrate if a project’s total emissions would result in a significant air quality impact. Therefore, screening-level criteria under Rule 20.2 are used to determine the significance of emissions from the Project. Because the SDAPCD has not established screening-level criteria under Rule 20.2 for ROG or PM2.5 emissions, the SCAQMD significance threshold for PM2.5 emissions and the City of San Diego’s Significance Determination Thresholds for VOC emissions are used in this analysis. The screening criteria are presented in **Table AQ-1** below.

TABLE AQ-1 SCREENING-LEVEL CRITERIA FOR AIR QUALITY IMPACTS

Pollutant	Total Emissions		
Construction Emissions			
	Pounds Per Day (lbs/day)		
Coarse Particulate Matter (PM10)	100		
Fine Particulate Matter (PM2.5) ¹	55		
Oxides of Nitrogen (NOx)	250		
Oxides of Sulfur (SOx)	250		
Carbon Monoxide (CO)	550		
Volatile Organic Compounds (VOC) ²	137		
Operational Emissions			
	lbs/hour	lbs/day	tons/year
Coarse Particulate Matter (PM ₁₀)	---	100	15
Fine Particulate Matter (PM _{2.5}) ¹	---	55	10

Oxides of Nitrogen (NO _x)	25	250	40
Oxides of Sulfur (SO _x)	25		
Carbon Monoxide (CO)	100	550	100
Lead and Lead Compounds	---	3.2	0.6
Volatile Organic Compounds (VOC) ²	---	137	15

Source: SDAPCD Rule 20.2

¹ PM_{2.5} is not currently regulated under SDAPCD Rule 20.2. PM_{2.5} thresholds are based on SCAQMD significance thresholds of 55 lbs./day for construction and operation and 10 tons/year for operation.

² VOC's are not regulated under SDAPCD Rule 20.2. VOC thresholds are based on City of San Diego's Significance Determination Thresholds.

SDAPCD Rule 51 (Public Nuisance) also prohibits emission of any material which causes nuisance to a considerable number of persons or endangers the comfort, health, or safety of any person. A project that proposes a use which would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of offsite receptors.

1.4 IMPACT ANALYSIS

1.4.1 CONFLICT WITH APPLICABLE AIR QUALITY PLANS

The SDAB's air quality plans include the Regional Air Quality Strategy (RAQS) and the State Implementation Plan (SIP). Both air quality plans contain strategies for the region to attain and maintain the ambient air quality standards. The Project is consistent with the existing zoning and land use designation, is not constructing residences, and the associated minor generation of criteria pollutants would not conflict with or obstruct implementation of the SDAB's air quality plans. As noted in Impact 1.4.2 below, construction and operational associated with the Project would be below all SDAPCD significance thresholds. Furthermore, the Project would be required to comply with applicable SDAPCD Rules and Regulations. Therefore, the Project would result in a **less-than-significant impact**.

1.4.2 COMPLIANCE WITH AIR QUALITY STANDARDS

Construction Impacts

Construction-related activities are temporary, finite sources of air emissions. Typical sources of construction-related air emissions include:

- Exhaust from construction equipment and worker automobiles, delivery trucks, and material-hauling trucks.
- Fugitive dust from earthmoving activities and equipment travel on unpaved surfaces.
- Fugitive VOC emissions from architectural coating.

Fugitive dust emissions vary greatly during construction and are dependent on the amount and type of activity, silt content of the soil, and the weather. Vehicles moving over unpaved surfaces,

excavation, earth movement, grading, and wind erosion from exposed surfaces are all sources of fugitive dust.

Heavy-duty construction equipment is usually diesel powered. In general, emissions from diesel-powered equipment contain more NO_x, SO_x, and PM than gasoline-powered engines. However, diesel-powered engines generally produce less CO and less VOC than gasoline-powered engines. Standard construction equipment includes dozers, rollers, scrapers, backhoes, loaders, paving equipment, and heavy trucks.

Project construction would commence in Summer or Fall of 2023. Emissions from construction of the Project were estimated using the California Emissions Estimator Model (CalEEMod) Version 2020.4.0.

Table AQ-2 provides a summary of the emission estimates for construction of the Project, as calculated with the CalEEMod (refer to **Appendix A** for detailed emissions outputs). As shown in **Table AQ-2**, emissions associated with construction would be below the significance thresholds for all construction phases and pollutants. Construction of the Project would be short-term and temporary. Thus, Project construction would result in a **less-than-significant impact**.

TABLE AQ-2 ESTIMATED DAILY CONSTRUCTION EMISSIONS

Emission Source	ROG ¹	NO _x	CO	SO _x	PM10	PM2.5
lbs/day						
Site Preparation						
Fugitive Dust	--	--	--	--	19.66	10.10
Off-road Diesel	2.66	27.52	18.24	0.04	1.27	1.16
Worker Travel	0.05	0.03	0.41	0.00	0.15	0.04
TOTAL	2.71	27.56	18.65	0.04	21.07	11.31
Significance Criteria	137	250	550	250	100	55
Significant?	No	No	No	No	No	No
Grading						
Fugitive Dust	--	--	--	--	7.08	3.42
Off-road Diesel	1.71	17.94	14.75	0.03	0.77	0.71
Worker Travel	0.04	0.03	0.34	0.00	0.12	0.03
TOTAL	1.76	17.96	15.09	0.03	7.98	4.17
Significance Criteria	137	250	550	250	100	55
Significant?	No	No	No	No	No	No

Emission Source	ROG ¹	NO _x	CO	SO _x	PM10	PM2.5
lbs/day						
Building Construction						
Off-road Diesel	1.57	14.38	16.24	0.03	0.70	0.66
Vendor Trucks	0.01	0.22	0.08	0.00	0.04	0.01
Worker Travel	0.04	0.03	0.32	0.00	0.12	0.03
TOTAL	1.62	14.64	16.64	0.03	0.85	0.70
Significance Criteria	137	250	550	250	100	55
Significant?	No	No	No	No	No	No
Paving						
Fugitive ROG	0.11	--	--	--	--	--
Off-road Diesel	0.88	8.27	12.22	0.02	0.40	0.37
Worker Trips	0.06	0.03	0.43	0.00	0.17	0.04
TOTAL	1.05	8.31	12.65	0.02	0.56	0.41
Significance Criteria	137	250	550	250	100	55
Significant?	No	No	No	No	No	No
Architectural Coating						
Fugitive VOC	7.35	--	--	--	--	--
Off-road Diesel	0.18	1.22	1.81	0.00	0.06	0.06
Worker Trips	0.01	0.01	0.06	0.00	0.02	0.01
TOTAL	7.54	1.22	1.87	0.00	0.09	0.07
Significance Criteria	137	250	550	250	100	55
Significant?	No	No	No	No	No	No
Maximum Daily Emissions						
Maximum Daily Emissions	80.4	17.0	14.8	0.03	8.4	4.2
Significance Criteria	137	250	550	250	100	55
Significant?	No	No	No	No	No	No

Source: SCAQMD, 2021.

¹ CARB uses the term "reactive organic gases" (ROG) to measure organic gases, which is also contained in the CalEEMod results.

The City of San Diego uses the term VOC ("volatile organic compounds") to describe organic gases in its Significance Determination Thresholds.

² Values may differ slightly from estimates shown in **Appendix A** due to rounding. Values are from summer daily emissions. Winter daily emissions are approximately the same and are less than all significance thresholds (**See Appendix A**).

Operational Impacts

The Project would generate negligible air quality emissions that would not 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. Thus, Project operation would result in a **less-than-significant impact**.

1.4.3 IMPACTS TO SENSITIVE RECEPTORS

Construction of the Project would result in temporary and minor emissions of TACs from construction equipment and motor vehicles. Therefore, the Project would result in a **less-than-significant impact**.

1.4.4 ODOR IMPACTS

During construction, diesel equipment operating at the site may generate some minor odors; however, due to the distance of sensitive receptors to the Project site and the temporary nature of construction, odors associated with Project construction would not be significant.

According to the SCAQMD CEQA Air Quality Handbook (SCAQMD, 1999), land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations. The Project does not propose sources of objectionable odors that would affect a substantial number of persons. Therefore, the Project would result in a **less-than-significant impact**.

1.5 CONCLUSIONS

This air quality analysis for the Las Lomas Grading Project evaluated emissions associated with both the construction and operation of the Project. The Project would not conflict with the air quality plans for the SDAB. Emissions associated with construction and operation were compared to SDAPCD significance thresholds, which provide a conservative means of evaluating whether Project emissions would cause a significant impact on the ambient air quality or whether further evaluation is warranted. Emissions associated with construction and operation would be well below the significance thresholds for all phases and pollutants. Furthermore, impacts to sensitive receptors from TACs and odors would be less than significant. Thus, the Project would result in a **less-than-significant impact**.

1.6 REFERENCES

- City of Vista. 2011. Vista General Plan 2030. December 2011.
- City of San Diego. 2016. Significance Determination Thresholds. July 2016.
- San Diego Air Pollution Control District (SDAPCD). 2007. Eight-Hour Ozone Attainment Plan for San Diego County.
- San Diego Air Pollution Control District (SDAPCD). 2016. 2016 Regional Air Quality Strategy Revision.
- South Coast Air Quality Management District (SCAQMD). 1999. CEQA Air Quality Handbook.
- South Coast Air Quality Management District (SCAQMD). 2021. CalEEMod Model, Version 2020.4.0. <http://www.caleemod.com/>

Appendix A

I. CalEEMod Annual Emissions Output

II. CalEEMod Summer Daily Emissions Output

III. CalEEMod Winter Daily Emissions Output

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**City of Vista 1985 Las Lomas
San Diego County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	32.80	1000sqft	0.75	32,800.00	0
Single Family Housing	1.00	Dwelling Unit	2.93	3,500.00	3

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The Project consists of the widening of Tierra Del Cielo and Las Lomas, constructing the fire equipment access road that connects to Kings Road, and grading lot 7.

Construction Phase -

Woodstoves - No fireplace

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	0.55	0.00
tblFireplaces	NumberNoFireplace	0.10	0.00

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFireplaces	NumberWood	0.35	0.00
tblLandUse	LandUseSquareFeet	1,800.00	3,500.00
tblLandUse	LotAcreage	0.32	2.93
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0728	0.6749	0.7144	1.2800e-003	0.0836	0.0319	0.1155	0.0406	0.0299	0.0705	0.0000	110.9664	110.9664	0.0264	6.4000e-004	111.8178
2024	0.1960	1.1603	1.4292	2.4800e-003	0.0131	0.0524	0.0655	3.5400e-003	0.0493	0.0528	0.0000	214.7961	214.7961	0.0483	1.3400e-003	216.4012
Maximum	0.1960	1.1603	1.4292	2.4800e-003	0.0836	0.0524	0.1155	0.0406	0.0493	0.0705	0.0000	214.7961	214.7961	0.0483	1.3400e-003	216.4012

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					
2023	0.0728	0.6749	0.7144	1.2800e-003	0.0836	0.0319	0.1155	0.0406	0.0299	0.0705	0.0000	110.9663	110.9663	0.0264	6.4000e-004	111.8176
2024	0.1960	1.1603	1.4292	2.4800e-003	0.0131	0.0524	0.0655	3.5400e-003	0.0493	0.0528	0.0000	214.7958	214.7958	0.0483	1.3400e-003	216.4010
Maximum	0.1960	1.1603	1.4292	2.4800e-003	0.0836	0.0524	0.1155	0.0406	0.0493	0.0705	0.0000	214.7958	214.7958	0.0483	1.3400e-003	216.4010

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2023	11-30-2023	0.5781	0.5781
2	12-1-2023	2-29-2024	0.5058	0.5058
3	3-1-2024	5-31-2024	0.4993	0.4993
4	6-1-2024	8-31-2024	0.4467	0.4467
5	9-1-2024	9-30-2024	0.0782	0.0782
		Highest	0.5781	0.5781

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0227	9.0000e-005	7.7200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0127	0.0127	1.0000e-005	0.0000	0.0130
Energy	1.2000e-004	9.9000e-004	4.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	3.0705	3.0705	1.4000e-004	4.0000e-005	3.0846
Mobile	4.5100e-003	5.0200e-003	0.0423	9.0000e-005	9.9600e-003	7.0000e-005	0.0100	2.6600e-003	7.0000e-005	2.7200e-003	0.0000	8.3391	8.3391	6.0000e-004	3.8000e-004	8.4668
Waste						0.0000	0.0000		0.0000	0.0000	0.2497	0.0000	0.2497	0.0148	0.0000	0.6186
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.3196	0.3402	2.1400e-003	5.0000e-005	0.4094
Total	0.0273	6.1000e-003	0.0504	1.0000e-004	9.9600e-003	1.9000e-004	0.0102	2.6600e-003	1.9000e-004	2.8400e-003	0.2704	11.7420	12.0123	0.0177	4.7000e-004	12.5924

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0227	9.0000e-005	7.7200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0127	0.0127	1.0000e-005	0.0000	0.0130
Energy	1.2000e-004	9.9000e-004	4.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	3.0705	3.0705	1.4000e-004	4.0000e-005	3.0846
Mobile	4.5100e-003	5.0200e-003	0.0423	9.0000e-005	9.9600e-003	7.0000e-005	0.0100	2.6600e-003	7.0000e-005	2.7200e-003	0.0000	8.3391	8.3391	6.0000e-004	3.8000e-004	8.4668
Waste						0.0000	0.0000		0.0000	0.0000	0.2497	0.0000	0.2497	0.0148	0.0000	0.6186
Water						0.0000	0.0000		0.0000	0.0000	0.0207	0.3196	0.3402	2.1400e-003	5.0000e-005	0.4094
Total	0.0273	6.1000e-003	0.0504	1.0000e-004	9.9600e-003	1.9000e-004	0.0102	2.6600e-003	1.9000e-004	2.8400e-003	0.2704	11.7420	12.0123	0.0177	4.7000e-004	12.5924

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2023	9/7/2023	5	5	
2	Grading	Grading	9/8/2023	9/19/2023	5	8	
3	Building Construction	Building Construction	9/20/2023	8/6/2024	5	230	

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Paving	Paving	8/7/2024	8/30/2024	5	18
5	Architectural Coating	Architectural Coating	8/31/2024	9/25/2024	5	18

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 0.75

Residential Indoor: 7,088; Residential Outdoor: 2,363; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,968 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	14.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0688	0.0456	1.0000e-004		3.1700e-003	3.1700e-003		2.9100e-003	2.9100e-003	0.0000	8.3627	8.3627	2.7000e-003	0.0000	8.4303
Total	6.6500e-003	0.0688	0.0456	1.0000e-004	0.0491	3.1700e-003	0.0523	0.0253	2.9100e-003	0.0282	0.0000	8.3627	8.3627	2.7000e-003	0.0000	8.4303

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	1.0300e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2856	0.2856	1.0000e-005	1.0000e-005	0.2881
Total	1.2000e-004	8.0000e-005	1.0300e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2856	0.2856	1.0000e-005	1.0000e-005	0.2881

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.6500e-003	0.0688	0.0456	1.0000e-004		3.1700e-003	3.1700e-003		2.9100e-003	2.9100e-003	0.0000	8.3627	8.3627	2.7000e-003	0.0000	8.4303
Total	6.6500e-003	0.0688	0.0456	1.0000e-004	0.0491	3.1700e-003	0.0523	0.0253	2.9100e-003	0.0282	0.0000	8.3627	8.3627	2.7000e-003	0.0000	8.4303

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	1.0300e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2856	0.2856	1.0000e-005	1.0000e-005	0.2881
Total	1.2000e-004	8.0000e-005	1.0300e-003	0.0000	3.6000e-004	0.0000	3.6000e-004	1.0000e-004	0.0000	1.0000e-004	0.0000	0.2856	0.2856	1.0000e-005	1.0000e-005	0.2881

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0283	0.0000	0.0283	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8400e-003	0.0717	0.0590	1.2000e-004		3.1000e-003	3.1000e-003		2.8500e-003	2.8500e-003	0.0000	10.4243	10.4243	3.3700e-003	0.0000	10.5085
Total	6.8400e-003	0.0717	0.0590	1.2000e-004	0.0283	3.1000e-003	0.0314	0.0137	2.8500e-003	0.0166	0.0000	10.4243	10.4243	3.3700e-003	0.0000	10.5085

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.3700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3807	0.3807	1.0000e-005	1.0000e-005	0.3842
Total	1.6000e-004	1.1000e-004	1.3700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3807	0.3807	1.0000e-005	1.0000e-005	0.3842

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0283	0.0000	0.0283	0.0137	0.0000	0.0137	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8400e-003	0.0717	0.0590	1.2000e-004		3.1000e-003	3.1000e-003		2.8500e-003	2.8500e-003	0.0000	10.4242	10.4242	3.3700e-003	0.0000	10.5085
Total	6.8400e-003	0.0717	0.0590	1.2000e-004	0.0283	3.1000e-003	0.0314	0.0137	2.8500e-003	0.0166	0.0000	10.4242	10.4242	3.3700e-003	0.0000	10.5085

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6000e-004	1.1000e-004	1.3700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3807	0.3807	1.0000e-005	1.0000e-005	0.3842
Total	1.6000e-004	1.1000e-004	1.3700e-003	0.0000	4.8000e-004	0.0000	4.8000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.3807	0.3807	1.0000e-005	1.0000e-005	0.3842

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0574	0.5251	0.5929	9.8000e-004		0.0255	0.0255		0.0240	0.0240	0.0000	84.6087	84.6087	0.0201	0.0000	85.1119
Total	0.0574	0.5251	0.5929	9.8000e-004		0.0255	0.0255		0.0240	0.0240	0.0000	84.6087	84.6087	0.0201	0.0000	85.1119

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	8.1000e-003	2.8600e-003	4.0000e-005	1.2100e-003	5.0000e-005	1.2600e-003	3.5000e-004	5.0000e-005	4.0000e-004	0.0000	3.6619	3.6619	1.1000e-004	5.3000e-004	3.8228
Worker	1.3800e-003	9.6000e-004	0.0117	4.0000e-005	4.1000e-003	2.0000e-005	4.1200e-003	1.0900e-003	2.0000e-005	1.1100e-003	0.0000	3.2426	3.2426	1.0000e-004	9.0000e-005	3.2720
Total	1.5900e-003	9.0600e-003	0.0145	8.0000e-005	5.3100e-003	7.0000e-005	5.3800e-003	1.4400e-003	7.0000e-005	1.5100e-003	0.0000	6.9045	6.9045	2.1000e-004	6.2000e-004	7.0947

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0574	0.5251	0.5929	9.8000e-004		0.0255	0.0255		0.0240	0.0240	0.0000	84.6086	84.6086	0.0201	0.0000	85.1118
Total	0.0574	0.5251	0.5929	9.8000e-004		0.0255	0.0255		0.0240	0.0240	0.0000	84.6086	84.6086	0.0201	0.0000	85.1118

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.1000e-004	8.1000e-003	2.8600e-003	4.0000e-005	1.2100e-003	5.0000e-005	1.2600e-003	3.5000e-004	5.0000e-005	4.0000e-004	0.0000	3.6619	3.6619	1.1000e-004	5.3000e-004	3.8228
Worker	1.3800e-003	9.6000e-004	0.0117	4.0000e-005	4.1000e-003	2.0000e-005	4.1200e-003	1.0900e-003	2.0000e-005	1.1100e-003	0.0000	3.2426	3.2426	1.0000e-004	9.0000e-005	3.2720
Total	1.5900e-003	9.0600e-003	0.0145	8.0000e-005	5.3100e-003	7.0000e-005	5.3800e-003	1.4400e-003	7.0000e-005	1.5100e-003	0.0000	6.9045	6.9045	2.1000e-004	6.2000e-004	7.0947

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1155	1.0553	1.2691	2.1200e-003		0.0481	0.0481		0.0453	0.0453	0.0000	182.0016	182.0016	0.0430	0.0000	183.0775
Total	0.1155	1.0553	1.2691	2.1200e-003		0.0481	0.0481		0.0453	0.0453	0.0000	182.0016	182.0016	0.0430	0.0000	183.0775

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0173	6.0000e-003	8.0000e-005	2.6100e-003	1.0000e-004	2.7100e-003	7.5000e-004	1.0000e-004	8.5000e-004	0.0000	7.7384	7.7384	2.4000e-004	1.1200e-003	8.0785
Worker	2.7900e-003	1.8500e-003	0.0234	7.0000e-005	8.8100e-003	5.0000e-005	8.8600e-003	2.3400e-003	4.0000e-005	2.3800e-003	0.0000	6.7454	6.7454	1.9000e-004	1.8000e-004	6.8043
Total	3.2300e-003	0.0192	0.0294	1.5000e-004	0.0114	1.5000e-004	0.0116	3.0900e-003	1.4000e-004	3.2300e-003	0.0000	14.4838	14.4838	4.3000e-004	1.3000e-003	14.8829

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1155	1.0553	1.2691	2.1200e-003		0.0481	0.0481		0.0453	0.0453	0.0000	182.0013	182.0013	0.0430	0.0000	183.0773
Total	0.1155	1.0553	1.2691	2.1200e-003		0.0481	0.0481		0.0453	0.0453	0.0000	182.0013	182.0013	0.0430	0.0000	183.0773

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.4000e-004	0.0173	6.0000e-003	8.0000e-005	2.6100e-003	1.0000e-004	2.7100e-003	7.5000e-004	1.0000e-004	8.5000e-004	0.0000	7.7384	7.7384	2.4000e-004	1.1200e-003	8.0785
Worker	2.7900e-003	1.8500e-003	0.0234	7.0000e-005	8.8100e-003	5.0000e-005	8.8600e-003	2.3400e-003	4.0000e-005	2.3800e-003	0.0000	6.7454	6.7454	1.9000e-004	1.8000e-004	6.8043
Total	3.2300e-003	0.0192	0.0294	1.5000e-004	0.0114	1.5000e-004	0.0116	3.0900e-003	1.4000e-004	3.2300e-003	0.0000	14.4838	14.4838	4.3000e-004	1.3000e-003	14.8829

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.9300e-003	0.0745	0.1100	1.7000e-004		3.5900e-003	3.5900e-003		3.3200e-003	3.3200e-003	0.0000	14.7423	14.7423	4.6300e-003	0.0000	14.8581
Paving	9.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.9100e-003	0.0745	0.1100	1.7000e-004		3.5900e-003	3.5900e-003		3.3200e-003	3.3200e-003	0.0000	14.7423	14.7423	4.6300e-003	0.0000	14.8581

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.0000e-004	3.8300e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1048	1.1048	3.0000e-005	3.0000e-005	1.1145
Total	4.6000e-004	3.0000e-004	3.8300e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1048	1.1048	3.0000e-005	3.0000e-005	1.1145

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.9300e-003	0.0745	0.1100	1.7000e-004		3.5900e-003	3.5900e-003		3.3200e-003	3.3200e-003	0.0000	14.7423	14.7423	4.6300e-003	0.0000	14.8581
Paving	9.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	8.9100e-003	0.0745	0.1100	1.7000e-004		3.5900e-003	3.5900e-003		3.3200e-003	3.3200e-003	0.0000	14.7423	14.7423	4.6300e-003	0.0000	14.8581

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.6000e-004	3.0000e-004	3.8300e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1048	1.1048	3.0000e-005	3.0000e-005	1.1145
Total	4.6000e-004	3.0000e-004	3.8300e-003	1.0000e-005	1.4400e-003	1.0000e-005	1.4500e-003	3.8000e-004	1.0000e-005	3.9000e-004	0.0000	1.1048	1.1048	3.0000e-005	3.0000e-005	1.1145

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0662					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6300e-003	0.0110	0.0163	3.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3012
Total	0.0678	0.0110	0.0163	3.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3012

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.7000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1657	0.1657	0.0000	0.0000	0.1672
Total	7.0000e-005	5.0000e-005	5.7000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1657	0.1657	0.0000	0.0000	0.1672

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0662					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6300e-003	0.0110	0.0163	3.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3012
Total	0.0678	0.0110	0.0163	3.0000e-005		5.5000e-004	5.5000e-004		5.5000e-004	5.5000e-004	0.0000	2.2979	2.2979	1.3000e-004	0.0000	2.3012

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.0000e-005	5.0000e-005	5.7000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1657	0.1657	0.0000	0.0000	0.1672
Total	7.0000e-005	5.0000e-005	5.7000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1657	0.1657	0.0000	0.0000	0.1672

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.5100e-003	5.0200e-003	0.0423	9.0000e-005	9.9600e-003	7.0000e-005	0.0100	2.6600e-003	7.0000e-005	2.7200e-003	0.0000	8.3391	8.3391	6.0000e-004	3.8000e-004	8.4668
Unmitigated	4.5100e-003	5.0200e-003	0.0423	9.0000e-005	9.9600e-003	7.0000e-005	0.0100	2.6600e-003	7.0000e-005	2.7200e-003	0.0000	8.3391	8.3391	6.0000e-004	3.8000e-004	8.4668

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	9.44	9.54	8.55	26,632	26,632
Total	9.44	9.54	8.55	26,632	26,632

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Single Family Housing	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

5.0 Energy Detail

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.9189	1.9189	1.2000e-004	1.0000e-005	1.9260
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1.9189	1.9189	1.2000e-004	1.0000e-005	1.9260
NaturalGas Mitigated	1.2000e-004	9.9000e-004	4.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1517	1.1517	2.0000e-005	2.0000e-005	1.1585
NaturalGas Unmitigated	1.2000e-004	9.9000e-004	4.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1517	1.1517	2.0000e-005	2.0000e-005	1.1585

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	21581.5	1.2000e-004	9.9000e-004	4.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1517	1.1517	2.0000e-005	2.0000e-005	1.1585
Total		1.2000e-004	9.9000e-004	4.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1517	1.1517	2.0000e-005	2.0000e-005	1.1585

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	21581.5	1.2000e-004	9.9000e-004	4.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1517	1.1517	2.0000e-005	2.0000e-005	1.1585
Total		1.2000e-004	9.9000e-004	4.2000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.1517	1.1517	2.0000e-005	2.0000e-005	1.1585

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	7834.33	1.9189	1.2000e-004	1.0000e-005	1.9260
Total		1.9189	1.2000e-004	1.0000e-005	1.9260

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	7834.33	1.9189	1.2000e-004	1.0000e-005	1.9260
Total		1.9189	1.2000e-004	1.0000e-005	1.9260

6.0 Area Detail

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0227	9.0000e-005	7.7200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0127	0.0127	1.0000e-005	0.0000	0.0130
Unmitigated	0.0227	9.0000e-005	7.7200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0127	0.0127	1.0000e-005	0.0000	0.0130

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	6.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0158					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	9.0000e-005	7.7200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0127	0.0127	1.0000e-005	0.0000	0.0130
Total	0.0227	9.0000e-005	7.7200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0127	0.0127	1.0000e-005	0.0000	0.0130

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.6200e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0158					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.5000e-004	9.0000e-005	7.7200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0127	0.0127	1.0000e-005	0.0000	0.0130
Total	0.0227	9.0000e-005	7.7200e-003	0.0000		4.0000e-005	4.0000e-005		4.0000e-005	4.0000e-005	0.0000	0.0127	0.0127	1.0000e-005	0.0000	0.0130

7.0 Water Detail

7.1 Mitigation Measures Water

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.3402	2.1400e-003	5.0000e-005	0.4094
Unmitigated	0.3402	2.1400e-003	5.0000e-005	0.4094

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.065154 / 0.0410754	0.3402	2.1400e-003	5.0000e-005	0.4094
Total		0.3402	2.1400e-003	5.0000e-005	0.4094

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.065154 / 0.0410754	0.3402	2.1400e-003	5.0000e-005	0.4094
Total		0.3402	2.1400e-003	5.0000e-005	0.4094

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.2497	0.0148	0.0000	0.6186
Unmitigated	0.2497	0.0148	0.0000	0.6186

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.23	0.2497	0.0148	0.0000	0.6186
Total		0.2497	0.0148	0.0000	0.6186

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Single Family Housing	1.23	0.2497	0.0148	0.0000	0.6186
Total		0.2497	0.0148	0.0000	0.6186

9.0 Operational Offroad

City of Vista 1985 Las Lomas - San Diego County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**City of Vista 1985 Las Lomas
San Diego County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	32.80	1000sqft	0.75	32,800.00	0
Single Family Housing	1.00	Dwelling Unit	2.93	3,500.00	3

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The Project consists of the widening of Tierra Del Cielo and Las Lomas, constructing the fire equipment access road that connects to Kings Road, and grading lot 7.

Construction Phase -

Woodstoves - No fireplace

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	0.55	0.00
tblFireplaces	NumberNoFireplace	0.10	0.00

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFireplaces	NumberWood	0.35	0.00
tblLandUse	LandUseSquareFeet	1,800.00	3,500.00
tblLandUse	LotAcreage	0.32	2.93
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
2023	2.7086	27.5547	18.6763	0.0394	19.8049	1.2668	21.0717	10.1417	1.1655	11.3071	0.0000	3,819.3676	3,819.3676	1.1961	0.0186	3,850.2519
2024	7.5394	13.6780	16.5557	0.0289	0.1643	0.6152	0.7641	0.0436	0.5787	0.6190	0.0000	2,763.6337	2,763.6337	0.6103	0.0181	2,784.2899
Maximum	7.5394	27.5547	18.6763	0.0394	19.8049	1.2668	21.0717	10.1417	1.1655	11.3071	0.0000	3,819.3676	3,819.3676	1.1961	0.0186	3,850.2519

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					
2023	2.7086	27.5547	18.6763	0.0394	19.8049	1.2668	21.0717	10.1417	1.1655	11.3071	0.0000	3,819.3676	3,819.3676	1.1961	0.0186	3,850.2519
2024	7.5394	13.6780	16.5557	0.0289	0.1643	0.6152	0.7641	0.0436	0.5787	0.6190	0.0000	2,763.6337	2,763.6337	0.6103	0.0181	2,784.2899
Maximum	7.5394	27.5547	18.6763	0.0394	19.8049	1.2668	21.0717	10.1417	1.1655	11.3071	0.0000	3,819.3676	3,819.3676	1.1961	0.0186	3,850.2519

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598
Energy	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975
Mobile	0.0264	0.0263	0.2363	5.3000e-004	0.0573	3.9000e-004	0.0577	0.0153	3.7000e-004	0.0156		53.6934	53.6934	3.5600e-003	2.2500e-003	54.4526
Total	0.1526	0.0328	0.3244	5.6000e-004	0.0573	1.3000e-003	0.0586	0.0153	1.2800e-003	0.0166	0.0000	60.8053	60.8053	3.8500e-003	2.3800e-003	61.6099

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	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598
Energy	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975
Mobile	0.0264	0.0263	0.2363	5.3000e-004	0.0573	3.9000e-004	0.0577	0.0153	3.7000e-004	0.0156		53.6934	53.6934	3.5600e-003	2.2500e-003	54.4526
Total	0.1526	0.0328	0.3244	5.6000e-004	0.0573	1.3000e-003	0.0586	0.0153	1.2800e-003	0.0166	0.0000	60.8053	60.8053	3.8500e-003	2.3800e-003	61.6099

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2023	9/7/2023	5	5	
2	Grading	Grading	9/8/2023	9/19/2023	5	8	
3	Building Construction	Building Construction	9/20/2023	8/6/2024	5	230	
4	Paving	Paving	8/7/2024	8/30/2024	5	18	
5	Architectural Coating	Architectural Coating	8/31/2024	9/25/2024	5	18	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 0.75

Residential Indoor: 7,088; Residential Outdoor: 2,363; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,968 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	14.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0381	19.6570	1.2660	20.9230	10.1025	1.1647	11.2672		3,687.308 1	3,687.308 1	1.1926		3,717.121 9

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0306	0.4320	1.3100e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		132.0595	132.0595	3.5800e-003	3.2900e-003	133.1300
Total	0.0492	0.0306	0.4320	1.3100e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		132.0595	132.0595	3.5800e-003	3.2900e-003	133.1300

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0381	19.6570	1.2660	20.9230	10.1025	1.1647	11.2672	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0492	0.0306	0.4320	1.3100e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		132.0595	132.0595	3.5800e-003	3.2900e-003	133.1300
Total	0.0492	0.0306	0.4320	1.3100e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		132.0595	132.0595	3.5800e-003	3.2900e-003	133.1300

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	7.0826	0.7749	7.8575	3.4247	0.7129	4.1377		2,872.6910	2,872.6910	0.9291		2,895.9182

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0410	0.0255	0.3600	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		110.0496	110.0496	2.9800e-003	2.7400e-003	110.9417
Total	0.0410	0.0255	0.3600	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		110.0496	110.0496	2.9800e-003	2.7400e-003	110.9417

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	7.0826	0.7749	7.8575	3.4247	0.7129	4.1377	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0410	0.0255	0.3600	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		110.0496	110.0496	2.9800e-003	2.7400e-003	110.9417
Total	0.0410	0.0255	0.3600	1.0900e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		110.0496	110.0496	2.9800e-003	2.7400e-003	110.9417

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

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
Vendor	5.9700e-003	0.2143	0.0772	1.0200e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2500e-003	0.0110		110.5235	110.5235	3.3500e-003	0.0160	115.3761
Worker	0.0383	0.0238	0.3360	1.0200e-003	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		102.7130	102.7130	2.7800e-003	2.5600e-003	103.5456
Total	0.0442	0.2381	0.4132	2.0400e-003	0.1489	1.9300e-003	0.1508	0.0403	1.8200e-003	0.0421		213.2365	213.2365	6.1300e-003	0.0186	218.9217

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

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
Vendor	5.9700e-003	0.2143	0.0772	1.0200e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2500e-003	0.0110		110.5235	110.5235	3.3500e-003	0.0160	115.3761
Worker	0.0383	0.0238	0.3360	1.0200e-003	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		102.7130	102.7130	2.7800e-003	2.5600e-003	103.5456
Total	0.0442	0.2381	0.4132	2.0400e-003	0.1489	1.9300e-003	0.1508	0.0403	1.8200e-003	0.0421		213.2365	213.2365	6.1300e-003	0.0186	218.9217

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

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

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
Vendor	5.7500e-003	0.2129	0.0754	1.0000e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2600e-003	0.0110		108.5965	108.5965	3.4300e-003	0.0157	113.3677
Worker	0.0359	0.0214	0.3135	9.8000e-004	0.1150	5.9000e-004	0.1156	0.0305	5.4000e-004	0.0311		99.3382	99.3382	2.5300e-003	2.3900e-003	100.1146
Total	0.0417	0.2342	0.3889	1.9800e-003	0.1489	1.9000e-003	0.1508	0.0403	1.8000e-003	0.0421		207.9348	207.9348	5.9600e-003	0.0181	213.4823

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

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
Vendor	5.7500e-003	0.2129	0.0754	1.0000e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2600e-003	0.0110		108.5965	108.5965	3.4300e-003	0.0157	113.3677
Worker	0.0359	0.0214	0.3135	9.8000e-004	0.1150	5.9000e-004	0.1156	0.0305	5.4000e-004	0.0311		99.3382	99.3382	2.5300e-003	2.3900e-003	100.1146
Total	0.0417	0.2342	0.3889	1.9800e-003	0.1489	1.9000e-003	0.1508	0.0403	1.8000e-003	0.0421		207.9348	207.9348	5.9600e-003	0.0181	213.4823

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.1092					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9905	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0513	0.0305	0.4478	1.4000e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		141.9117	141.9117	3.6200e-003	3.4200e-003	143.0209
Total	0.0513	0.0305	0.4478	1.4000e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		141.9117	141.9117	3.6200e-003	3.4200e-003	143.0209

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.1092					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9905	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0513	0.0305	0.4478	1.4000e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		141.9117	141.9117	3.6200e-003	3.4200e-003	143.0209
Total	0.0513	0.0305	0.4478	1.4000e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		141.9117	141.9117	3.6200e-003	3.4200e-003	143.0209

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.3510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	7.5317	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-003	4.5800e-003	0.0672	2.1000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		21.2868	21.2868	5.4000e-004	5.1000e-004	21.4531
Total	7.7000e-003	4.5800e-003	0.0672	2.1000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		21.2868	21.2868	5.4000e-004	5.1000e-004	21.4531

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.3510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	7.5317	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-003	4.5800e-003	0.0672	2.1000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		21.2868	21.2868	5.4000e-004	5.1000e-004	21.4531
Total	7.7000e-003	4.5800e-003	0.0672	2.1000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		21.2868	21.2868	5.4000e-004	5.1000e-004	21.4531

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0264	0.0263	0.2363	5.3000e-004	0.0573	3.9000e-004	0.0577	0.0153	3.7000e-004	0.0156		53.6934	53.6934	3.5600e-003	2.2500e-003	54.4526
Unmitigated	0.0264	0.0263	0.2363	5.3000e-004	0.0573	3.9000e-004	0.0577	0.0153	3.7000e-004	0.0156		53.6934	53.6934	3.5600e-003	2.2500e-003	54.4526

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	9.44	9.54	8.55	26,632	26,632
Total	9.44	9.54	8.55	26,632	26,632

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Single Family Housing	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

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	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975
NaturalGas Unmitigated	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	59.1273	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975
Total		6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.0591273	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975
Total		6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975

6.0 Area Detail

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598
Unmitigated	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0363					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0865					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7800e-003	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.1557	0.1557	1.6000e-004		0.1598
Total	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0363					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0865					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7800e-003	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.1557	0.1557	1.6000e-004		0.1598
Total	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598

7.0 Water Detail

7.1 Mitigation Measures Water

City of Vista 1985 Las Lomas - San Diego County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

**City of Vista 1985 Las Lomas
San Diego County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Asphalt Surfaces	32.80	1000sqft	0.75	32,800.00	0
Single Family Housing	1.00	Dwelling Unit	2.93	3,500.00	3

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	40
Climate Zone	13			Operational Year	2025
Utility Company	San Diego Gas & Electric				
CO2 Intensity (lb/MWhr)	539.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - The Project consists of the widening of Tierra Del Cielo and Las Lomas, constructing the fire equipment access road that connects to Kings Road, and grading lot 7.

Construction Phase -

Woodstoves - No fireplace

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceDayYear	82.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	3,078.40	0.00
tblFireplaces	NumberGas	0.55	0.00
tblFireplaces	NumberNoFireplace	0.10	0.00

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblFireplaces	NumberWood	0.35	0.00
tblLandUse	LandUseSquareFeet	1,800.00	3,500.00
tblLandUse	LotAcreage	0.32	2.93
tblWoodstoves	NumberCatalytic	0.05	0.00
tblWoodstoves	NumberNoncatalytic	0.05	0.00
tblWoodstoves	WoodstoveDayYear	82.00	0.00
tblWoodstoves	WoodstoveWoodMass	3,019.20	0.00

2.0 Emissions Summary

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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					
2023	2.7128	27.5585	18.6548	0.0393	19.8049	1.2668	21.0717	10.1417	1.1655	11.3071	0.0000	3,812.109 1	3,812.109 1	1.1964	0.0188	3,843.079 2
2024	7.5401	13.6896	16.5430	0.0289	0.1643	0.6152	0.7641	0.0436	0.5787	0.6190	0.0000	2,758.344 9	2,758.344 9	0.6105	0.0184	2,779.073 8
Maximum	7.5401	27.5585	18.6548	0.0393	19.8049	1.2668	21.0717	10.1417	1.1655	11.3071	0.0000	3,812.109 1	3,812.109 1	1.1964	0.0188	3,843.079 2

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					
2023	2.7128	27.5585	18.6548	0.0393	19.8049	1.2668	21.0717	10.1417	1.1655	11.3071	0.0000	3,812.109 1	3,812.109 1	1.1964	0.0188	3,843.079 2
2024	7.5401	13.6896	16.5430	0.0289	0.1643	0.6152	0.7641	0.0436	0.5787	0.6190	0.0000	2,758.344 9	2,758.344 9	0.6105	0.0184	2,779.073 8
Maximum	7.5401	27.5585	18.6548	0.0393	19.8049	1.2668	21.0717	10.1417	1.1655	11.3071	0.0000	3,812.109 1	3,812.109 1	1.1964	0.0188	3,843.079 2

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598
Energy	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975
Mobile	0.0258	0.0285	0.2425	5.0000e-004	0.0573	3.9000e-004	0.0577	0.0153	3.7000e-004	0.0156		51.3740	51.3740	3.7600e-003	2.3700e-003	52.1735
Total	0.1520	0.0349	0.3306	5.3000e-004	0.0573	1.3000e-003	0.0586	0.0153	1.2800e-003	0.0166	0.0000	58.4859	58.4859	4.0500e-003	2.5000e-003	59.3307

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	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598
Energy	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975
Mobile	0.0258	0.0285	0.2425	5.0000e-004	0.0573	3.9000e-004	0.0577	0.0153	3.7000e-004	0.0156		51.3740	51.3740	3.7600e-003	2.3700e-003	52.1735
Total	0.1520	0.0349	0.3306	5.3000e-004	0.0573	1.3000e-003	0.0586	0.0153	1.2800e-003	0.0166	0.0000	58.4859	58.4859	4.0500e-003	2.5000e-003	59.3307

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2023	9/7/2023	5	5	
2	Grading	Grading	9/8/2023	9/19/2023	5	8	
3	Building Construction	Building Construction	9/20/2023	8/6/2024	5	230	
4	Paving	Paving	8/7/2024	8/30/2024	5	18	
5	Architectural Coating	Architectural Coating	8/31/2024	9/25/2024	5	18	

Acres of Grading (Site Preparation Phase): 7.5

Acres of Grading (Grading Phase): 8

Acres of Paving: 0.75

Residential Indoor: 7,088; Residential Outdoor: 2,363; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 1,968 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	1	8.00	158	0.38
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	14.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	3.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647		3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	19.6570	1.2660	20.9230	10.1025	1.1647	11.2672		3,687.3081	3,687.3081	1.1926		3,717.1219

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0533	0.0344	0.4105	1.2300e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		124.8010	124.8010	3.8100e-003	3.5600e-003	125.9573
Total	0.0533	0.0344	0.4105	1.2300e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		124.8010	124.8010	3.8100e-003	3.5600e-003	125.9573

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9
Total	2.6595	27.5242	18.2443	0.0381	19.6570	1.2660	20.9230	10.1025	1.1647	11.2672	0.0000	3,687.308 1	3,687.308 1	1.1926		3,717.121 9

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0533	0.0344	0.4105	1.2300e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		124.8010	124.8010	3.8100e-003	3.5600e-003	125.9573
Total	0.0533	0.0344	0.4105	1.2300e-003	0.1479	7.9000e-004	0.1487	0.0392	7.3000e-004	0.0400		124.8010	124.8010	3.8100e-003	3.5600e-003	125.9573

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129		2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	7.0826	0.7749	7.8575	3.4247	0.7129	4.1377		2,872.6910	2,872.6910	0.9291		2,895.9182

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0286	0.3421	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		104.0008	104.0008	3.1800e-003	2.9700e-003	104.9644
Total	0.0445	0.0286	0.3421	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		104.0008	104.0008	3.1800e-003	2.9700e-003	104.9644

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.7109	17.9359	14.7507	0.0297		0.7749	0.7749		0.7129	0.7129	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182
Total	1.7109	17.9359	14.7507	0.0297	7.0826	0.7749	7.8575	3.4247	0.7129	4.1377	0.0000	2,872.6910	2,872.6910	0.9291		2,895.9182

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0445	0.0286	0.3421	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		104.0008	104.0008	3.1800e-003	2.9700e-003	104.9644
Total	0.0445	0.0286	0.3421	1.0300e-003	0.1232	6.6000e-004	0.1239	0.0327	6.1000e-004	0.0333		104.0008	104.0008	3.1800e-003	2.9700e-003	104.9644

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

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
Vendor	5.8100e-003	0.2234	0.0796	1.0300e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2600e-003	0.0110		110.6806	110.6806	3.3300e-003	0.0160	115.5440
Worker	0.0415	0.0267	0.3193	9.6000e-004	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		97.0675	97.0675	2.9700e-003	2.7700e-003	97.9668
Total	0.0473	0.2501	0.3988	1.9900e-003	0.1489	1.9300e-003	0.1508	0.0403	1.8300e-003	0.0421		207.7481	207.7481	6.3000e-003	0.0188	213.5108

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

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
Vendor	5.8100e-003	0.2234	0.0796	1.0300e-003	0.0339	1.3100e-003	0.0352	9.7500e-003	1.2600e-003	0.0110		110.6806	110.6806	3.3300e-003	0.0160	115.5440
Worker	0.0415	0.0267	0.3193	9.6000e-004	0.1150	6.2000e-004	0.1156	0.0305	5.7000e-004	0.0311		97.0675	97.0675	2.9700e-003	2.7700e-003	97.9668
Total	0.0473	0.2501	0.3988	1.9900e-003	0.1489	1.9300e-003	0.1508	0.0403	1.8300e-003	0.0421		207.7481	207.7481	6.3000e-003	0.0188	213.5108

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

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

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
Vendor	5.5700e-003	0.2219	0.0778	1.0100e-003	0.0339	1.3200e-003	0.0352	9.7500e-003	1.2600e-003	0.0110		108.7553	108.7553	3.4100e-003	0.0158	113.5369
Worker	0.0391	0.0240	0.2984	9.3000e-004	0.1150	5.9000e-004	0.1156	0.0305	5.4000e-004	0.0311		93.8906	93.8906	2.7000e-003	2.5900e-003	94.7292
Total	0.0446	0.2459	0.3762	1.9400e-003	0.1489	1.9100e-003	0.1508	0.0403	1.8000e-003	0.0421		202.6460	202.6460	6.1100e-003	0.0184	208.2662

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.6989	2,555.6989	0.6044		2,570.8077

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
Vendor	5.5700e-003	0.2219	0.0778	1.0100e-003	0.0339	1.3200e-003	0.0352	9.7500e-003	1.2600e-003	0.0110		108.7553	108.7553	3.4100e-003	0.0158	113.5369
Worker	0.0391	0.0240	0.2984	9.3000e-004	0.1150	5.9000e-004	0.1156	0.0305	5.4000e-004	0.0311		93.8906	93.8906	2.7000e-003	2.5900e-003	94.7292
Total	0.0446	0.2459	0.3762	1.9400e-003	0.1489	1.9100e-003	0.1508	0.0403	1.8000e-003	0.0421		202.6460	202.6460	6.1100e-003	0.0184	208.2662

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.1092					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9905	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685		1,805.6205	1,805.6205	0.5673		1,819.8039

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0558	0.0343	0.4263	1.3300e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		134.1294	134.1294	3.8600e-003	3.7000e-003	135.3275
Total	0.0558	0.0343	0.4263	1.3300e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		134.1294	134.1294	3.8600e-003	3.7000e-003	135.3275

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.8814	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039
Paving	0.1092					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9905	8.2730	12.2210	0.0189		0.3987	0.3987		0.3685	0.3685	0.0000	1,805.6205	1,805.6205	0.5673		1,819.8039

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0558	0.0343	0.4263	1.3300e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		134.1294	134.1294	3.8600e-003	3.7000e-003	135.3275
Total	0.0558	0.0343	0.4263	1.3300e-003	0.1643	8.4000e-004	0.1651	0.0436	7.7000e-004	0.0444		134.1294	134.1294	3.8600e-003	3.7000e-003	135.3275

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.3510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	7.5317	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3700e-003	5.1500e-003	0.0640	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		20.1194	20.1194	5.8000e-004	5.5000e-004	20.2991
Total	8.3700e-003	5.1500e-003	0.0640	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		20.1194	20.1194	5.8000e-004	5.5000e-004	20.2991

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	7.3510					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	7.5317	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

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
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.3700e-003	5.1500e-003	0.0640	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		20.1194	20.1194	5.8000e-004	5.5000e-004	20.2991
Total	8.3700e-003	5.1500e-003	0.0640	2.0000e-004	0.0246	1.3000e-004	0.0248	6.5400e-003	1.2000e-004	6.6500e-003		20.1194	20.1194	5.8000e-004	5.5000e-004	20.2991

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0258	0.0285	0.2425	5.0000e-004	0.0573	3.9000e-004	0.0577	0.0153	3.7000e-004	0.0156		51.3740	51.3740	3.7600e-003	2.3700e-003	52.1735
Unmitigated	0.0258	0.0285	0.2425	5.0000e-004	0.0573	3.9000e-004	0.0577	0.0153	3.7000e-004	0.0156		51.3740	51.3740	3.7600e-003	2.3700e-003	52.1735

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Single Family Housing	9.44	9.54	8.55	26,632	26,632
Total	9.44	9.54	8.55	26,632	26,632

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Single Family Housing	10.80	7.30	7.50	41.60	18.80	39.60	86	11	3

4.4 Fleet Mix

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751
Single Family Housing	0.561854	0.062428	0.177046	0.117565	0.023832	0.006317	0.008949	0.006298	0.000705	0.000577	0.028723	0.000955	0.004751

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	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975
NaturalGas Unmitigated	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	59.1273	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975
Total		6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975

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					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Single Family Housing	0.0591273	6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975
Total		6.4000e-004	5.4500e-003	2.3200e-003	3.0000e-005		4.4000e-004	4.4000e-004		4.4000e-004	4.4000e-004		6.9562	6.9562	1.3000e-004	1.3000e-004	6.9975

6.0 Area Detail

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598
Unmitigated	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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	0.0363					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0865					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7800e-003	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.1557	0.1557	1.6000e-004		0.1598
Total	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.0363					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0865					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.7800e-003	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004		0.1557	0.1557	1.6000e-004		0.1598
Total	0.1256	9.8000e-004	0.0858	0.0000		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	0.1557	0.1557	1.6000e-004	0.0000	0.1598

7.0 Water Detail

7.1 Mitigation Measures Water

City of Vista 1985 Las Lomas - San Diego County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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
