



KPC EHS Consultants

Technical Memorandum

To: EPC Consulting, Ernest Perea

From: Kevin P. Carr, MS., KPC EHS Consultants

Date: February 11, 2023

Re: Rancho 38 Development Project - Air Quality/GHG Assessment

1.0 Purpose

The purpose of this memorandum is to document the results of the air quality (AQ) and greenhouse gas (GHG) emissions assessment as it relates to the potential environmental impacts associated with the construction and operation of the proposed warehouse project on approximately 39.24 acres.

2.0 Project Location & Description

2.1 Project Location: The proposed project site is located in the City of Adelanto, San Bernardino, California on the south side of Rancho Road, on the southwest corner of the intersection of Rancho Road and Emerald Road, and is referred to as APN: 3128-291-02.

2.2 Description: The Applicant is proposing to develop a 686,400 square foot (sf) warehouse/distribution facility consisting of 646,400 sf warehouse (549,440 sf non-refrigerated warehouse and 96,960 sf cold storage warehouse), 40,000 sf office space/mezzanine, automobile parking spaces, and trailer stalls on an approximately 39.24 acre vacant parcel.

3.0 Air Quality & Greenhouse Gas (GHG) Assessment

3.1 Determination of Significance: The criteria used to determine the significance related to potential Project related air quality and greenhouse gas emission impacts is based on the California Environmental Quality Act (CEQA) Environmental Checklist, Appendix G Thresholds:

3.1.1 Air Quality / GHG Impacts:

Would the Project: Conflict with or obstruct implementation of the applicable air quality plan?

Would the Project: 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?

Would the Project: Expose sensitive receptors to substantial pollutant concentrations?

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

Would the Project: Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Would the Project: Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

3.1.2 Air Quality / GHG Thresholds:

The Mojave Desert Air Quality Management District (MDAQMD) has developed regional significance thresholds for regulated pollutants as well as GHG emissions. The MDAQMD's CEQA Guidelines provide significance thresholds as indicated in Table 3.1 below.

Table 3.1 – Emissions Significance Thresholds

Criteria Pollutant / Emission	Annual Threshold (Tons)	Daily Threshold (pounds)
Carbon Monoxide (CO)	100	548
Oxides of Nitrogen (NO _x)	25	137
Reactive Organic Gases (ROG)	25	137
Sulfur Oxides (SO _x)	25	137
Particulate Matter 10 microns (PM ₁₀)	15	82
Particulate Matter 2.5 microns (PM _{2.5})	12	65
Carbon Dioxide Equivalent (CO ₂ e) for GHG.	100,000	548,000

3.2 Construction Emissions:

Construction emissions for the Project were estimated by using the California Emissions Estimator Model (CalEEMod) 2020.4.0, which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential criteria pollutant emissions associated with both construction and operations emissions. CalEEMod is authorized for use to assess project emissions by the Mojave Desert Air Quality Management District (MDAQMD). Construction emissions are summarized in Table 3.2.

Construction emissions were based on CalEEMod Land Uses for 549,440 square foot “Unrefrigerated Warehouse – No Rail”, 96,960 square foot “Refrigerated Warehouse – No Rail”, 40,000 square foot “General Office”, and 1.5 acres parking lot and truck/trailers parking.

Construction was estimated using a CalEEMod 320-day construction schedule, with default values for off-road construction equipment. Construction schedule values were used per construction estimates from the project proponent for site preparation, grading, building construction, architectural coating, and paving schedules. Peak emissions represent the highest value from the summer or winter modeling as a worse-case scenario. MDAQMD significance thresholds were used for determining the project's impacts.

Table 3.2 - Summary of Peak Construction Emissions (Without Mitigation)*

Year	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2023	6.30	54.02	55.82	0.14	21.07	11.31
2024	84.32	29.30	44.85	0.10	5.23	2.21
Maximum Daily Emissions	84.32	54.02	56.14	0.14	21.07	11.31
MDAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

* MDAQMD Fugitive Dust Rules Applied.

3.3 Operational Emissions:

Operational emissions for the Project were estimated by using the California Emissions Estimator Model (CalEEMod) which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential criteria pollutant emissions associated with both construction and operations emissions. CalEEMod is authorized for use to assess project emissions by the Mojave Desert Air Quality Management District (MDAQMD). Operations emissions include stationary (facility emissions), mobile (transportation emissions from employees and trucks), and area (on-going architectural coatings, consumer product use, landscaping maintenance emissions). Default values were used. MDAQMD significance thresholds were used for determining the project's impacts. Operation emissions are summarized in Table 3.3.

3.3.1 Transport Refrigeration Units

Transport Refrigeration Units (TRU) are refrigeration systems powered by diesel internal combustion engines (ICEs) designed to refrigerate or heat perishable products that are transported in various containers, including vans, trucks, semi-truck trailers, and shipping containers.

To account for the operations of TRUs on-site the number of refrigerated trucks/trailers was estimated using the Traffic Study and Vehicle Miles Traveled (VMT) Screening Memo from David Evans and Associates, dated November 9, 2022. According to the Memo's Trip Generation Table the average daily trips for the Cold Storage portion of the building would be approximately 44 trucks per day. For determining emissions from the TRUs they were estimated to be 50 horsepower (HP) units operating on diesel fuel for a period of 4 hours on-site. The 4-hour

operational time is a worse-case scenario as typical TRUs range from 9 to 36 horsepower¹, and emissions can be substantially reduced through the implementation of MM-AQ-6, which requires installation of electrical plugs for electric transport units at each dock door servicing the Cold Storage portion of the Project.

To calculate the emissions for the TRUs the CARB EMFAC OFFROAD2021 (v1.0.3) was used to obtain emissions factors and multiplied by the daily number of trucks and the estimated hours of on-site operation. The output table for emissions factors is included as Appendix B.

3.3.2 On-Site Equipment Emissions

Industrial warehouse projects commonly require cargo handling equipment (CHE) to move empty containers and empty chassis to and from the various pieces of cargo handling equipment that receive and distribute containers. The most common type of cargo handling equipment is the yard truck which is designed for moving cargo containers. Yard trucks are also known as yard goats, utility tractors (UTRs), hustlers, yard hostlers, and yard tractors. Yard trucks have a horsepower (hp) range of approximately 175 hp to 200 hp. Based on surveys conducted by the SCAQMD; high-cube warehouse projects typically have 3.6-yard trucks per million square feet of building space. For the Project, on-site modeled operational equipment includes four (4) 200 hp yard tractors operating at 8 hours a day for 365 days of the year. In addition to the use of yard trucks operating at the Project site, forklifts and pallet jacks are also common pieces of equipment used in warehouse operations. As part of the Project's design, all on-site outdoor CHE (including yard trucks, hostlers, yard goats), will be powered by compressed natural gas, propane, or electric engines while all forklift and pallet jacks will be electric powered. Using the CalEEMod program the emissions from UTRs were calculated using the Tractor/Loader/Backhoe equipment, operating at 200 HP on CNG. The emission estimates for the Project includes 120 forklifts/pallet jacks operating at 8 hours a day for 365 days of the year interior to the building. For purposes of the AQA forklifts and pallet jacks are assumed to be electric consistent with industry standards.

¹ California Air Resources Board (CARB) Transport Refrigeration Unit retrieved November 23, ,2022 from:
<https://ww2.arb.ca.gov/our-work/programs/transport-refrigeration-unit/about>

Table 3.3 - Summary of Peak Operational Emissions

Operational Activities – Summer	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Source	15.59	<0.01	0.07	<0.01	<0.01	<0.01
Energy Source	0.18	1.68	1.41	0.01	0.13	0.13
Mobile	4.44	11.76	39.50	0.11	9.41	2.62
UTRs/Forklifts/Pallet Jacks	0.87	7.78	6.01	0.03	0.28	0.26
TRU	2.79	2.27	0.37	<0.01	0.059	0.051
Total Maximum Daily Emissions	23.88	23.50	47.37	0.14	9.88	3.05
MDAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	NO	NO	NO	NO	NO	NO
Operational Activities – Winter	Emissions (pounds per day)					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Source	15.59	<0.01	0.07	<0.01	<0.01	<0.01
Energy Source	0.18	1.68	1.41	0.01	0.13	0.13
Mobile	3.73	12.54	35.52	0.10	9.41	2.62
UTRs/Forklifts/Pallet Jacks	0.87	7.78	6.01	0.03	0.28	0.26
TRU	2.79	2.27	0.37	<0.01	0.059	0.051
Total Maximum Daily Emissions	23.17	24.27	43.38	0.14	9.88	3.05
MDAQMD Regional Threshold	137	137	548	137	82	65
Threshold Exceeded?	NO	NO	NO	NO	NO	NO

3.4 Greenhouse Gas Emissions (GHG):

GHG emissions for the Project were estimated by using the California Emissions Estimator Model (CalEEMod) which is a statewide land use emissions computer model designed to provide a uniform platform for government agencies to quantify potential criteria pollutant emissions associated with both construction and operations emissions. CalEEMod is authorized for use to assess project emissions by the Mojave Desert Air Quality Management District (MDAQMD). The City uses the MDAQMD significance thresholds to determine a project's impacts on GHG emissions. The thresholds established by the MDAQMD for GHG emissions included an annual threshold of 100,000 short tons CO₂e per year (90,718 MTCO₂e/year) and a daily threshold of 548,000 pounds per day. The MDAQMD significance thresholds were used for determining the project's impacts. Construction and operation GHG emissions are presented in Table 3.4 and summarized in Table 3.5.

Table 3.4 - Project Greenhouse Gas Emissions

Source	GHG Emissions MT/yr			
	N ₂ O	CO ₂	CH ₄	CO ₂ e
Area	0.000	0.012	0.00003	0.013
Energy	0.016	1,314.29	0.089	1,321.33
Mobile Sources	1.153	1,692.66	0.069	1,740.01
UTRs/Forklifts/Pallet Jacks	1.68	406.16	0.131	409.44
Solid Waste	0.00	130.89	7.74	324.28
Water/Wastewater	0.12	419.86	5.13	585.24
30-year Amortized Construction GHG				28.34
TOTAL			<i>Tons / Metric Tons</i>	4,860 / 4,409
MDAQMD Threshold			<i>Tons / Metric Tons</i>	100,000/90,718
Exceed Threshold?				NO

Table 3.5 - Project Greenhouse Gas Emissions - Summary

GHG Emissions Source	Daily Emissions	Daily Threshold	Annual Emissions Tons / Metric Tons	Annual Threshold Tons/Metric Tons	Exceeds Threshold?
Construction 2023	13,794.1	548,000	359.4 / 326.1	100,000 / 90,718.5	NO
Construction 2024	10,514.5	548,000	577.7 / 524.1	100,000 / 90,718.5	NO
Operations	15,932.1	548,000	4,869.3 / 4,409.2	100,000 / 90,718.5	NO

3.5 Objectionable Odors:

The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include:

- Agricultural uses (livestock and farming)
- Wastewater treatment plants
- Food processing plants
- Chemical plants
- Composting operations
- Refineries
- Landfills
- Dairies
- Fiberglass molding facilities

The Project does not propose or require land uses that would be substantive sources of objectionable odors. Potential temporary and intermittent odors may result from construction equipment exhaust, the application of asphalt and architectural coatings. Temporary and intermittent construction-source emissions are controlled through existing requirements and industry BMPs addressing proper storage and application of construction materials.

Over the life of the Project, odors may result from storage of municipal solid waste pending its transport to area landfills. Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations.

The proposed Project would involve the use of diesel-powered construction equipment and

diesel-powered vehicles pulling trailers for deliveries during operations. Diesel exhaust during construction may be noticeable temporarily at adjacent properties; however, construction activities would be temporary. During operations diesel vehicles entering the site are required to limit idling to less than 5-minutes which will reduce the impacts of diesel odors.

The proposed Project would also be required to comply with MDAQMD Rule 402. Rule 402 provides that “[a] person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.” Based on the preceding, the potential for the Project to create objectionable odors affecting a substantial number of people is considered less-than-significant.

3.6 CO “Hotspot” Analysis

As discussed below, the Project would not result in potentially adverse CO concentrations or “hotspots.” Further, detailed modeling of Project-specific carbon monoxide (CO) “hot spots” is not needed to reach this conclusion.

The Basin is designated attainment under the CAAQS and NAAQS for CO. An adverse CO hotspot would occur if an exceedance of the state one-hour standard of 20 ppm or the eight-hour standard of 9 ppm were to occur.

It has long been recognized that CO hotspots are caused by vehicular emissions, primarily when idling at congested intersections. Due to changing regulations vehicle emissions standards have become increasingly stringent in the last twenty years. Currently, the allowable CO emissions standard in California is a maximum of 3.4 grams/mile for passenger cars (there are requirements for certain vehicles that are more stringent). With the turnover of older vehicles, introduction of cleaner fuels, and implementation of increasingly sophisticated and efficient emissions control technologies, CO concentration in the Basin have steadily declined.

The SCAQMD as part of their 2003 AQMP conducted modeling for CO Hotspot Analysis at multiple congested intersections in their South Coast Air Basin including the intersection of Wilshire Boulevard and Veteran Avenue- considered one of the most congested intersections in Southern California with an ADT of approximately 100,000 vehicles. The CO concentrations modeled by the SCAQMD’s analysis identified all traffic induced CO levels below Federal and State thresholds. As the CO hotspots were not modeled at an intersection that accommodates over 100,000 vehicles per day, it can be reasonably deduced that CO hotspots would not be experienced at any intersections in the vicinity of the proposed project.

The project would be approximately 1.25 miles to State Highway 395 as the major traffic route. As shown in 2020 Traffic Volumes on California State Highways (Caltrans 2020), average daily trips (ADT) are 22,700 on State Highway 395. As shown in the Traffic Study Scope and Vehicle Miles Traveled (VMT) Screening Memorandum (Appendix C), the project would generate 965 average daily trips on weekdays, which is nominal representing an approximately 4.25 % increase

compared to traffic on State Highway 395. Therefore, the project would not contribute a significant increase in traffic to the adjacent roadways and would not cause an impact to intersection operations.

Given the extremely low level of CO concentrations in the project area and no project-traffic related impacts at any intersections, project-related vehicle emissions are not expected to result in the CO concentrations exceeding the State or federal CO standards.

3.7 CARB 2022 Scoping Plan Consistency

On December 15, 2022, CARB adopted the Final 2022 Scoping Plan Update, which identifies the State's progress towards the statutory 2030 target, while providing a path towards carbon neutrality and reduce greenhouse gases emissions by 85% below 1990 levels by 2045. Recent studies show that the State's existing and proposed regulatory framework will allow the State to reduce its GHG emissions level to 40% below 1990 levels by 2030 (55). The Project would not conflict with any of the 2022 Scoping Plan elements as any regulations adopted would apply directly or indirectly to the Project.

Additionally, the Project is consistent with the general plan land use designation, density, building intensity, and applicable policies specified for the Project area in SCAG's Sustainable Community Strategy/Regional Transportation Plan, which pursuant to SB 375 calls for the integration of transportation, land-use and housing policies to plan for achievement of the GHG-emissions target for the region. Therefore, the Project will have a less than significant impact related to GHG emissions from construction and operation.

3.8 Cumulative Impacts

Air Quality Cumulative Impacts

The MDAQMD relies on the SCAQMD guidance for determining cumulative impacts. The SCAQMD has recognized that there is typically insufficient information to quantitatively evaluate the cumulative contributions of multiple projects because each project applicant has no control over nearby projects.

The SCAQMD published a report on how to address cumulative impacts from air pollution: *White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution* (22). In this report the AQMD clearly states (Page D-3):

“...the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA

analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.”

Individual projects that do not generate operational or construction emissions that exceed the MDAQMD's recommended daily thresholds for project-specific impacts would also not cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment, and, therefore, would not be considered to have a significant, adverse air quality impact. As previously noted, the Project construction-source and operational-source air pollutant emissions would not exceed applicable MDAQMD regional thresholds. As such, Project construction and operational-source emissions are considered less than significant.

GHG Cumulative Impacts

According to CAPCOA, “GHG impacts are exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective.”² The resultant consequences of that climate change can cause adverse environmental effects. A project's GHG emissions typically would be very small in comparison to state or global GHG emissions and, consequently, they would, in isolation, have no significant direct impact on climate change.

Individual projects that do not generate operational or construction emissions that exceed the MDAQMD's recommended daily and annual thresholds for project-specific impacts would also not cause a cumulatively considerable increase in GHG, and, therefore, would not be considered to have a significant, adverse GHG impact. As previously noted, the Project construction-source and operational-source GHG emissions would not exceed applicable MDAQMD thresholds. As such, Project construction and operational-source GHG emissions are considered less than significant.

² California Air Pollution Control Officers Association, CEQA & Climate change: Evaluating and Addressing Greenhouse Gas Emissions from Projects
Subject to the California Environmental Quality Act, (2008).

4.0 Best Management Practices

The operational emissions as shown in Table 3.3 indicate that MDAQMD Thresholds will not be exceeded. The Project will be required to comply with all applicable MDAQMD Rules and the project must also adhere to the City of Adelanto General Plan Policies and Implementing Programs. Additionally, per the California Attorney General's Bureau of Environmental Justice, *Warehouse Projects: Best Practices and Mitigation Measures to Comply with the California Environmental Quality Act*, in order to ensure emissions impacts from the operational phases will be reduced to the extent feasible the following Best Management Practices (BMPs) are recommended:

BMP-AQ-1 TRU Electrical Connections: Electrical hookups shall be provided as part of the tenant improvements for any tenant that requires cold storage. The electrical hookups shall be provided at loading bays for truckers to plug in any onboard auxiliary equipment and power refrigeration units while their truck is stopped.

BMP-AQ-2 Truck Access Gate Signage: All truck access gates and loading docks within the project site shall have a sign posted that states:

- Truck drivers shall turn off engines when not in use.
- Truck drivers shall shut down the engine after five minutes of continuous idling operation once the vehicle is stopped, the transmission is set to “neutral” or “park”, and the parking brake is engaged.
- Telephone numbers of the building facilities manager and CARB to report Violations.

5.0 Conclusion

Based on the assessment in Section 3.0 all estimated Project emissions for construction and operations are below the MDAQMD significance threshold levels and as such impacts to the environment for Air Quality and Greenhouse Gases are less than significant. Additionally, the proposed Project will not conflict with any air quality or GHG policies or plans.



KPC EHS Consultants

APPENDIX A

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

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

Adelanto-IPG Rancho 38 Project
Mojave Desert AQMD Air District, Summer

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	40.00	1000sqft	0.92	40,000.00	0
Refrigerated Warehouse-No Rail	96.96	1000sqft	2.23	96,960.00	0
Unrefrigerated Warehouse-No Rail	549.44	1000sqft	12.61	549,440.00	0
Parking Lot	1.50	Acre	1.50	65,340.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use per site plan and narrative

Construction Phase - No demolition phase; schedule per applicant

Grading -

Architectural Coating - VOC per MDAQMD Rule 1113

Vehicle Trips - Trip rate per traffic study scope dated: 9/26/2022

Woodstoves - No wood fireplaces

Area Coating - VOC per MDAQMD Rule 1113

Construction Off-road Equipment Mitigation - Construction mitigation for fugitive dust

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

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

Area Mitigation - MDAQMD rule 1113

Water Mitigation - use low flow fixtures

Operational Off-Road Equipment - CHE For yard dogs and forlifts/pallet jacks

Fleet Mix - Fleet mix per traffic study scope dated: 11/8/2022

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	20
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	20
tblConstructionPhase	NumDays	30.00	55.00
tblConstructionPhase	NumDays	300.00	195.00
tblConstructionPhase	NumDays	20.00	40.00
tblFleetMix	HHD	0.02	0.12
tblFleetMix	HHD	0.02	0.12
tblFleetMix	LDA	0.53	0.80
tblFleetMix	LDA	0.53	0.80
tblFleetMix	LDA	0.53	0.80

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

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

tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.6920e-003	0.03
tblFleetMix	LHD2	7.6920e-003	0.03
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MHD	6.1550e-003	0.05
tblFleetMix	MHD	6.1550e-003	0.05
tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

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

tblFleetMix	UBUS	1.5800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	120.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	4.00

2.0 Emissions Summary

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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	6.2960	53.7344	55.8240	0.1379	19.8049	2.1797	21.0716	10.1417	2.0215	11.3071	0.0000	13,605.25 15	13,605.25 15	2.6322	0.4128	13,794.05 61	
2024	84.3245	28.9977	44.8499	0.1043	4.0298	1.1993	5.2291	1.0879	1.1224	2.2103	0.0000	10,356.78 36	10,356.78 36	1.4175	0.4103	10,514.49 66	
Maximum	84.3245	53.7344	55.8240	0.1379	19.8049	2.1797	21.0716	10.1417	2.0215	11.3071	0.0000	13,605.25 15	13,605.25 15	2.6322	0.4128	13,794.05 61	

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	6.2960	53.7344	55.8240	0.1379	7.7884	2.1797	9.0551	3.9729	2.0215	5.1382	0.0000	13,605.25 15	13,605.25 15	2.6322	0.4128	13,794.05 61	
2024	84.3245	28.9977	44.8499	0.1043	3.3557	1.1993	4.5549	0.9224	1.1224	2.0448	0.0000	10,356.78 36	10,356.78 36	1.4175	0.4103	10,514.49 66	
Maximum	84.3245	53.7344	55.8240	0.1379	7.7884	2.1797	9.0551	3.9729	2.0215	5.1382	0.0000	13,605.25 15	13,605.25 15	2.6322	0.4128	13,794.05 61	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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	53.24	0.00	48.25	56.41	0.00	46.86	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	15.5952	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004			0.1604
Energy	0.1849	1.6807	1.4118	0.0101		0.1277	0.1277		0.1277	0.1277	2,016.8623	2,016.8623	0.0387	0.0370		2,028.8475
Mobile	4.4365	11.7604	39.4990	0.1082	9.2725	0.1349	9.4074	2.4859	0.1279	2.6138	11,141.5365	11,141.5365	0.4183	0.9332		11,430.0943
Offroad	0.8748	7.7845	6.0102	0.0254		0.2845	0.2845		0.2617	0.2617	0.0000	2,453.2092	2,453.2092	0.7934		2,473.0446
Total	21.0914	21.2262	46.9911	0.1436	9.2725	0.5473	9.8198	2.4859	0.5176	3.0035	0.0000	15,611.7585	15,611.7585	1.2508	0.9702	15,932.1468

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

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	lb/day											lb/day					
Area	15.5927	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004		0.1604		
Energy	0.1849	1.6807	1.4118	0.0101		0.1277	0.1277		0.1277	0.1277	2,016.8623	2,016.8623	0.0387	0.0370	2,028.8475		
Mobile	4.4365	11.7604	39.4990	0.1082	9.2725	0.1349	9.4074	2.4859	0.1279	2.6138	11,141.5365	11,141.5365	0.4183	0.9332	11,430.0943		
Offroad	0.8748	7.7845	6.0102	0.0254		0.2845	0.2845		0.2617	0.2617	0.0000	2,453.2092	2,453.2092	0.7934		2,473.0446	
Total	21.0889	21.2262	46.9911	0.1436	9.2725	0.5473	9.8198	2.4859	0.5176	3.0035	0.0000	15,611.7585	15,611.7585	1.2508	0.9702	15,932.1468	

	ROG	NOx	CO	SO2	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	0.01	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	7/3/2023	7/14/2023	5	10	
2	Grading	Grading	8/15/2023	10/30/2023	5	55	
3	Building Construction	Building Construction	10/27/2023	7/25/2024	5	195	
4	Architectural Coating	Architectural Coating	4/1/2024	5/24/2024	5	40	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

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

5	Paving	Paving	5/6/2024	5/31/2024	5	20
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Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 165

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,029,600; Non-Residential Outdoor: 343,200; Striped Parking Area: 3,920 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

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

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	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	312.00	123.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	62.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

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

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0657	0.0351	0.5089	1.3300e-003	0.1479	7.0000e-004	0.1486	0.0392	6.4000e-004	0.0399	134.7499	134.7499	3.7300e-003	3.5400e-003	135.8980	
Total	0.0657	0.0351	0.5089	1.3300e-003	0.1479	7.0000e-004	0.1486	0.0392	6.4000e-004	0.0399	134.7499	134.7499	3.7300e-003	3.5400e-003	135.8980	

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					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219
Total	2.6595	27.5242	18.2443	0.0381	7.6662	1.2660	8.9323	3.9400	1.1647	5.1047	0.0000	3,687.3081	3,687.3081	1.1926		3,717.1219

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0657	0.0351	0.5089	1.3300e-003	0.1222	7.0000e-004	0.1229	0.0329	6.4000e-004	0.0336	134.7499	134.7499	3.7300e-003	3.5400e-003	135.8980	
Total	0.0657	0.0351	0.5089	1.3300e-003	0.1222	7.0000e-004	0.1229	0.0329	6.4000e-004	0.0336	134.7499	134.7499	3.7300e-003	3.5400e-003	135.8980	

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					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.477 7	6,011.477 7	1.9442		6,060.083 6
Total	3.3217	34.5156	28.0512	0.0621	9.2036	1.4245	10.6281	3.6538	1.3105	4.9643		6,011.477 7	6,011.477 7	1.9442		6,060.083 6

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0730	0.0390	0.5655	1.4800e-003	0.1643	7.8000e-004	0.1651	0.0436	7.1000e-004	0.0443	149.7221	149.7221	4.1500e-003	3.9300e-003	150.9978		
Total	0.0730	0.0390	0.5655	1.4800e-003	0.1643	7.8000e-004	0.1651	0.0436	7.1000e-004	0.0443		149.7221	149.7221	4.1500e-003	3.9300e-003	150.9978	

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					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250	0.0000	0.0000				0.0000	
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477	6,011.477	1.9442		6,060.083	
Total	3.3217	34.5156	28.0512	0.0621	3.5894	1.4245	5.0139	1.4250	1.3105	2.7355	0.0000	6,011.477	6,011.477	1.9442		6,060.083	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0730	0.0390	0.5655	1.4800e-003	0.1357	7.8000e-004	0.1365	0.0366	7.1000e-004	0.0373	149.7221	149.7221	4.1500e-003	3.9300e-003	150.9978		
Total	0.0730	0.0390	0.5655	1.4800e-003	0.1357	7.8000e-004	0.1365	0.0366	7.1000e-004	0.0373		149.7221	149.7221	4.1500e-003	3.9300e-003	150.9978	

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	2,555.209 9	2,555.209 9	0.6079			2,570.406 1	
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.1896	4.1867	2.1416	0.0243	0.8343	0.0426	0.8768	0.2403	0.0407	0.2810	2,553.176 9	2,553.176 9	0.0113	0.3475	2,657.003 3		
Worker	1.1389	0.6083	8.8217	0.0231	2.5630	0.0121	2.5751	0.6798	0.0111	0.6910	2,335.664 8	2,335.664 8	0.0647	0.0614	2,355.565 4		
Total	1.3285	4.7950	10.9633	0.0474	3.3973	0.0546	3.4519	0.9201	0.0518	0.9719	4,888.841 7	4,888.841 7	0.0760	0.4088	5,012.568 7		

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	2,555.209 9	2,555.209 9	0.6079		2,570.406 1	
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1896	4.1867	2.1416	0.0243	0.7156	0.0426	0.7581	0.2111	0.0407	0.2518	2,553.176 9	2,553.176 9	0.0113	0.3475	2,657.003 3	
Worker	1.1389	0.6083	8.8217	0.0231	2.1175	0.0121	2.1296	0.5705	0.0111	0.5816	2,335.664 8	2,335.664 8	0.0647	0.0614	2,355.565 4	
Total	1.3285	4.7950	10.9633	0.0474	2.8331	0.0546	2.8877	0.7816	0.0518	0.8334	4,888.841 7	4,888.841 7	0.0760	0.4088	5,012.568 7	

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	2,555.698 9	2,555.698 9	0.6044			2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	2,555.698 9	2,555.698 9	0.6044			2,570.807 7

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1830	4.1385	2.0650	0.0238	0.8343	0.0423	0.8766	0.2403	0.0405	0.2807	2,497.554 5	2,497.554 5	0.0108	0.3395	2,598.984 5	
Worker	1.0537	0.5390	8.1667	0.0223	2.5630	0.0114	2.5744	0.6798	0.0105	0.6903	2,257.416 2	2,257.416 2	0.0582	0.0568	2,275.806 5	
Total	1.2366	4.6775	10.2317	0.0461	3.3973	0.0537	3.4510	0.9201	0.0510	0.9711	4,754.970 7	4,754.970 7	0.0690	0.3963	4,874.791 0	

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	2,555.698 9	2,555.698 9	0.6044		2,570.807 7
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1830	4.1385	2.0650	0.0238	0.7156	0.0423	0.7579	0.2111	0.0405	0.2516	2,497.554 5	2,497.554 5	0.0108	0.3395	2,598.984 5	
Worker	1.0537	0.5390	8.1667	0.0223	2.1175	0.0114	2.1289	0.5705	0.0105	0.5810	2,257.416 2	2,257.416 2	0.0582	0.0568	2,275.806 5	
Total	1.2366	4.6775	10.2317	0.0461	2.8331	0.0537	2.8868	0.7816	0.0510	0.8326	4,754.970 7	4,754.970 7	0.0690	0.3963	4,874.791 0	

3.5 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	79.9908						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	80.1716	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	281.4481	281.4481	0.0159			281.8443

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2094	0.1071	1.6229	4.4400e-003	0.5093	2.2700e-003	0.5116	0.1351	2.0900e-003	0.1372	448.5891	448.5891	0.0116	0.0113	452.2436	
Total	0.2094	0.1071	1.6229	4.4400e-003	0.5093	2.2700e-003	0.5116	0.1351	2.0900e-003	0.1372	448.5891	448.5891	0.0116	0.0113	452.2436	

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	79.9908					0.0000	0.0000		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	80.1716	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

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.2094	0.1071	1.6229	4.4400e-003	0.4208	2.2700e-003	0.4231	0.1134	2.0900e-003	0.1155	448.5891	448.5891	0.0116	0.0113	452.2436	
Total	0.2094	0.1071	1.6229	4.4400e-003	0.4208	2.2700e-003	0.4231	0.1134	2.0900e-003	0.1155	448.5891	448.5891	0.0116	0.0113	452.2436	

3.6 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	2,207.5472	2,207.5472	0.7140		2,225.3963	
Paving	0.1965					0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Total	1.1847	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	2,207.5472	2,207.5472	0.7140		2,225.3963	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0507	0.0259	0.3926	1.0700e-003	0.1232	5.5000e-004	0.1238	0.0327	5.0000e-004	0.0332	108.5296	108.5296	2.8000e-003	2.7300e-003	109.4138	
Total	0.0507	0.0259	0.3926	1.0700e-003	0.1232	5.5000e-004	0.1238	0.0327	5.0000e-004	0.0332	108.5296	108.5296	2.8000e-003	2.7300e-003	109.4138	

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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.1965					0.0000	0.0000		0.0000	0.0000		0.0000				0.0000
Total	1.1847	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0507	0.0259	0.3926	1.0700e-003	0.1018	5.5000e-004	0.1024	0.0274	5.0000e-004	0.0279	108.5296	108.5296	2.8000e-003	2.7300e-003	109.4138		
Total	0.0507	0.0259	0.3926	1.0700e-003	0.1018	5.5000e-004	0.1024	0.0274	5.0000e-004	0.0279	108.5296	108.5296	2.8000e-003	2.7300e-003	109.4138		

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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	
Category	lb/day											lb/day					
Mitigated	4.4365	11.7604	39.4990	0.1082	9.2725	0.1349	9.4074	2.4859	0.1279	2.6138	11,141.53 65	11,141.53 65	0.4183	0.9332	11,430.09 43		
Unmitigated	4.4365	11.7604	39.4990	0.1082	9.2725	0.1349	9.4074	2.4859	0.1279	2.6138	11,141.53 65	11,141.53 65	0.4183	0.9332	11,430.09 43		

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	389.60	88.40	28.00	704,772	704,772
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	205.56	205.56	205.56	600,121	600,121
Unrefrigerated Warehouse-No Rail	956.03	956.03	956.03	2,791,127	2,791,127
Total	1,551.18	1,249.98	1,189.58	4,096,020	4,096,020

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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
General Office Building	0.800000	0.000000	0.000000	0.000000	0.000000	0.007692	0.006155	0.022126	0.000483	0.000000	0.027801	0.000928	0.000000
Parking Lot	0.800000	0.000000	0.000000	0.000000	0.000000	0.007692	0.006155	0.022126	0.000483	0.000000	0.027801	0.000928	0.000000
Refrigerated Warehouse-No Rail	0.800000	0.000000	0.000000	0.000000	0.000000	0.030000	0.050000	0.120000	0.000000	0.000000	0.027801	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.800000	0.000000	0.000000	0.000000	0.000000	0.030000	0.050000	0.120000	0.000000	0.000000	0.027801	0.000000	0.000000

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	0.1849	1.6807	1.4118	0.0101		0.1277	0.1277		0.1277	0.1277	2,016.862 3	2,016.862 3	0.0387	0.0370	2,028.847 5	
NaturalGas Unmitigated	0.1849	1.6807	1.4118	0.0101		0.1277	0.1277		0.1277	0.1277	2,016.862 3	2,016.862 3	0.0387	0.0370	2,028.847 5	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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						
General Office Building	375.89	4.0500e-003	0.0369	0.0310	2.2000e-004		2.8000e-003	2.8000e-003		2.8000e-003	2.8000e-003		44.2224	44.2224	8.5000e-004	8.1000e-004	44.4852	
Parking Lot	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	
Refrigerated Warehouse-No Rail	13741.8	0.1482	1.3472	1.1317	8.0800e-003		0.1024	0.1024		0.1024	0.1024		1,616.6771	1,616.6771	0.0310	0.0296	1,626.2842	
Unrefrigerated Warehouse-No Rail	3025.68	0.0326	0.2966	0.2492	1.7800e-003		0.0225	0.0225		0.0225	0.0225		355.9627	355.9627	6.8200e-003	6.5300e-003	358.0781	
Total		0.1849	1.6807	1.4118	0.0101		0.1277	0.1277		0.1277	0.1277		2,016.8623	2,016.8623	0.0387	0.0370	2,028.8475	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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****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					
General Office Building	0.37589	4.0500e-003	0.0369	0.0310	2.2000e-004		2.8000e-003	2.8000e-003	2.8000e-003	2.8000e-003		44.2224	44.2224	8.5000e-004	8.1000e-004	44.4852	
Parking Lot	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	
Refrigerated Warehouse-No Rail	13.7418	0.1482	1.3472	1.1317	8.0800e-003		0.1024	0.1024		0.1024	0.1024	1,616.6771	1,616.6771	0.0310	0.0296	1,626.2842	
Unrefrigerated Warehouse-No Rail	3.02568	0.0326	0.2966	0.2492	1.7800e-003		0.0225	0.0225		0.0225	0.0225	355.9627	355.9627	6.8200e-003	6.5300e-003	358.0781	
Total		0.1849	1.6807	1.4118	0.0101		0.1277	0.1277		0.1277	0.1277	2,016.8623	2,016.8623	0.0387	0.0370	2,028.8475	

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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	
Category	lb/day												lb/day				
Mitigated	15.5927	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004		0.1604		
Unmitigated	15.5952	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004		0.1604		

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	0.8766					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0.0000	
Consumer Products	14.7121					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0.0000	
Landscaping	6.4700e-003	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004		0.1604		
Total	15.5952	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004		0.1604		

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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	0.8741					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.7121					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.4700e-003	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		0.1506	0.1506	3.9000e-004		0.1604
Total	15.5927	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		0.1506	0.1506	3.9000e-004		0.1604

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

8.0 Waste Detail**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

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
Forklifts	120	8.00	365	89	0.20	Electrical
Tractors/Loaders/Backhoes	4	8.00	365	200	0.37	CNG

UnMitigated/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
Equipment Type	lb/day										lb/day					
Forklifts	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Tractors/Loaders/ Backhoes	0.8748	7.7845	6.0102	0.0254			0.2845	0.2845		0.2617	0.2617	0.0000	2,453.2092	2,453.2092	0.7934	2,473.0446
Total	0.8748	7.7845	6.0102	0.0254			0.2845	0.2845		0.2617	0.2617	0.0000	2,453.2092	2,453.2092	0.7934	2,473.0446

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

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Summer

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

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Winter

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

Adelanto-IPG Rancho 38 Project
Mojave Desert AQMD Air District, Winter

1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	40.00	1000sqft	0.92	40,000.00	0
Refrigerated Warehouse-No Rail	96.96	1000sqft	2.23	96,960.00	0
Unrefrigerated Warehouse-No Rail	549.44	1000sqft	12.61	549,440.00	0
Parking Lot	1.50	Acre	1.50	65,340.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use per site plan and narrative

Construction Phase - No demolition phase; schedule per applicant

Grading -

Architectural Coating - VOC per MDAQMD Rule 1113

Vehicle Trips - Trip rate per traffic study scope dated: 9/26/2022

Woodstoves - No wood fireplaces

Area Coating - VOC per MDAQMD Rule 1113

Construction Off-road Equipment Mitigation - Construction mitigation for fugitive dust

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Winter

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

Area Mitigation - MDAQMD rule 1113

Water Mitigation - use low flow fixtures

Operational Off-Road Equipment - CHE For yard dogs and forlifts/pallet jacks

Fleet Mix - Fleet mix per traffic study scope dated: 11/8/2022

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	20
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	20
tblConstructionPhase	NumDays	30.00	55.00
tblConstructionPhase	NumDays	300.00	195.00
tblConstructionPhase	NumDays	20.00	40.00
tblFleetMix	HHD	0.02	0.12
tblFleetMix	HHD	0.02	0.12
tblFleetMix	LDA	0.53	0.80
tblFleetMix	LDA	0.53	0.80
tblFleetMix	LDA	0.53	0.80

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Winter

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

tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.6920e-003	0.03
tblFleetMix	LHD2	7.6920e-003	0.03
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MHD	6.1550e-003	0.05
tblFleetMix	MHD	6.1550e-003	0.05
tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Winter

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

tblFleetMix	UBUS	1.5800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	120.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	4.00

2.0 Emissions Summary

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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	6.1647	54.0220	54.0167	0.1352	19.8049	2.1798	21.0716	10.1417	2.0216	11.3071	0.0000	13,335.37	10	13,335.37	10	2.6330	0.4154	13,524.98	31
2024	84.1860	29.2825	42.9013	0.1013	4.0298	1.1994	5.2292	1.0879	1.1226	2.2104	0.0000	10,050.92	69	10,050.92	69	1.4187	0.4130	10,209.46	33
Maximum	84.1860	54.0220	54.0167	0.1352	19.8049	2.1798	21.0716	10.1417	2.0216	11.3071	0.0000	13,335.37	10	13,335.37	10	2.6330	0.4154	13,524.98	31

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	6.1647	54.0220	54.0167	0.1352	7.7884	2.1798	9.0551	3.9729	2.0216	5.1382	0.0000	13,335.37	10	13,335.37	10	2.6330	0.4154	13,524.98	31
2024	84.1860	29.2825	42.9013	0.1013	3.3557	1.1994	4.5551	0.9224	1.1226	2.0450	0.0000	10,050.92	69	10,050.92	69	1.4187	0.4130	10,209.46	33
Maximum	84.1860	54.0220	54.0167	0.1352	7.7884	2.1798	9.0551	3.9729	2.0216	5.1382	0.0000	13,335.37	10	13,335.37	10	2.6330	0.4154	13,524.98	31

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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	53.24	0.00	48.25	56.41	0.00	46.86	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	15.5952	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004		0.1604	
Energy	0.1849	1.6807	1.4118	0.0101		0.1277	0.1277		0.1277	0.1277	2,016.8623	2,016.8623	0.0387	0.0370	2,028.8475	
Mobile	3.7286	12.5360	35.5216	0.1014	9.2725	0.1352	9.4077	2.4859	0.1282	2.6141	10,461.3814	10,461.3814	0.4300	0.9433	10,753.2314	
Offroad	0.8748	7.7845	6.0102	0.0254		0.2845	0.2845		0.2617	0.2617	0.0000	2,453.2092	2,453.2092	0.7934		2,473.0446
Total	20.3835	22.0019	43.0137	0.1368	9.2725	0.5476	9.8201	2.4859	0.5179	3.0038	0.0000	14,931.6034	14,931.6034	1.2625	0.9803	15,255.2839

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Winter

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	lb/day											lb/day					
Area	15.5927	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004		0.1604		
Energy	0.1849	1.6807	1.4118	0.0101		0.1277	0.1277		0.1277	0.1277	2,016.8623	2,016.8623	0.0387	0.0370	2,028.8475		
Mobile	3.7286	12.5360	35.5216	0.1014	9.2725	0.1352	9.4077	2.4859	0.1282	2.6141	10,461.3814	10,461.3814	0.4300	0.9433	10,753.2314		
Offroad	0.8748	7.7845	6.0102	0.0254		0.2845	0.2845		0.2617	0.2617	0.0000	2,453.2092	2,453.2092	0.7934		2,473.0446	
Total	20.3810	22.0019	43.0137	0.1368	9.2725	0.5476	9.8201	2.4859	0.5179	3.0038	0.0000	14,931.6034	14,931.6034	1.2625	0.9803	15,255.2839	

	ROG	NOx	CO	SO2	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	0.01	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	7/3/2023	7/14/2023	5	10	
2	Grading	Grading	8/15/2023	10/30/2023	5	55	
3	Building Construction	Building Construction	10/27/2023	7/25/2024	5	195	
4	Architectural Coating	Architectural Coating	4/1/2024	5/24/2024	5	40	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Winter

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

5	Paving	Paving	5/6/2024	5/31/2024	5	20
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Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 165

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,029,600; Non-Residential Outdoor: 343,200; Striped Parking Area: 3,920 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Winter

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

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	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	312.00	123.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	62.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

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

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0593	0.0361	0.4069	1.1800e-003	0.1479	7.0000e-004	0.1486	0.0392	6.4000e-004	0.0399	119.7291	119.7291	3.8000e-003	3.6000e-003	120.8967		
Total	0.0593	0.0361	0.4069	1.1800e-003	0.1479	7.0000e-004	0.1486	0.0392	6.4000e-004	0.0399		119.7291	119.7291	3.8000e-003	3.6000e-003	120.8967	

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					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000	
Off-Road	2.6595	27.5242	18.2443	0.0381		1.2660	1.2660		1.1647	1.1647	0.0000	3,687.3081	3,687.3081	1,1926		3,717.1219	
Total	2.6595	27.5242	18.2443	0.0381	7.6662	1.2660	8.9323	3.9400	1.1647	5.1047	0.0000	3,687.3081	3,687.3081	1,1926		3,717.1219	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0593	0.0361	0.4069	1.1800e-003	0.1222	7.0000e-004	0.1229	0.0329	6.4000e-004	0.0336	119.7291	119.7291	3.8000e-003	3.6000e-003	120.8967		
Total	0.0593	0.0361	0.4069	1.1800e-003	0.1222	7.0000e-004	0.1229	0.0329	6.4000e-004	0.0336	119.7291	119.7291	3.8000e-003	3.6000e-003	120.8967		

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					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000	
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105		6,011.477 7	6,011.477 7	1.9442		6,060.083 6	
Total	3.3217	34.5156	28.0512	0.0621	9.2036	1.4245	10.6281	3.6538	1.3105	4.9643		6,011.477 7	6,011.477 7	1.9442		6,060.083 6	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0658	0.0401	0.4521	1.3200e-003	0.1643	7.8000e-004	0.1651	0.0436	7.1000e-004	0.0443	133.0323	133.0323	4.2300e-003	4.0000e-003	134.3297		
Total	0.0658	0.0401	0.4521	1.3200e-003	0.1643	7.8000e-004	0.1651	0.0436	7.1000e-004	0.0443		133.0323	133.0323	4.2300e-003	4.0000e-003	134.3297	

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					3.5894	0.0000	3.5894	1.4250	0.0000	1.4250	0.0000	0.0000				0.0000	
Off-Road	3.3217	34.5156	28.0512	0.0621		1.4245	1.4245		1.3105	1.3105	0.0000	6,011.477	6,011.477	1.9442		6,060.083	
Total	3.3217	34.5156	28.0512	0.0621	3.5894	1.4245	5.0139	1.4250	1.3105	2.7355	0.0000	6,011.477	6,011.477	1.9442		6,060.083	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0658	0.0401	0.4521	1.3200e-003	0.1357	7.8000e-004	0.1365	0.0366	7.1000e-004	0.0373	133.0323	133.0323	4.2300e-003	4.0000e-003	134.3297		
Total	0.0658	0.0401	0.4521	1.3200e-003	0.1357	7.8000e-004	0.1365	0.0366	7.1000e-004	0.0373		133.0323	133.0323	4.2300e-003	4.0000e-003	134.3297	

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	2,555.209 9	2,555.209 9	0.6079			2,570.406 1	
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1772	4.4561	2.2161	0.0244	0.8343	0.0427	0.8770	0.2403	0.0408	0.2811	2,560.3470	2,560.3470	0.0108	0.3490	2,664.6203	
Worker	1.0272	0.6254	7.0533	0.0205	2.5630	0.0121	2.5751	0.6798	0.0111	0.6910	2,075.3040	2,075.3040	0.0659	0.0624	2,095.5435	
Total	1.2044	5.0815	9.2694	0.0449	3.3973	0.0548	3.4521	0.9201	0.0520	0.9721	4,635.6510	4,635.6510	0.0767	0.4114	4,760.1638	

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

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1772	4.4561	2.2161	0.0244	0.7156	0.0427	0.7583	0.2111	0.0408	0.2520	2,560.3470	2,560.3470	0.0108	0.3490	2,664.6203	
Worker	1.0272	0.6254	7.0533	0.0205	2.1175	0.0121	2.1296	0.5705	0.0111	0.5816	2,075.3040	2,075.3040	0.0659	0.0624	2,095.5435	
Total	1.2044	5.0815	9.2694	0.0449	2.8331	0.0548	2.8879	0.7816	0.0520	0.8336	4,635.6510	4,635.6510	0.0767	0.4114	4,760.1638	

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

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.1706	4.4047	2.1399	0.0238	0.8343	0.0425	0.8767	0.2403	0.0406	0.2809	2,504.643 4	2,504.643 4	0.0102	0.3410	2,606.503 6		
Worker	0.9525	0.5540	6.5437	0.0199	2.5630	0.0114	2.5744	0.6798	0.0105	0.6903	2,006.416 1	2,006.416 1	0.0596	0.0578	2,025.121 8		
Total	1.1231	4.9586	8.6836	0.0437	3.3973	0.0539	3.4511	0.9201	0.0511	0.9712	4,511.059 5	4,511.059 5	0.0698	0.3987	4,631.625 4		

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	2,555.698 9	2,555.698 9	0.6044		2,570.807 7	
Total	1.4716	13.4438	16.1668	0.0270		0.6133	0.6133		0.5769	0.5769	0.0000	2,555.698 9	2,555.698 9	0.6044		2,570.807 7	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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 Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1706	4.4047	2.1399	0.0238	0.7156	0.0425	0.7580	0.2111	0.0406	0.2517	2,504.643 4	2,504.643 4	0.0102	0.3410	2,606.503 6	
Worker	0.9525	0.5540	6.5437	0.0199	2.1175	0.0114	2.1289	0.5705	0.0105	0.5810	2,006.416 1	2,006.416 1	0.0596	0.0578	2,025.121 8	
Total	1.1231	4.9586	8.6836	0.0437	2.8331	0.0539	2.8869	0.7816	0.0511	0.8327	4,511.059 5	4,511.059 5	0.0698	0.3987	4,631.625 4	

3.5 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	79.9908						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	80.1716	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	281.4481	281.4481	0.0159			281.8443

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 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	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1893	0.1101	1.3004	3.9400e-003	0.5093	2.2700e-003	0.5116	0.1351	2.0900e-003	0.1372	398.7109	398.7109	0.0118	0.0115	402.4280	
Total	0.1893	0.1101	1.3004	3.9400e-003	0.5093	2.2700e-003	0.5116	0.1351	2.0900e-003	0.1372	398.7109	398.7109	0.0118	0.0115	402.4280	

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	79.9908					0.0000	0.0000		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	80.1716	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

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 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	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.1893	0.1101	1.3004	3.9400e-003	0.4208	2.2700e-003	0.4231	0.1134	2.0900e-003	0.1155	398.7109	398.7109	0.0118	0.0115	402.4280		
Total	0.1893	0.1101	1.3004	3.9400e-003	0.4208	2.2700e-003	0.4231	0.1134	2.0900e-003	0.1155	398.7109	398.7109	0.0118	0.0115	402.4280		

3.6 Paving - 2024**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	2,207.5472	2,207.5472	0.7140		2,225.3963		
Paving	0.1965					0.0000	0.0000		0.0000	0.0000		0.0000			0.0000		
Total	1.1847	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	2,207.5472	2,207.5472	0.7140		2,225.3963		

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2024****Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0458	0.0266	0.3146	9.5000e-004	0.1232	5.5000e-004	0.1238	0.0327	5.0000e-004	0.0332	96.4623	96.4623	2.8700e-003	2.7800e-003	97.3616		
Total	0.0458	0.0266	0.3146	9.5000e-004	0.1232	5.5000e-004	0.1238	0.0327	5.0000e-004	0.0332	96.4623	96.4623	2.8700e-003	2.7800e-003	97.3616		

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	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963	
Paving	0.1965					0.0000	0.0000		0.0000	0.0000		0.0000	0.0000			0.0000	
Total	1.1847	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 Paving - 2024****Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	0.0458	0.0266	0.3146	9.5000e-004	0.1018	5.5000e-004	0.1024	0.0274	5.0000e-004	0.0279	96.4623	96.4623	2.8700e-003	2.7800e-003	97.3616		
Total	0.0458	0.0266	0.3146	9.5000e-004	0.1018	5.5000e-004	0.1024	0.0274	5.0000e-004	0.0279	96.4623	96.4623	2.8700e-003	2.7800e-003	97.3616		

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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	
Category	lb/day											lb/day					
Mitigated	3.7286	12.5360	35.5216	0.1014	9.2725	0.1352	9.4077	2.4859	0.1282	2.6141	10,461.38 14	10,461.38 14	0.4300	0.9433	10,753.23 14		
Unmitigated	3.7286	12.5360	35.5216	0.1014	9.2725	0.1352	9.4077	2.4859	0.1282	2.6141	10,461.38 14	10,461.38 14	0.4300	0.9433	10,753.23 14		

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	389.60	88.40	28.00	704,772	704,772
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	205.56	205.56	205.56	600,121	600,121
Unrefrigerated Warehouse-No Rail	956.03	956.03	956.03	2,791,127	2,791,127
Total	1,551.18	1,249.98	1,189.58	4,096,020	4,096,020

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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
General Office Building	0.800000	0.000000	0.000000	0.000000	0.000000	0.007692	0.006155	0.022126	0.000483	0.000000	0.027801	0.000928	0.000000
Parking Lot	0.800000	0.000000	0.000000	0.000000	0.000000	0.007692	0.006155	0.022126	0.000483	0.000000	0.027801	0.000928	0.000000
Refrigerated Warehouse-No Rail	0.800000	0.000000	0.000000	0.000000	0.000000	0.030000	0.050000	0.120000	0.000000	0.000000	0.027801	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.800000	0.000000	0.000000	0.000000	0.000000	0.030000	0.050000	0.120000	0.000000	0.000000	0.027801	0.000000	0.000000

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	0.1849	1.6807	1.4118	0.0101		0.1277	0.1277		0.1277	0.1277	2,016.862 3	2,016.862 3	0.0387	0.0370	2,028.847 5	
NaturalGas Unmitigated	0.1849	1.6807	1.4118	0.0101		0.1277	0.1277		0.1277	0.1277	2,016.862 3	2,016.862 3	0.0387	0.0370	2,028.847 5	

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, 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					
General Office Building	375.89	4.0500e-003	0.0369	0.0310	2.2000e-004		2.8000e-003	2.8000e-003	2.8000e-003	2.8000e-003		44.2224	44.2224	8.5000e-004	8.1000e-004	44.4852	
Parking Lot	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	
Refrigerated Warehouse-No Rail	13741.8	0.1482	1.3472	1.1317	8.0800e-003		0.1024	0.1024	0.1024	0.1024		1,616.6771	1,616.6771	0.0310	0.0296	1,626.2842	
Unrefrigerated Warehouse-No Rail	3025.68	0.0326	0.2966	0.2492	1.7800e-003		0.0225	0.0225	0.0225	0.0225		355.9627	355.9627	6.8200e-003	6.5300e-003	358.0781	
Total		0.1849	1.6807	1.4118	0.0101		0.1277	0.1277	0.1277	0.1277		2,016.8623	2,016.8623	0.0387	0.0370	2,028.8475	

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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****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					
General Office Building	0.37589	4.0500e-003	0.0369	0.0310	2.2000e-004		2.8000e-003	2.8000e-003	2.8000e-003	2.8000e-003		44.2224	44.2224	8.5000e-004	8.1000e-004	44.4852	
Parking Lot	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	
Refrigerated Warehouse-No Rail	13.7418	0.1482	1.3472	1.1317	8.0800e-003		0.1024	0.1024		0.1024	0.1024		1,616.6771	1,616.6771	0.0310	0.0296	1,626.2842
Unrefrigerated Warehouse-No Rail	3.02568	0.0326	0.2966	0.2492	1.7800e-003		0.0225	0.0225		0.0225	0.0225		355.9627	355.9627	6.8200e-003	6.5300e-003	358.0781
Total		0.1849	1.6807	1.4118	0.0101		0.1277	0.1277		0.1277	0.1277		2,016.8623	2,016.8623	0.0387	0.0370	2,028.8475

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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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	lb/day												lb/day				
Mitigated	15.5927	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004		0.1604		
Unmitigated	15.5952	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004		0.1604		

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	0.8766					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	
Consumer Products	14.7121					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	
Landscaping	6.4700e-003	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004		0.1604	
Total	15.5952	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004	0.1506	0.1506	3.9000e-004		0.1604	

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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	0.8741					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	14.7121					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.4700e-003	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		0.1506	0.1506	3.9000e-004		0.1604
Total	15.5927	6.4000e-004	0.0701	1.0000e-005		2.5000e-004	2.5000e-004		2.5000e-004	2.5000e-004		0.1506	0.1506	3.9000e-004		0.1604

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

8.0 Waste Detail**8.1 Mitigation Measures Waste****9.0 Operational Offroad**

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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
Forklifts	120	8.00	365	89	0.20	Electrical
Tractors/Loaders/Backhoes	4	8.00	365	200	0.37	CNG

UnMitigated/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
Equipment Type	lb/day										lb/day					
Forklifts	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Tractors/Loaders/ Backhoes	0.8748	7.7845	6.0102	0.0254			0.2845	0.2845		0.2617	0.2617	0.0000	2,453.2092	2,453.2092	0.7934	2,473.0446
Total	0.8748	7.7845	6.0102	0.0254			0.2845	0.2845		0.2617	0.2617	0.0000	2,453.2092	2,453.2092	0.7934	2,473.0446

10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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11.0 Vegetation

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

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

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1.0 Project Characteristics**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	40.00	1000sqft	0.92	40,000.00	0
Refrigerated Warehouse-No Rail	96.96	1000sqft	2.23	96,960.00	0
Unrefrigerated Warehouse-No Rail	549.44	1000sqft	12.61	549,440.00	0
Parking Lot	1.50	Acre	1.50	65,340.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.6	Precipitation Freq (Days)	30
Climate Zone	10			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Land use per site plan and narrative

Construction Phase - No demolition phase; schedule per applicant

Grading -

Architectural Coating - VOC per MDAQMD Rule 1113

Vehicle Trips - Trip rate per traffic study scope dated: 9/26/2022

Woodstoves - No wood fireplaces

Area Coating - VOC per MDAQMD Rule 1113

Construction Off-road Equipment Mitigation - Construction mitigation for fugitive dust

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

Area Mitigation - MDAQMD rule 1113

Water Mitigation - use low flow fixtures

Operational Off-Road Equipment - CHE For yard dogs and forlifts/pallet jacks

Fleet Mix - Fleet mix per traffic study scope dated: 11/8/2022

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	50.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	50.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	50
tblAreaCoating	Area_EF_Nonresidential_Interior	250	50
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	50
tblAreaCoating	Area_EF_Residential_Interior	250	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblAreaMitigation	UseLowVOCPaintParkingValue	100	50
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	20
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	20
tblConstructionPhase	NumDays	30.00	55.00
tblConstructionPhase	NumDays	300.00	195.00
tblConstructionPhase	NumDays	20.00	40.00
tblFleetMix	HHD	0.02	0.12
tblFleetMix	HHD	0.02	0.12
tblFleetMix	LDA	0.53	0.80
tblFleetMix	LDA	0.53	0.80
tblFleetMix	LDA	0.53	0.80

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

tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.6920e-003	0.03
tblFleetMix	LHD2	7.6920e-003	0.03
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MH	5.4230e-003	0.00
tblFleetMix	MHD	6.1550e-003	0.05
tblFleetMix	MHD	6.1550e-003	0.05
tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	OBUS	4.8300e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	SBUS	9.2800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00

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

tblFleetMix	UBUS	1.5800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblFleetMix	UBUS	1.5800e-004	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	120.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	4.00

2.0 Emissions Summary

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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	0.1689	1.5360	1.4758	3.6100e-003	0.4334	0.0629	0.4962	0.1732	0.0582	0.2314	0.0000	321.8410	321.8410	0.0684	8.7500e-003	326.1576
2024	1.8078	1.4932	2.0974	5.6800e-003	0.2600	0.0557	0.3157	0.0705	0.0524	0.1228	0.0000	514.6121	514.6121	0.0527	0.0273	524.0716
Maximum	1.8078	1.5360	2.0974	5.6800e-003	0.4334	0.0629	0.4962	0.1732	0.0582	0.2314	0.0000	514.6121	514.6121	0.0684	0.0273	524.0716

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	0.1689	1.5360	1.4758	3.6100e-003	0.2054	0.0629	0.2683	0.0778	0.0582	0.1360	0.0000	321.8407	321.8407	0.0684	8.7500e-003	326.1573
2024	1.8078	1.4932	2.0974	5.6800e-003	0.2169	0.0557	0.2725	0.0599	0.0524	0.1122	0.0000	514.6118	514.6118	0.0527	0.0273	524.0714
Maximum	1.8078	1.5360	2.0974	5.6800e-003	0.2169	0.0629	0.2725	0.0778	0.0582	0.1360	0.0000	514.6118	514.6118	0.0684	0.0273	524.0714

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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	39.09	0.00	33.39	43.52	0.00	29.93	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	1.0912	1.0912
2	12-1-2023	2-29-2024	0.6962	0.6962
3	3-1-2024	5-31-2024	2.3622	2.3622
4	6-1-2024	8-31-2024	0.4092	0.4092
		Highest	2.3622	2.3622

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	2.8455	6.0000e-005	6.3100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0123	0.0123	3.0000e-005	0.0000	0.0131
Energy	0.0337	0.3067	0.2577	1.8400e-003		0.0233	0.0233		0.0233	0.0233	0.0000	1,314.2903	1,314.2903	0.0892	0.0162	1,321.3322
Mobile	0.6425	2.2358	6.4703	0.0181	1.5748	0.0240	1.5988	0.4232	0.0228	0.4460	0.0000	1,692.6605	1,692.6605	0.0687	0.1531	1,740.0098
Offroad	0.1597	1.4207	1.0969	4.6300e-003		0.0519	0.0519		0.0478	0.0478	0.0000	406.1558	406.1558	0.1314	0.0000	409.4398
Waste						0.0000	0.0000		0.0000	0.0000	130.8906	0.0000	130.8906	7.7354	0.0000	324.2759
Water						0.0000	0.0000		0.0000	0.0000	49.6786	370.1840	419.8626	5.1337	0.1243	585.2371
Total	3.6815	3.9633	7.8311	0.0246	1.5748	0.0992	1.6741	0.4232	0.0939	0.5171	180.5692	3,783.3029	3,963.8721	13.1584	0.2936	4,380.3079

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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	2.8451	6.0000e-005	6.3100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0123	0.0123	3.0000e-005	0.0000	0.0131	
Energy	0.0337	0.3067	0.2577	1.8400e-003		0.0233	0.0233		0.0233	0.0233	0.0000	1,314.2903	1,314.2903	0.0892	0.0162	1,321.3322	
Mobile	0.6425	2.2358	6.4703	0.0181	1.5748	0.0240	1.5988	0.4232	0.0228	0.4460	0.0000	1,692.6605	1,692.6605	0.0687	0.1531	1,740.0098	
Offroad	0.1597	1.4207	1.0969	4.6300e-003		0.0519	0.0519		0.0478	0.0478	0.0000	406.1558	406.1558	0.1314	0.0000	409.4398	
Waste						0.0000	0.0000		0.0000	0.0000	130.8906	0.0000	130.8906	7.7354	0.0000	324.2759	
Water						0.0000	0.0000		0.0000	0.0000	43.5383	324.9667	368.5050	4.4992	0.1089	513.4420	
Total	3.6810	3.9633	7.8311	0.0246	1.5748	0.0992	1.6741	0.4232	0.0939	0.5171	174.4289	3,738.0856	3,912.5145	12.5239	0.2782	4,308.5128	

	ROG	NOx	CO	SO2	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	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.40	1.20	1.30	4.82	5.23	1.64

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	7/3/2023	7/14/2023	5	10	
2	Grading	Grading	8/15/2023	10/30/2023	5	55	

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

3	Building Construction	Building Construction	10/27/2023	7/25/2024	5	195
4	Architectural Coating	Architectural Coating	4/1/2024	5/24/2024	5	40
5	Paving	Paving	5/6/2024	5/31/2024	5	20

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 165

Acres of Paving: 1.5

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 1,029,600; Non-Residential Outdoor: 343,200; Striped Parking Area: 3,920 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

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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	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	312.00	123.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	62.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

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					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004	6.3300e-003	6.3300e-003	0.1046	0.0505	5.8200e-003	5.8200e-003	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0983	6.3300e-003	0.1046	0.0505	5.8200e-003	0.0563	0.0000	16.7254	16.7254	5.4100e-003	0.0000	16.8606

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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	2.8000e-004	1.9000e-004	2.1800e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5584	0.5584	2.0000e-005	2.0000e-005	0.5639	
Total	2.8000e-004	1.9000e-004	2.1800e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5584	0.5584	2.0000e-005	2.0000e-005	0.5639	

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					0.0383	0.0000	0.0383	0.0197	0.0000	0.0197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0133	0.1376	0.0912	1.9000e-004		6.3300e-003	6.3300e-003		5.8200e-003	5.8200e-003	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606
Total	0.0133	0.1376	0.0912	1.9000e-004	0.0383	6.3300e-003	0.0447	0.0197	5.8200e-003	0.0255	0.0000	16.7253	16.7253	5.4100e-003	0.0000	16.8606

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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	2.8000e-004	1.9000e-004	2.1800e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5584	0.5584	2.0000e-005	2.0000e-005	0.5639	
Total	2.8000e-004	1.9000e-004	2.1800e-003	1.0000e-005	6.0000e-004	0.0000	6.0000e-004	1.6000e-004	0.0000	1.7000e-004	0.0000	0.5584	0.5584	2.0000e-005	2.0000e-005	0.5639	

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					0.2531	0.0000	0.2531	0.1005	0.0000	0.1005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0914	0.9492	0.7714	1.7100e-003		0.0392	0.0392		0.0360	0.0360	0.0000	149.9718	149.9718	0.0485	0.0000	151.1844
Total	0.0914	0.9492	0.7714	1.7100e-003	0.2531	0.0392	0.2923	0.1005	0.0360	0.1365	0.0000	149.9718	149.9718	0.0485	0.0000	151.1844

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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	1.6800e-003	1.1700e-003	0.0133	4.0000e-005	4.4400e-003	2.0000e-005	4.4600e-003	1.1800e-003	2.0000e-005	1.2000e-003	0.0000	3.4124	3.4124	1.1000e-004	1.0000e-004	3.4461	
Total	1.6800e-003	1.1700e-003	0.0133	4.0000e-005	4.4400e-003	2.0000e-005	4.4600e-003	1.1800e-003	2.0000e-005	1.2000e-003	0.0000	3.4124	3.4124	1.1000e-004	1.0000e-004	3.4461	

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					0.0987	0.0000	0.0987	0.0392	0.0000	0.0392	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0914	0.9492	0.7714	1.7100e-003		0.0392	0.0392		0.0360	0.0360	0.0000	149.9717	149.9717	0.0485	0.0000	151.1842	
Total	0.0914	0.9492	0.7714	1.7100e-003	0.0987	0.0392	0.1379	0.0392	0.0360	0.0752	0.0000	149.9717	149.9717	0.0485	0.0000	151.1842	

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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	1.6800e-003	1.1700e-003	0.0133	4.0000e-005	3.6700e-003	2.0000e-005	3.6900e-003	9.9000e-004	2.0000e-005	1.0100e-003	0.0000	3.4124	3.4124	1.1000e-004	1.0000e-004	3.4461	
Total	1.6800e-003	1.1700e-003	0.0133	4.0000e-005	3.6700e-003	2.0000e-005	3.6900e-003	9.9000e-004	2.0000e-005	1.0100e-003	0.0000	3.4124	3.4124	1.1000e-004	1.0000e-004	3.4461	

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	0.0362	0.3309	0.3736	6.2000e-004		0.0161	0.0161		0.0151	0.0151	0.0000	53.3151	53.3151	0.0127	0.0000	53.6322
Total	0.0362	0.3309	0.3736	6.2000e-004		0.0161	0.0161		0.0151	0.0151	0.0000	53.3151	53.3151	0.0127	0.0000	53.6322

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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	4.1900e-003	0.1017	0.0502	5.6000e-004	0.0189	9.8000e-004	0.0199	5.4600e-003	9.4000e-004	6.3900e-003	0.0000	53.3358	53.3358	2.3000e-004	7.2700e-003	55.5084	
Worker	0.0220	0.0153	0.1739	4.9000e-004	0.0579	2.8000e-004	0.0582	0.0154	2.6000e-004	0.0156	0.0000	44.5222	44.5222	1.4100e-003	1.3600e-003	44.9620	
Total	0.0262	0.1170	0.2241	1.0500e-003	0.0768	1.2600e-003	0.0781	0.0208	1.2000e-003	0.0220	0.0000	97.8580	97.8580	1.6400e-003	8.6300e-003	100.4705	

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	0.0362	0.3309	0.3736	6.2000e-004		0.0161	0.0161		0.0151	0.0151	0.0000	53.3150	53.3150	0.0127	0.0000	53.6321	
Total	0.0362	0.3309	0.3736	6.2000e-004		0.0161	0.0161		0.0151	0.0151	0.0000	53.3150	53.3150	0.0127	0.0000	53.6321	

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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	4.1900e-003	0.1017	0.0502	5.6000e-004	0.0162	9.8000e-004	0.0172	4.8000e-003	9.4000e-004	5.7400e-003	0.0000	53.3358	53.3358	2.3000e-004	7.2700e-003	55.5084
Worker	0.0220	0.0153	0.1739	4.9000e-004	0.0479	2.8000e-004	0.0481	0.0129	2.6000e-004	0.0132	0.0000	44.5222	44.5222	1.4100e-003	1.3600e-003	44.9620
Total	0.0262	0.1170	0.2241	1.0500e-003	0.0641	1.2600e-003	0.0654	0.0177	1.2000e-003	0.0189	0.0000	97.8580	97.8580	1.6400e-003	8.6300e-003	100.4705

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	0.1096	1.0016	1.2044	2.0100e-003		0.0457	0.0457		0.0430	0.0430	0.0000	172.7276	172.7276	0.0409	0.0000	173.7487
Total	0.1096	1.0016	1.2044	2.0100e-003		0.0457	0.0457		0.0430	0.0430	0.0000	172.7276	172.7276	0.0409	0.0000	173.7487

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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	0.0131	0.3254	0.1568	1.7700e-003	0.0612	3.1600e-003	0.0644	0.0177	3.0200e-003	0.0207	0.0000	169.0000	169.0000	7.1000e-004	0.0230	175.8743
Worker	0.0659	0.0439	0.5225	1.5200e-003	0.1875	8.5000e-004	0.1884	0.0498	7.8000e-004	0.0506	0.0000	139.4144	139.4144	4.1300e-003	4.0700e-003	140.7307
Total	0.0790	0.3694	0.6793	3.2900e-003	0.2488	4.0100e-003	0.2528	0.0675	3.8000e-003	0.0713	0.0000	308.4144	308.4144	4.8400e-003	0.0271	316.6050

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	0.1096	1.0016	1.2044	2.0100e-003		0.0457	0.0457		0.0430	0.0430	0.0000	172.7274	172.7274	0.0409	0.0000	173.7485
Total	0.1096	1.0016	1.2044	2.0100e-003		0.0457	0.0457		0.0430	0.0430	0.0000	172.7274	172.7274	0.0409	0.0000	173.7485

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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	0.0131	0.3254	0.1568	1.7700e-003	0.0526	3.1600e-003	0.0557	0.0156	3.0200e-003	0.0186	0.0000	169.0000	169.0000	7.1000e-004	0.0230	175.8743	
Worker	0.0659	0.0439	0.5225	1.5200e-003	0.1550	8.5000e-004	0.1559	0.0418	7.8000e-004	0.0426	0.0000	139.4144	139.4144	4.1300e-003	4.0700e-003	140.7307	
Total	0.0790	0.3694	0.6793	3.2900e-003	0.2076	4.0100e-003	0.2116	0.0574	3.8000e-003	0.0612	0.0000	308.4144	308.4144	4.8400e-003	0.0271	316.6050	

3.5 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	1.5998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6200e-003	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137
Total	1.6034	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 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	3.5100e-003	2.3400e-003	0.0279	8.0000e-005	0.0100	5.0000e-005	0.0101	2.6600e-003	4.0000e-005	2.7000e-003	0.0000	7.4374	7.4374	2.2000e-004	2.2000e-004	7.5076
Total	3.5100e-003	2.3400e-003	0.0279	8.0000e-005	0.0100	5.0000e-005	0.0101	2.6600e-003	4.0000e-005	2.7000e-003	0.0000	7.4374	7.4374	2.2000e-004	2.2000e-004	7.5076

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.5998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6200e-003	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137
Total	1.6034	0.0244	0.0362	6.0000e-005		1.2200e-003	1.2200e-003		1.2200e-003	1.2200e-003	0.0000	5.1065	5.1065	2.9000e-004	0.0000	5.1137

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.5 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	3.5100e-003	2.3400e-003	0.0279	8.0000e-005	8.2700e-003	5.0000e-005	8.3200e-003	2.2300e-003	4.0000e-005	2.2700e-003	0.0000	7.4374	7.4374	2.2000e-004	2.2000e-004	7.5076	
Total	3.5100e-003	2.3400e-003	0.0279	8.0000e-005	8.2700e-003	5.0000e-005	8.3200e-003	2.2300e-003	4.0000e-005	2.2700e-003	0.0000	7.4374	7.4374	2.2000e-004	2.2000e-004	7.5076	

3.6 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	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885
Paving	1.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0119	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1885

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 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	4.3000e-004	2.8000e-004	3.3700e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8997	0.8997	3.0000e-005	3.0000e-005	0.9082	
Total	4.3000e-004	2.8000e-004	3.3700e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.8997	0.8997	3.0000e-005	3.0000e-005	0.9082	

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	9.8800e-003	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884
Paving	1.9700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0119	0.0953	0.1463	2.3000e-004		4.6900e-003	4.6900e-003		4.3100e-003	4.3100e-003	0.0000	20.0265	20.0265	6.4800e-003	0.0000	20.1884

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**3.6 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	4.3000e-004	2.8000e-004	3.3700e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8997	0.8997	3.0000e-005	3.0000e-005	0.9082	
Total	4.3000e-004	2.8000e-004	3.3700e-003	1.0000e-005	1.0000e-003	1.0000e-005	1.0100e-003	2.7000e-004	1.0000e-005	2.7000e-004	0.0000	0.8997	0.8997	3.0000e-005	3.0000e-005	0.9082	

4.0 Operational Detail - Mobile**4.1 Mitigation Measures Mobile**

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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	0.6425	2.2358	6.4703	0.0181	1.5748	0.0240	1.5988	0.4232	0.0228	0.4460	0.0000	1,692.660	1,692.660	0.0687	0.1531	1,740.009	
Unmitigated	0.6425	2.2358	6.4703	0.0181	1.5748	0.0240	1.5988	0.4232	0.0228	0.4460	0.0000	1,692.660	1,692.660	0.0687	0.1531	1,740.009	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	389.60	88.40	28.00	704,772	704,772
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	205.56	205.56	205.56	600,121	600,121
Unrefrigerated Warehouse-No Rail	956.03	956.03	956.03	2,791,127	2,791,127
Total	1,551.18	1,249.98	1,189.58	4,096,020	4,096,020

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

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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
General Office Building	0.800000	0.000000	0.000000	0.000000	0.000000	0.007692	0.006155	0.022126	0.000483	0.000000	0.027801	0.000928	0.000000
Parking Lot	0.800000	0.000000	0.000000	0.000000	0.000000	0.007692	0.006155	0.022126	0.000483	0.000000	0.027801	0.000928	0.000000
Refrigerated Warehouse-No Rail	0.800000	0.000000	0.000000	0.000000	0.000000	0.030000	0.050000	0.120000	0.000000	0.000000	0.027801	0.000000	0.000000
Unrefrigerated Warehouse-No Rail	0.800000	0.000000	0.000000	0.000000	0.000000	0.030000	0.050000	0.120000	0.000000	0.000000	0.027801	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	980.3761	980.3761	0.0828	0.0100	985.4337
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	980.3761	980.3761	0.0828	0.0100	985.4337
NaturalGas Mitigated	0.0337	0.3067	0.2577	1.8400e-003		0.0233	0.0233	0.0233	0.0233	0.0000	333.9142	333.9142	6.4000e-003	6.1200e-003	335.8985	
NaturalGas Unmitigated	0.0337	0.3067	0.2577	1.8400e-003		0.0233	0.0233	0.0233	0.0233	0.0000	333.9142	333.9142	6.4000e-003	6.1200e-003	335.8985	

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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					
General Office Building	137200	7.4000e-004	6.7300e-003	5.6500e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.3215	7.3215	1.4000e-004	1.3000e-004	7.3650
Parking Lot	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
Refrigerated Warehouse-No Rail	5.01574e+006	0.0271	0.2459	0.2065	1.4800e-003		0.0187	0.0187		0.0187	0.0187	0.0000	267.6590	267.6590	5.1300e-003	4.9100e-003	269.2496
Unrefrigerated Warehouse-No Rail	1.10437e+006	5.9500e-003	0.0541	0.0455	3.2000e-004		4.1100e-003	4.1100e-003		4.1100e-003	4.1100e-003	0.0000	58.9336	58.9336	1.1300e-003	1.0800e-003	59.2838
Total		0.0337	0.3067	0.2577	1.8400e-003		0.0233	0.0233		0.0233	0.0233	0.0000	333.9142	333.9142	6.4000e-003	6.1200e-003	335.8985

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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****Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Office Building	137200	7.4000e-004	6.7300e-003	5.6500e-003	4.0000e-005		5.1000e-004	5.1000e-004		5.1000e-004	5.1000e-004	0.0000	7.3215	7.3215	1.4000e-004	1.3000e-004	7.3650
Parking Lot	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
Refrigerated Warehouse-No Rail	5.01574e+006	0.0271	0.2459	0.2065	1.4800e-003		0.0187	0.0187		0.0187	0.0187	0.0000	267.6590	267.6590	5.1300e-003	4.9100e-003	269.2496
Unrefrigerated Warehouse-No Rail	1.10437e+006	5.9500e-003	0.0541	0.0455	3.2000e-004		4.1100e-003	4.1100e-003		4.1100e-003	4.1100e-003	0.0000	58.9336	58.9336	1.1300e-003	1.0800e-003	59.2838
Total		0.0337	0.3067	0.2577	1.8400e-003		0.0233	0.0233		0.0233	0.0233	0.0000	333.9142	333.9142	6.4000e-003	6.1200e-003	335.8985

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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			
General Office Building	367600	65.1922	5.5000e-003	6.7000e-004	65.5285
Parking Lot	22869	4.0557	3.4000e-004	4.0000e-005	4.0766
Refrigerated Warehouse-No Rail	3.86289e+006	685.0657	0.0578	7.0100e-003	688.5998
Unrefrigerated Warehouse-No Rail	1.2747e+006	226.0625	0.0191	2.3100e-003	227.2287
Total		980.3761	0.0827	0.0100	985.4337

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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****Mitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Office Building	367600	65.1922	5.5000e-003	6.7000e-004	65.5285
Parking Lot	22869	4.0557	3.4000e-004	4.0000e-005	4.0766
Refrigerated Warehouse-No Rail	3.86289e+006	685.0657	0.0578	7.0100e-003	688.5998
Unrefrigerated Warehouse-No Rail	1.2747e+006	226.0625	0.0191	2.3100e-003	227.2287
Total		980.3761	0.0827	0.0100	985.4337

6.0 Area Detail**6.1 Mitigation Measures Area**

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

No Hearths Installed

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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	2.8451	6.0000e-005	6.3100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0123	0.0123	3.0000e-005	0.0000	0.0131	
Unmitigated	2.8455	6.0000e-005	6.3100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0123	0.0123	3.0000e-005	0.0000	0.0131	

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.1600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Consumer Products	2.6850					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Landscaping	5.8000e-004	6.0000e-005	6.3100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0123	0.0123	3.0000e-005	0.0000	0.0131	
Total	2.8455	6.0000e-005	6.3100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0123	0.0123	3.0000e-005	0.0000	0.0131	

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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	0.1595					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.6850					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.8000e-004	6.0000e-005	6.3100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0123	0.0123	3.0000e-005	0.0000	0.0131
Total	2.8451	6.0000e-005	6.3100e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0123	0.0123	3.0000e-005	0.0000	0.0131

7.0 Water Detail**7.1 Mitigation Measures Water**

Install Low Flow Bathroom Faucet

Install Low Flow Toilet

Use Water Efficient Irrigation System

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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	368.5050	4.4992	0.1089	513.4420
Unmitigated	419.8626	5.1337	0.1243	585.2371

7.2 Water by Land Use**Unmitigated**

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	7.10935 / 4.35734	27.2578	0.2338	5.7300e-003	34.8083
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	22.422 / 0	58.8907	0.7350	0.0178	82.5643
Unrefrigerated Warehouse-No Rail	127.058 / 0	333.7141	4.1650	0.1008	467.8645
Total		419.8626	5.1337	0.1243	585.2371

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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/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Office Building	6.23063 / 4.09155	24.4262	0.2049	5.0200e- 003	31.0462
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	19.6506 / 0	51.6118	0.6442	0.0156	72.3594
Unrefrigerated Warehouse-No Rail	111.354 / 0	292.4670	3.6502	0.0883	410.0364
Total		368.5050	4.4992	0.1089	513.4420

8.0 Waste Detail**8.1 Mitigation Measures Waste**

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

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	130.8906	7.7354	0.0000	324.2759
Unmitigated	130.8906	7.7354	0.0000	324.2759

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	37.2	7.5513	0.4463	0.0000	18.7079
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	91.14	18.5006	1.0934	0.0000	45.8344
Unrefrigerated Warehouse-No Rail	516.47	104.8387	6.1958	0.0000	259.7336
Total		130.8906	7.7354	0.0000	324.2759

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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****Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Office Building	37.2	7.5513	0.4463	0.0000	18.7079
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	91.14	18.5006	1.0934	0.0000	45.8344
Unrefrigerated Warehouse-No Rail	516.47	104.8387	6.1958	0.0000	259.7336
Total		130.8906	7.7354	0.0000	324.2759

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	120	8.00	365	89	0.20	Electrical
Tractors/Loaders/Backhoes	4	8.00	365	200	0.37	CNG

Adelanto-IPG Rancho 38 Project - Mojave Desert AQMD Air District, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**UnMitigated/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
Equipment Type	tons/yr												MT/yr			
Forklifts	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tractors/Loaders/ Backhoes	0.1597	1.4207	1.0969	4.6300e-003		0.0519	0.0519		0.0478	0.0478	0.0000	406.1558	406.1558	0.1314	0.0000	409.4398
Total	0.1597	1.4207	1.0969	4.6300e-003		0.0519	0.0519		0.0478	0.0478	0.0000	406.1558	406.1558	0.1314	0.0000	409.4398

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

Adelanto-IPG Rancho 38 Project

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

Mojave Desert AQMD Air District, Mitigation Report

Construction Mitigation Summary

Phase	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Grading	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Site Preparation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

OFFROAD Equipment Mitigation

Adelanto-IPG Rancho 38 Project

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

Equipment Type	Fuel Type	Tier	Number Mitigated	Total Number of Equipment	DPF	Oxidation Catalyst
Air Compressors	Diesel	No Change	0	1	No Change	0.00
Cranes	Diesel	No Change	0	1	No Change	0.00
Excavators	Diesel	No Change	0	2	No Change	0.00
Forklifts	Diesel	No Change	0	3	No Change	0.00
Generator Sets	Diesel	No Change	0	1	No Change	0.00
Graders	Diesel	No Change	0	1	No Change	0.00
Pavers	Diesel	No Change	0	2	No Change	0.00
Paving Equipment	Diesel	No Change	0	2	No Change	0.00
Rollers	Diesel	No Change	0	2	No Change	0.00
Rubber Tired Dozers	Diesel	No Change	0	4	No Change	0.00
Scrapers	Diesel	No Change	0	2	No Change	0.00
Tractors/Loaders/Backhoes	Diesel	No Change	0	9	No Change	0.00
Welders	Diesel	No Change	0	1	No Change	0.00

Adelanto-IPG Rancho 38 Project**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Unmitigated tons/yr											Unmitigated mt/yr	
Air Compressors	3.62000E-003	2.43800E-002	3.62000E-002	6.00000E-005	1.22000E-003	1.22000E-003	0.00000E+000	5.10651E+000	5.10651E+000	2.90000E-004	0.00000E+000	5.11370E+000
Cranes	2.87000E-002	3.05220E-001	1.52610E-001	4.90000E-004	1.27100E-002	1.16900E-002	0.00000E+000	4.32487E+001	4.32487E+001	1.39900E-002	0.00000E+000	4.35984E+001
Excavators	1.03800E-002	8.51700E-002	1.79180E-001	2.80000E-004	4.17000E-003	3.84000E-003	0.00000E+000	2.49529E+001	2.49529E+001	8.07000E-003	0.00000E+000	2.51546E+001
Forklifts	2.81300E-002	2.63690E-001	3.33620E-001	4.50000E-004	1.55000E-002	1.42600E-002	0.00000E+000	3.92802E+001	3.92802E+001	1.27000E-002	0.00000E+000	3.95978E+001
Generator Sets	2.82700E-002	2.52030E-001	3.57350E-001	6.40000E-004	1.12000E-002	1.12000E-002	0.00000E+000	5.51077E+001	5.51077E+001	2.28000E-003	0.00000E+000	5.51646E+001
Graders	1.05500E-002	1.27960E-001	4.65500E-002	1.80000E-004	4.15000E-003	3.81000E-003	0.00000E+000	1.59878E+001	1.59878E+001	5.17000E-003	0.00000E+000	1.61171E+001
Pavers	3.67000E-003	3.48400E-002	5.78600E-002	9.00000E-005	1.63000E-003	1.50000E-003	0.00000E+000	8.25832E+000	8.25832E+000	2.67000E-003	0.00000E+000	8.32510E+000
Paving Equipment	3.30000E-003	2.99200E-002	5.14000E-002	8.00000E-005	1.45000E-003	1.33000E-003	0.00000E+000	7.15707E+000	7.15707E+000	2.31000E-003	0.00000E+000	7.21493E+000
Rollers	2.91000E-003	3.04900E-002	3.70000E-002	5.00000E-005	1.61000E-003	1.48000E-003	0.00000E+000	4.61114E+000	4.61114E+000	1.49000E-003	0.00000E+000	4.64843E+000
Rubber Tired Dozers	2.91000E-002	3.02900E-001	1.32020E-001	3.60000E-004	1.36400E-002	1.25500E-002	0.00000E+000	3.18853E+001	3.18853E+001	1.03100E-002	0.00000E+000	3.21431E+001
Scrapers	4.32700E-002	4.55590E-001	3.37540E-001	8.40000E-004	1.78600E-002	1.64300E-002	0.00000E+000	7.33523E+001	7.33523E+001	2.37200E-002	0.00000E+000	7.39454E+001
Tractors/Loaders/ Backhoes	4.86400E-002	4.91120E-001	7.39260E-001	1.03000E-003	2.32600E-002	2.14000E-002	0.00000E+000	9.05735E+001	9.05735E+001	2.92900E-002	0.00000E+000	9.13058E+001
Welders	2.34200E-002	1.35540E-001	1.62540E-001	2.50000E-004	4.80000E-003	4.80000E-003	0.00000E+000	1.83515E+001	1.83515E+001	1.90000E-003	0.00000E+000	1.83991E+001

Adelanto-IPG Rancho 38 Project

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

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Mitigated tons/yr							Mitigated mt/yr					
Air Compressors	3.62000E-003	2.43800E-002	3.62000E-002	6.00000E-005	1.22000E-003	1.22000E-003	0.00000E+000	5.10650E+000	5.10650E+000	2.90000E-004	0.00000E+000	5.11369E+000
Cranes	2.87000E-002	3.05220E-001	1.52610E-001	4.90000E-004	1.27100E-002	1.16900E-002	0.00000E+000	4.32486E+001	4.32486E+001	1.39900E-002	0.00000E+000	4.35983E+001
Excavators	1.03800E-002	8.51700E-002	1.79180E-001	2.80000E-004	4.17000E-003	3.84000E-003	0.00000E+000	2.49528E+001	2.49528E+001	8.07000E-003	0.00000E+000	2.51546E+001
Forklifts	2.81300E-002	2.63680E-001	3.33620E-001	4.50000E-004	1.55000E-002	1.42600E-002	0.00000E+000	3.92802E+001	3.92802E+001	1.27000E-002	0.00000E+000	3.95978E+001
Generator Sets	2.82700E-002	2.52030E-001	3.57350E-001	6.40000E-004	1.12000E-002	1.12000E-002	0.00000E+000	5.51077E+001	5.51077E+001	2.28000E-003	0.00000E+000	5.51646E+001
Graders	1.05500E-002	1.27960E-001	4.65500E-002	1.80000E-004	4.15000E-003	3.81000E-003	0.00000E+000	1.59878E+001	1.59878E+001	5.17000E-003	0.00000E+000	1.61170E+001
Pavers	3.67000E-003	3.48400E-002	5.78600E-002	9.00000E-005	1.63000E-003	1.50000E-003	0.00000E+000	8.25831E+000	8.25831E+000	2.67000E-003	0.00000E+000	8.32509E+000
Paving Equipment	3.30000E-003	2.99200E-002	5.14000E-002	8.00000E-005	1.45000E-003	1.33000E-003	0.00000E+000	7.15706E+000	7.15706E+000	2.31000E-003	0.00000E+000	7.21493E+000
Rollers	2.91000E-003	3.04900E-002	3.70000E-002	5.00000E-005	1.61000E-003	1.48000E-003	0.00000E+000	4.61114E+000	4.61114E+000	1.49000E-003	0.00000E+000	4.64842E+000
Rubber Tired Dozers	2.91000E-002	3.02900E-001	1.32020E-001	3.60000E-004	1.36400E-002	1.25500E-002	0.00000E+000	3.18853E+001	3.18853E+001	1.03100E-002	0.00000E+000	3.21431E+001
Scrapers	4.32700E-002	4.55590E-001	3.37540E-001	8.40000E-004	1.78600E-002	1.64300E-002	0.00000E+000	7.33522E+001	7.33522E+001	2.37200E-002	0.00000E+000	7.39453E+001
Tractors/Loaders/Buckets/hoes	4.86400E-002	4.91120E-001	7.39260E-001	1.03000E-003	2.32600E-002	2.14000E-002	0.00000E+000	9.05734E+001	9.05734E+001	2.92900E-002	0.00000E+000	9.13057E+001
Welders	2.34200E-002	1.35540E-001	1.62540E-001	2.50000E-004	4.80000E-003	4.80000E-003	0.00000E+000	1.83515E+001	1.83515E+001	1.90000E-003	0.00000E+000	1.83991E+001

Adelanto-IPG Rancho 38 Project

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

Equipment Type	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Air Compressors	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.95828E-006	1.95828E-006	0.00000E+000	0.00000E+000	1.95553E-006
Cranes	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.15611E-006	1.15611E-006	0.00000E+000	0.00000E+000	1.14683E-006
Excavators	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.20227E-006	1.20227E-006	0.00000E+000	0.00000E+000	1.19262E-006
Forklifts	0.00000E+000	3.79233E-005	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.27291E-006	1.27291E-006	0.00000E+000	0.00000E+000	1.26270E-006
Generator Sets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.27024E-006	1.27024E-006	0.00000E+000	0.00000E+000	1.26893E-006
Graders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.25095E-006	1.25095E-006	0.00000E+000	0.00000E+000	6.20461E-007
Pavers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.21090E-006	1.21090E-006	0.00000E+000	0.00000E+000	1.20119E-006
Paving Equipment	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.39722E-006	1.39722E-006	0.00000E+000	0.00000E+000	0.00000E+000
Rollers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	2.15126E-006
Rubber Tired Dozers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	9.40872E-007	9.40872E-007	0.00000E+000	0.00000E+000	1.24443E-006
Scrapers	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.09063E-006	1.09063E-006	0.00000E+000	0.00000E+000	1.08188E-006
Tractors/Loaders/Buckets	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.10408E-006	1.10408E-006	0.00000E+000	0.00000E+000	1.20474E-006
Welders	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	0.00000E+000	1.08983E-006	1.08983E-006	0.00000E+000	0.00000E+000	1.63051E-006

Fugitive Dust Mitigation

Yes/No	Mitigation Measure	Mitigation Input	Mitigation Input
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No	Soil Stabilizer for unpaved Roads	PM10 Reduction	0.00	PM2.5 Reduction	0.00	
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Adelanto-IPG Rancho 38 Project

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

No	Replace Ground Cover of Area Disturbed	PM10 Reduction	0.00	PM2.5 Reduction	0.00		
Yes	Water Exposed Area	PM10 Reduction	61.00	PM2.5 Reduction	61.00	Frequency (per day)	3.00
No	Unpaved Road Mitigation	Moisture Content %	0.00	Vehicle Speed (mph)	20.00		
Yes	Clean Paved Road	% PM Reduction	20.00				

Phase	Source	Unmitigated		Mitigated		Percent Reduction	
		PM10	PM2.5	PM10	PM2.5	PM10	PM2.5
Architectural Coating	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Architectural Coating	Roads	0.01	0.00	0.01	0.00	0.17	0.16
Building Construction	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Building Construction	Roads	0.33	0.09	0.27	0.08	0.17	0.15
Grading	Fugitive Dust	0.25	0.10	0.10	0.04	0.61	0.61
Grading	Roads	0.00	0.00	0.00	0.00	0.17	0.16
Paving	Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00
Paving	Roads	0.00	0.00	0.00	0.00	0.17	0.16
Site Preparation	Fugitive Dust	0.10	0.05	0.04	0.02	0.61	0.61
Site Preparation	Roads	0.00	0.00	0.00	0.00	0.18	0.16

Operational Percent Reduction Summary

Adelanto-IPG Rancho 38 Project

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

Category	ROG	NOx	CO	SO2	Exhaust PM10	Exhaust PM2.5	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction												
Architectural Coating	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Consumer Products	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Landscaping	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mobile	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Water Indoor	0.00	0.00	0.00	0.00	0.00	12.36	12.21	12.23	12.36	12.36	12.27	
Water Outdoor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Operational Mobile Mitigation

Project Setting:

Mitigation	Category	Measure	% Reduction	Input Value 1	Input Value 2	Input Value 3
No	Land Use	Increase Density	0.00			
No	Land Use	Increase Diversity	0.07	0.26		
No	Land Use	Improve Walkability Design	0.00			
No	Land Use	Improve Destination Accessibility	0.00			
No	Land Use	Increase Transit Accessibility	0.25			
No	Land Use	Integrate Below Market Rate Housing	0.00			
	Land Use	Land Use SubTotal	0.00			

Adelanto-IPG Rancho 38 Project

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

No	Neighborhood Enhancements	Improve Pedestrian Network				
No	Neighborhood Enhancements	Provide Traffic Calming Measures				
No	Neighborhood Enhancements	Implement NEV Network	0.00			
	Neighborhood Enhancements	Neighborhood Enhancements Subtotal	0.00			
No	Parking Policy Pricing	Limit Parking Supply	0.00			
No	Parking Policy Pricing	Unbundle Parking Costs	0.00			
No	Parking Policy Pricing	On-street Market Pricing	0.00			
	Parking Policy Pricing	Parking Policy Pricing Subtotal	0.00			
No	Transit Improvements	Provide BRT System	0.00			
No	Transit Improvements	Expand Transit Network	0.00			
No	Transit Improvements	Increase Transit Frequency	0.00			
	Transit Improvements	Transit Improvements Subtotal	0.00			
		Land Use and Site Enhancement Subtotal	0.00			
No	Commute	Implement Trip Reduction Program				
No	Commute	Transit Subsidy				
No	Commute	Implement Employee Parking "Cash Out"				
No	Commute	Workplace Parking Charge				
No	Commute	Encourage Telecommuting and Alternative Work Schedules	0.00			
No	Commute	Market Commute Trip Reduction Option	0.00			
No	Commute	Employee Vanpool/Shuttle	0.00			2.00

Adelanto-IPG Rancho 38 Project

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

No	Commute	Provide Ride Sharing Program				
	Commute	Commute Subtotal	0.00			
No	School Trip	Implement School Bus Program	0.00			
		Total VMT Reduction	0.00			

Area Mitigation

Measure Implemented	Mitigation Measure	Input Value
No	Only Natural Gas Hearth	
Yes	No Hearth	
No	Use Low VOC Cleaning Supplies	
No	Use Low VOC Paint (Residential Interior)	50.00
No	Use Low VOC Paint (Residential Exterior)	50.00
Yes	Use Low VOC Paint (Non-residential Interior)	50.00
Yes	Use Low VOC Paint (Non-residential Exterior)	50.00
Yes	Use Low VOC Paint (Parking)	50.00
No	% Electric Lawnmower	0.00
No	% Electric Leafblower	0.00
No	% Electric Chainsaw	0.00

Energy Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	Exceed Title 24		

Adelanto-IPG Rancho 38 Project

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

No	:Install High Efficiency Lighting		
No	:On-site Renewable		

Appliance Type	Land Use Subtype	% Improvement
ClothWasher		30.00
DishWasher		15.00
Fan		50.00
Refrigerator		15.00

Water Mitigation Measures

Measure Implemented	Mitigation Measure	Input Value 1	Input Value 2
No	:Apply Water Conservation on Strategy	0.00	0.00
No	:Use Reclaimed Water	0.00	0.00
No	:Use Grey Water	0.00	
Yes	:Install low-flow bathroom faucet	32.00	
No	:Install low-flow Kitchen faucet	18.00	
Yes	:Install low-flow Toilet	20.00	
No	:Install low-flow Shower	20.00	
No	:Turf Reduction	0.00	
Yes	:Use Water Efficient Irrigation Systems	6.10	
No	:Water Efficient Landscape	0.00	0.00

Solid Waste Mitigation

Adelanto-IPG Rancho 38 Project**EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied**

Mitigation Measures	Input Value
Institute Recycling and Composting Services Percent Reduction in Waste Disposed	

APPENDIX B:

**TRAFFIC STUDY AND VEHICLE MILES TRAVELED (VMT)
SCREENING MEMORANDUM.**

APPENDIX C:

CARB EMFAC OFFROAD2021 (v1.0.3) OUTPUTS

Shareable link: <https://arb.ca.gov/emfac/emissions-inventory/d748b34605a6a34673f16491d359406b2eb034dd>

Request Summary

Model Output
OFFROAD2021 (v1.0.3) Emissions Inventory

Region Type
Sub-Area

Region
San Bernardino (MD)

Calendar Year
2024

Scenario
All Adopted Rules - Exhaust

Vehicle Classification
OFFROAD2021 Equipment Types

Model Year
Aggregate

Horsepower Bin
50

Fuel
Diesel

Units
tons/day for Emissions, gallons/year for Fuel, hours/year for Activity,
Horsepower-hours/year for Horsepower-hours.

Output Table

Vehicle Population and Activities All

Activity Population Horsepower Hour Fuel Consumption

Pollutants  All

NOx PM2.5 PM10 CO2 NH3 HC CO ROG TOG SOx

No	ROG	CO	NOx	CO2	PM10	PM2.5	SOx	Fuel Consumption	Total_Activity	Total_Population	↓ Horsepower_Hours
1	1.64e-1	2.20e-2	1.37e-1	3.15e+1	3.33e-3	3.06e-3	4.95e+4	1.03e+6	1.35e+6	7.53e+2	0

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