

Appendix B

Air Quality/Health Risk Assessment and Greenhouse Gas Emissions Data

ANALYSIS OF PUBLIC HEALTH RISKS

FOR THE
PILOT FLYING J TRAVEL CENTER
PALMDALE CALIFORNIA
JANUARY 6, 2021

PROJECT TITLE

Palmdale Pilot Flying J

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INTRODUCTION

This Health Risk Assessment (HRA) was prepared to assess potential public health risks that may be present at the proposed Pilot Flying J Facility in the city of Palmdale, Los Angeles County, California. This report analyzes the emissions of toxic air pollutants within the project area and their impacts on public health.

PROJECT DESCRIPTION

PROJECT LOCATION

The Project site consists of approximately 9.0 acres generally located north of Pearblossom Highway and approximately 1,200 feet west of Fort Tejon Road/Highway 138 in the City of Palmdale.

EXISTING SURROUNDING USES

The approximately 9-acre Project site is part of a larger approximately 28-acre parcel (referred to herein as the 28-acre parcel or parent parcel); refer to Figure 2, Project Site and Surrounding Area. The entire 28-acre parcel is designated Regional Commercial (RC) by the City of Palmdale General Plan and is zoned C-4 (Commercial Center) by the City of Palmdale Zoning Map. The Project site is currently used for parking for the existing swap meet use within the parent parcel. Trees are distributed throughout the Project site. There is a small wooden outpost structure and signage associated with the adjacent use located adjacent to Pearblossom Highway. The Project site is accessed from Pearblossom Highway via two driveways located at the eastern and western edges of the Project site. The eastern driveway extends along the eastern edge of the Project site to Highway 138. All of the driveways currently have moveable barrier gates.

Immediately north of the Project site is a berm and elevated railroad track. Highway 138 extends in a northwest/southeast direction east of the Project site and forms the eastern boundary of the larger 28-acre parcel. Additional parking is located directly east of the Project site and shared road/driveway. Further east are buildings/structures associated with the existing use within the eastern portion of the 28-acre parcel. A gas station is located on the northwest corner of Pearblossom Highway and Highway 138, adjacent to the 28-acre parcel's eastern property line. Directly to the south of the Project site, across Pearblossom Highway, are single-family residences surrounded by undeveloped land within unincorporated Los Angeles County. To the southeast (east of 53rd Street) are undeveloped parcels within the City of Palmdale designated RC and zoned C-4. Immediately to the west of the Project site are two undeveloped parcels and a parcel containing a Palmdale Water District facility; all three parcels are designated Medium Residential and zoned R-2 (Medium Residential); a single-family residential subdivision is located further west.

PROJECT CHARACTERISTICS

The Project proposes the construction and operation of a Pilot Travel Center on the approximately 9.0-acre parcel (the Project site) for regional and local highway traveling users. Implementation of the Project would involve the development of fueling facilities, travel

amenities, restaurants, and parking facilities for passing motorists and commercial truck operators, as described below; refer to Figure 4, Proposed Site Plan.

Fueling Facilities

The Project proposes eight diesel fueling lanes/positions and seven gas islands with 14 fueling positions. The diesel fueling lanes would be located to the north of the travel center building and include a 20-foot-tall canopy structure. The gas islands would be located south of the travel center building and north of Pearblossom Highway, and include a 20-foot-tall canopy structure. Two aboveground diesel storage farms, a Bio-blending shed, belowground gasoline storage tanks, and a truck scale would be located within the diesel portion of the site.

Travel Center Building

The proposed travel center building would be up to 12,000 square feet and include a convenience store, three quick service restaurants, driver amenities (e.g., restrooms, showers, laundry), and support/utility areas.

A refuse enclosure and storage area and transformers, screened from view by a solid wall, would be located to the west of the travel center building.

Parking Facilities

The Project would provide 123 parking spaces (56 automobile, 3 ADA, 64 truck) with passenger automobile and handicapped parking located south of and adjacent to the travel center facility and south of the gas islands, adjacent to Pearblossom Highway. Truck parking would be located north of the travel center facility and truck diesel fueling lanes.

Signage and Lighting

Internally illuminated 10-foot-tall monument signs would be located at the southeast corner of the Project site, adjacent to the proposed roadway and at the proposed access driveway at Highway 138; refer to the *Access* discussion below. Internally illuminated directional signage would also be provided within the interior of the Project site. Additional illuminated signage would be provided on the travel center facility and fueling canopies.

Landscaping and Walls

Landscaping would be installed throughout the site; refer to Figure 5, Conceptual Landscape Plan. Landscaping would be provided along the Project site frontage, east and west of the travel center building, and east of the diesel fueling lanes. Landscaping would also be provided east of the Project driveway, around the perimeter of the proposed detention pond, and to the north of the detention pond.

An eight-foot-tall fence would be provided along the Project site's western property line adjacent to the auto fueling area. North of the auto fueling area the eight-foot-tall fence would transition onto a five-foot-tall berm and extend to the northern property line and storm pond.

Access

Primary access to the Project site would be provided from Pearblossom Highway. A shared 36-foot-wide roadway would extend north from Pearblossom Highway along the eastern edge of the Project site, providing access to the proposed Project site and the two proposed parcels north and east of the Project site. A driveway along the western edge of the Project site would provide auto only access from Pear Blossom Highway to the auto fueling area.

Additional access is proposed from Highway 138 via a one-way, 15-foot-wide roadway which would extend southwest from Highway 138 and connect to the shared access roadway at the northeast corner of the Project site.

SCOPE OF RISK ASSESSMENT

Preparation of risk assessments is a three-step process. The first step is to identify potential contaminants that may lead to public health risks. The second step is to assess the magnitude of contaminants that may reach the public (exposure assessment). The last step is to calculate the magnitude of the health risk as a result of exposure to harmful contaminants on the basis of the toxicology of the contaminants.

The Office of Environmental Health Hazard Assessment, and the Antelope Valley Air Quality Management District (AVAQMD) provide guidance on the procedures that should be used, including, toxicological data for individual contaminants. This risk assessment is based on the guidance provided within these guidance documents. It should be noted that while this risk assessment uses certain procedures and data from these Guidelines, this assessment is not intended to satisfy the reporting requirements under AB-2588 “Air Toxics” Hot Spots program.

The health risks that are evaluated in this study include:

- Residential Cancer Risk (70-year exposure; start at third trimester);
- Workplace Cancer Risk (40-year exposure; start at age 16); and
- Acute and Chronic Hazard Indices.

The 70-year risk applies to residential areas where exposure may potentially occur 24 hours/day, 365 days/year. The 40-year risk is applicable to workplace exposure and therefore accounts for a reduced exposure for the fact that individuals typically would be exposed 8-hrs per day, 5 days per week, and 50 weeks per year. Non-cancer risks can be described as acute (short-term, exposure) or chronic health impacts.

SIGNIFICANCE CRITERIA

The following significance criteria shown in Table 1, based on guidance from the AVAQMD, are used in this report to assess the significance of public health risks.

TABLE 1 THRESHOLDS OF SIGNIFICANCE FOR PUBLIC HEALTH RISKS

<i>Risk Metric</i>	<i>Significance Threshold</i>
Residential Cancer Risk	10 per million
Workplace Cancer Risk	10 per million
Chronic and Acute non-cancer hazard Indices	non-cancer health hazard exposure index of 1.0

SOURCE: AVAQMD, 2016.

As shown in Table 1, a project that contributes a cancer risk in excess of 10 new cases in a population of one million persons at identified receptors, or a non-cancer hazard index of greater than or equal to 1.0 would be considered to have a significant project-level impact.

EMISSION SOURCES AND EXPOSURE

The main source of toxic air pollutants (TACs) within the proposed truck stop project is diesel particulate matter (DPM) from truck idle and mobile emissions, and the operation of Truck Refrigeration Units (TRUs). Another source of TACs on the project site is from refueling activities which produces benzene (a known carcinogen) from the gasoline vapor of on-site refueling operations. Based on numerous studies by the California Air Resources Board (ARB), DPM represents the largest single contributor to public health risks. Additionally, in its comprehensive assessment of diesel exhaust, OEHHA analyzed more than 30 studies of people who worked around diesel equipment, including truck drivers, railroad workers, and equipment operators. The studies showed these workers were more likely to develop lung cancer than workers who were not exposed to diesel emissions. These studies provide strong evidence that long-term occupational exposure to diesel exhaust increases the risk of lung cancer. Exposure to diesel exhaust can have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, diesel exhaust particles made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Emissions from the following project sources were analyzed and are shown in Table 2:

- Truck on-site mobile emissions
- Truck on-site idling emissions
- TRU generated emissions
- Gasoline refueling operations

TABLE 2: EMISSION SOURCE ASSUMPTIONS

Source Type / Emission	Configuration	Assumptions
On-site Mobile Diesel Truck Circulation (DPM)	<i>Modeled as line-volume sources</i> Release Height = 12 ft Plume Height = 6 ft	• On-site travel of 218 trucks per day (Kimley-Horn, 2020). All truck entering project site assumed to refuel.

	Plume Width = 12 ft (width of a truck) Line Lengths = based on path of travel	- Traveling distance based on proposed site plan layout. - PM₁₀ mobile emissions factor provided by EMFAC 2017 (Parameters: Los Angeles County, Annual, Year 2021; emission factor for T7 Tractor)
On-site Diesel Truck Idling (DPM)	<i>Modeled as point sources</i> Release Height = 12 ft Diameter = 0.1 meter Velocity = 57.1 m/s @ 1500 rpm Temperature = 366 K	- On-site Idle of 218 trucks per day (Kimley-Horn, 2020) 5 minutes idling per vehicle - Emissions Factors based on EMFAC 2014 Technical Documentation Guidebook average of summer and winter high idle emissions rates
TRUs (DPM)	<i>Modeled as point sources</i> Release Height = 13 ft Diameter = 0.04445 m Temperature = 501 K Velocity = 49 m/s	- Trucks are assumed to run their TRUs for 15 minutes per hour. 34 hp rated TRUs - Emission factor (Source: ARB Guidelines for in-use Diesel-Fueled Transport Refrigeration Units TRU) 0.53 load factor 50 % of the 64 truck parking spaces occupied during nighttime (8 hours) 15 % of the 64 Parking spaces occupied during Daytime (16 hours) 15% of trucks have TRUs bases on fleet mix (Source: ATA)
Gasoline Service Activities (Benzene)	<i>Underground tank loading (point source)</i> Release Height = 3.66 m Temperature = 291 K Diameter = 0.0508 m Velocity = 0.00035 m/s <i>Underground tank breathing (point source)</i> Release Height = 3.66 m Temperature = 288.71 K Diameter = 0.0508 m Velocity = 0.000106 m/s <i>Vehicle refueling (volume source)</i> 1. Release Height = 4 m Length = 36 m Lateral = 8.37 m Vertical = 1.86 m	1,800 gallons of gasoline pumped per pump per day (factor provided by SJVAPCD) - Total of 14 gasoline fueling pumps.

	<i>Spillage (volume source)</i> 1. Release Height = 4 m Length = 36 m Lateral = 8.37 m Vertical = 1.86 m	
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DAILY TRUCK TRIPS

The total diesel truck trips generated by the proposed project is based on a Traffic Study - MOU for the proposed project prepared by Kimley-Horn in October 2020. According to the project applicant, the average total daily truck traffic includes 218 net primary trips per day.

EMISSION RATES

Table 3 provides emissions rates by source and emissions factors. For calculations, data outputs, and reference documents please see Appendix 1.

TABLE 3: EMISSION RATES BY SOURCE

Source	Pollutant	Volume/Size	Emission Factor	Emissions Pounds/Year
On-site Diesel Truck (Mobile) Circulation	Diesel Particulate Matter (DPM)	281 trucks per day traveling 0.324356 miles	0.08554432 g/mile	6.27402227
On-site Diesel Truck Idling	Diesel Particulate Matter (DPM)	281 trucks per day idling 5 min	0.0035 g/hr -vehicle	0.05116464
Truck Refrigeration Units (TRUs)	Diesel Particulate Matter (DPM)	15% of all trucks, 34 hp rated TRU engines	0.02 g/hp-hr	4.455
Gasoline Vehicle Fueling Loss (95%) (Passenger Vehicle Refueling)	Benzene	14 pumps; 1,800 gallons per pump/day	0.00126 Emission Factor (lb/1,000 gallons of gasoline)	11.59
Gasoline Spillage (Passenger Vehicle Refueling)	Benzene	14 pumps; 1,800 gallons per pump/day	0.0042 Emission Factor (lb/1,000 gallons of gasoline)	38.63
Breathing Loss (Underground tank)	Benzene	14 pumps (at 657,000 GPY per pump)	0.000075 Emission Factor (lb/1,000 gallons of gasoline)	0.690
Underground Tank Filling Loss (98%)	Benzene	14 pumps (at 657,000 GPY per pump)	0.000252 Emission Factor (lb/1,000 gallons of gasoline)	2.318

SOURCES: EMFAC 2017 (ON-SITE DIESEL TRUCK CIRCULATION); TABLES 3.2-41 AND 42, OF THE EMFAC2014 VOLUME III - TECHNICAL DOCUMENTATION GUIDEBOOK ON IDLING EMISSIONS; AIR DISTRICT CORRESPONDENCE FOR BENZENE EMISSION FACTORS (SEE APPENDIX 1). SEE TABLE 2 OF THIS DOCUMENT AND APPENDIX 1 FOR FURTHER DETAIL.

EXPOSURE ASSESSMENT

Exposure assessment involves translating the emission rate (e.g., lbs/hr, g/hr) of individual toxic air contaminants into the concentration (e.g., grams/cubic meter g /sec m² or parts per million) of each toxic air contaminant. The key step in performing an exposure assessment is the application of an air dispersion model. The dispersion model incorporates the local meteorological data (wind speed, wind direction, local temperature, inversions, etc.), stack height, and exhaust flow characteristics, into the dispersion of individual air contaminant. The Lakes Environmental AERMOD Version 9.9.0 (AERMOD Version 19191) dispersion model was employed for this assessment.

Modeling Receptor Grid: A rectangular (x-y) coordinate system was used. A region 1,000 x 1,000 meters was selected for the purposes of analysis. The modeling region divided into 517 discrete Cartesian receptors in the vicinity of the project area. This grid allows for analysis throughout the modelling extent and allows for a visual representation of dispersion contours.

Meteorological Data: Five years of meteorological data was used in the exposure assessment. The meteorological (“Met”) data (wind speed, wind direction, temperature, etc.) were recorded at the General William J. Fox Airfield location for the years 2009 through 2014.

RISK ASSESSMENT

Once the emissions rates of individual air contaminants have been calculated, and an air dispersion model has been run through AERMOD, the next step in determining health risks is to determine the cancer risk, and acute and chronic incident rates. Period and 1-hour dispersion files we used in combination with HARP-2 risk modelling software to calculate risk scenarios for residential, and workplace cancer rates, as well as acute and chronic incidences. The Hotspots Analysis and Reporting Program (HARP) is a software suite used to assist with the programmatic requirements of the Air Toxics “Hot Spots” Program [Assembly Bill (AB) 2588]. HARP combines the tools needed to implement the requirements of AB 2588, such as reporting a facilities emissions inventory, determining a facilities prioritization score, conducting air dispersion modeling, and performing a facility health risk assessment. This study utilized the HARP2 Air Dispersion and Risk Tool with dispersion plot files created in AERMOD. After the risk assessment was complete HARP-2, plot files were then imported back into AREMOD for spatial and visual representation, and analysis of impact areas.

The Intake Rate Percentile sets the intake rate at which a person is exposed to the air pollutant. This study utilized the high-end intake rate to assess risk at the 95th percentile exposure rate for risk scenarios (see Appendix 3 HARP-2 project summary report). Additionally, residential cancer risk is assessed using a 70-year exposure duration starting at the third trimester; workplace cancer risks are assessed at a 40-year exposure duration with age 16 being the first potential exposure year.

RISK ASSESSMENT RESULTS

The results of the risk analysis indicate that cancer risks vary depending on the exposure scenario (residential or worker) and on location. As would be expected, locations nearest the project area have the greatest exposure and the associated risks are considerably lower as distance from the project site increases. Table 4 displays the residential and workplace cancer risk, and acute and chronic incidence rate results at nearest receptors. Figures 2 through 5 display a spatial representation of the associated risk by selected risk scenarios.

TABLE 4: SUMMARY OF MAXIMUM HEALTH RISKS

Risk Metric	Maximum Risk (per million persons)	Significance Threshold	Is Threshold Exceeded?
Residential Cancer Risk (70-year exposure) ¹	3.16	10 per million	No
Workplace Cancer Risk (40-year exposure)	3.55	10 per million	No
Chronic (non-cancer)	<0.01	Hazard Index ≥ 1	No
Acute (non-cancer)	0.06	Hazard Index ≥ 1	No

SOURCES: AERMOD (LAKES ENVIRONMENTAL SOFTWARE, 2016); AND HARP-2 AIR DISPERSION AND RISK TOOL

NOTES: ¹THE MAXIMUM RESIDENTIAL CANCER RISK WOULD BE FOR THE RESIDENCE LOCATED AT 5154 NIGHSTKY PLACE, APPROXIMATELY 190 FEET TO THE WEST OF THE PROJECT SITE.

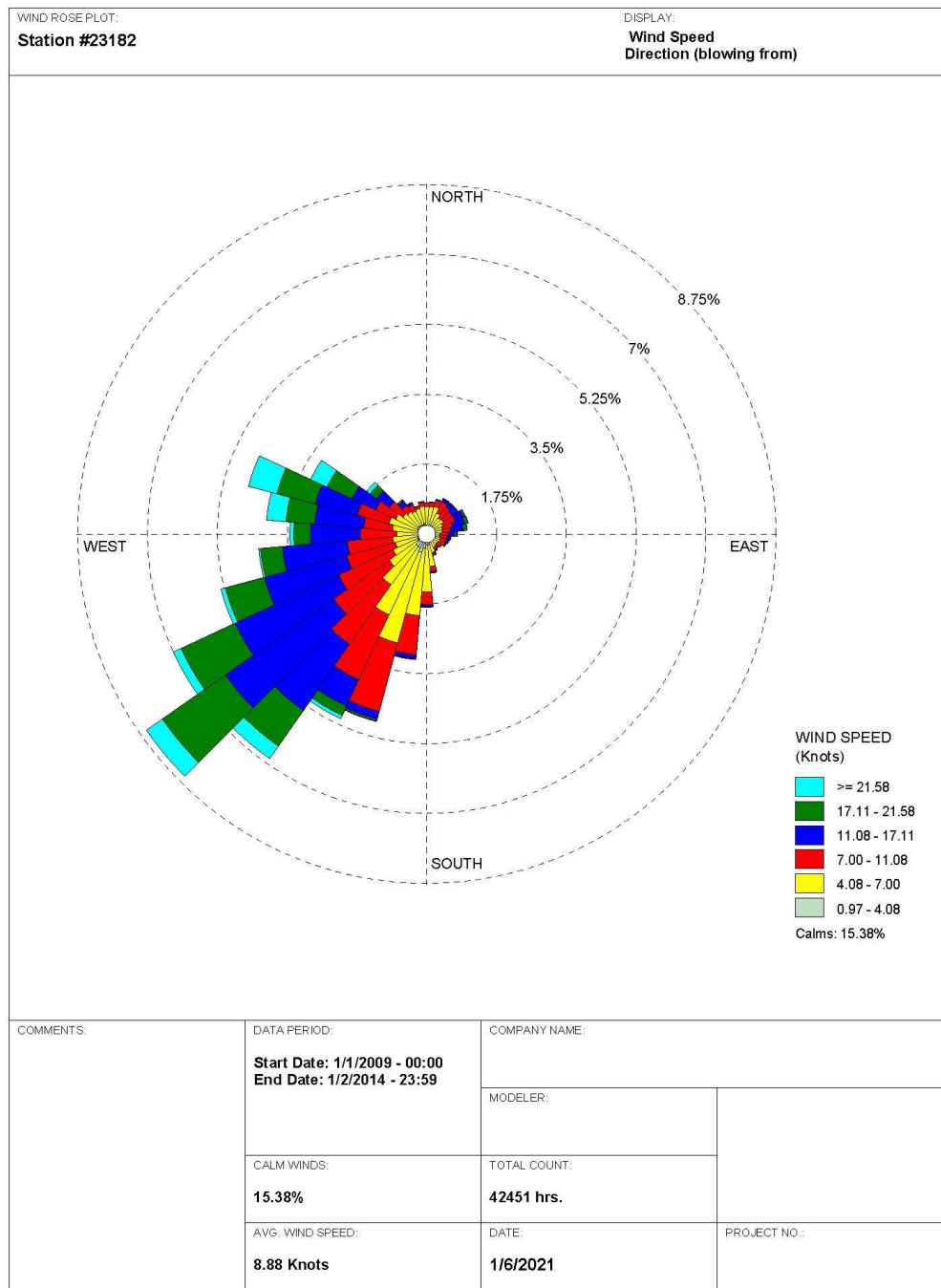
The primary TAC emissions from the project result from the on-site truck travel, idling of diesel-fueled vehicles, and the operation of transport refrigeration units (TRU) used to transport perishable products. DPM emissions showed the greatest health effects when compared individually to on-site sources such as benzene emissions from refueling activities (emitted from gasoline vapor). Additionally, within the sources of on-site DPM, the operation of TRUs produced the greatest DPM emissions and contributed substantially to overall project health risks, including cancer risk.

Variation of risk at all locations for residential cancer risk is shown in Figure 2. Overall, the results show that residential 70-year cancer risk would remain below 10 in a million at areas near the project site that contain residential receptors. However, it is very unlikely any individual would remain at the same location for 70 years; therefore, this result represents a conservative estimate.

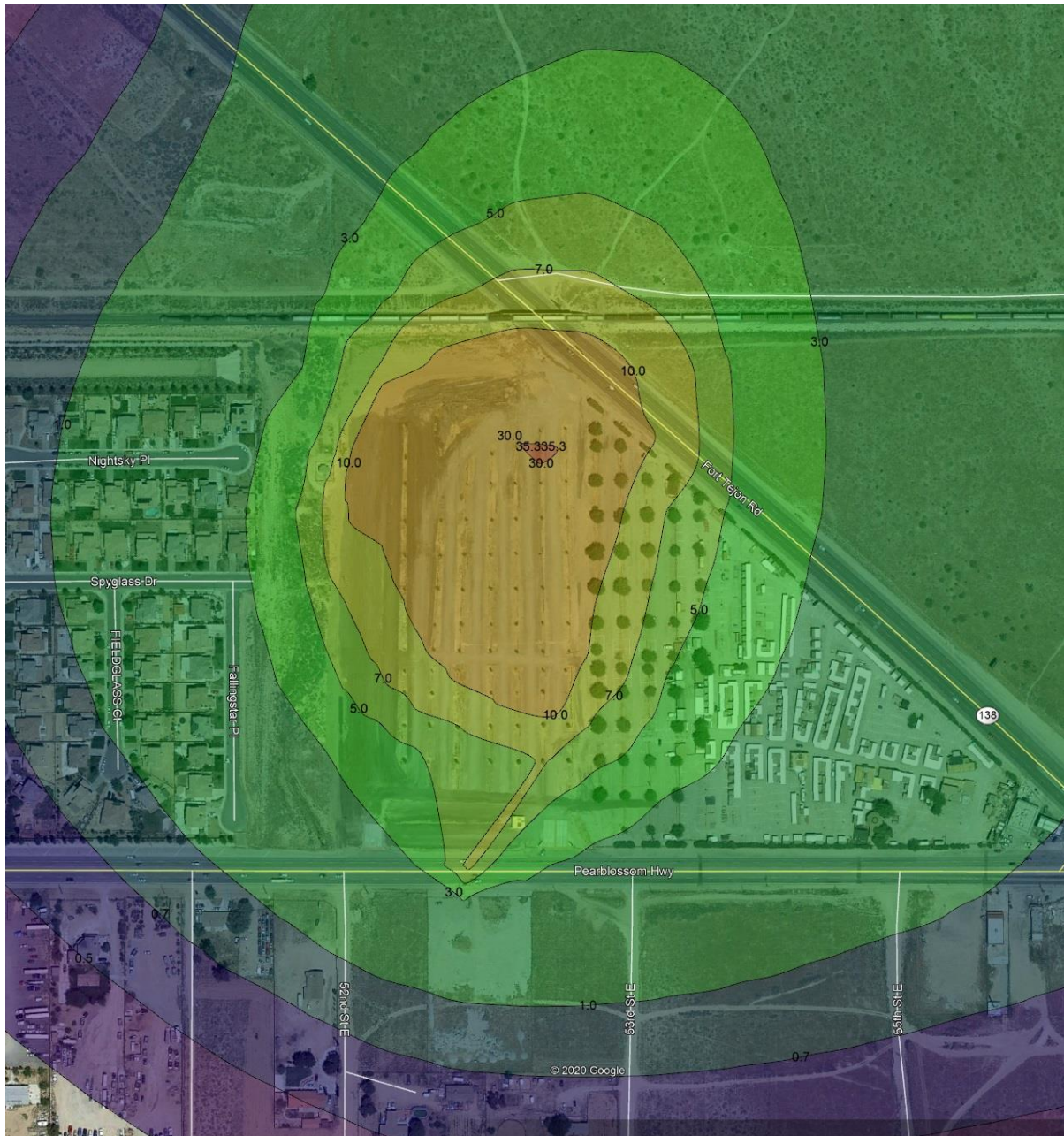
Variation of risk at all locations for workplace cancer is shown in Figure 3. Overall, the results show that 40-year workplace cancer risk would remain below 10 in a million (the SJVPACD threshold) at the project site, with a maximum value of 3.55 per million measured within the northeast portion of the project site (the location of maximum cancer risk).

Chronic or long-term exposures and Acute exposure to DPM and Benzene can result in non-cancer health effects. Chronic and Acute Non-Cancer Hazards results show that the acute and chronic risk on and near the project site would remain below the hazard index of ≥ 1 . With maximum values of <0.01 and 0.06, respectively.

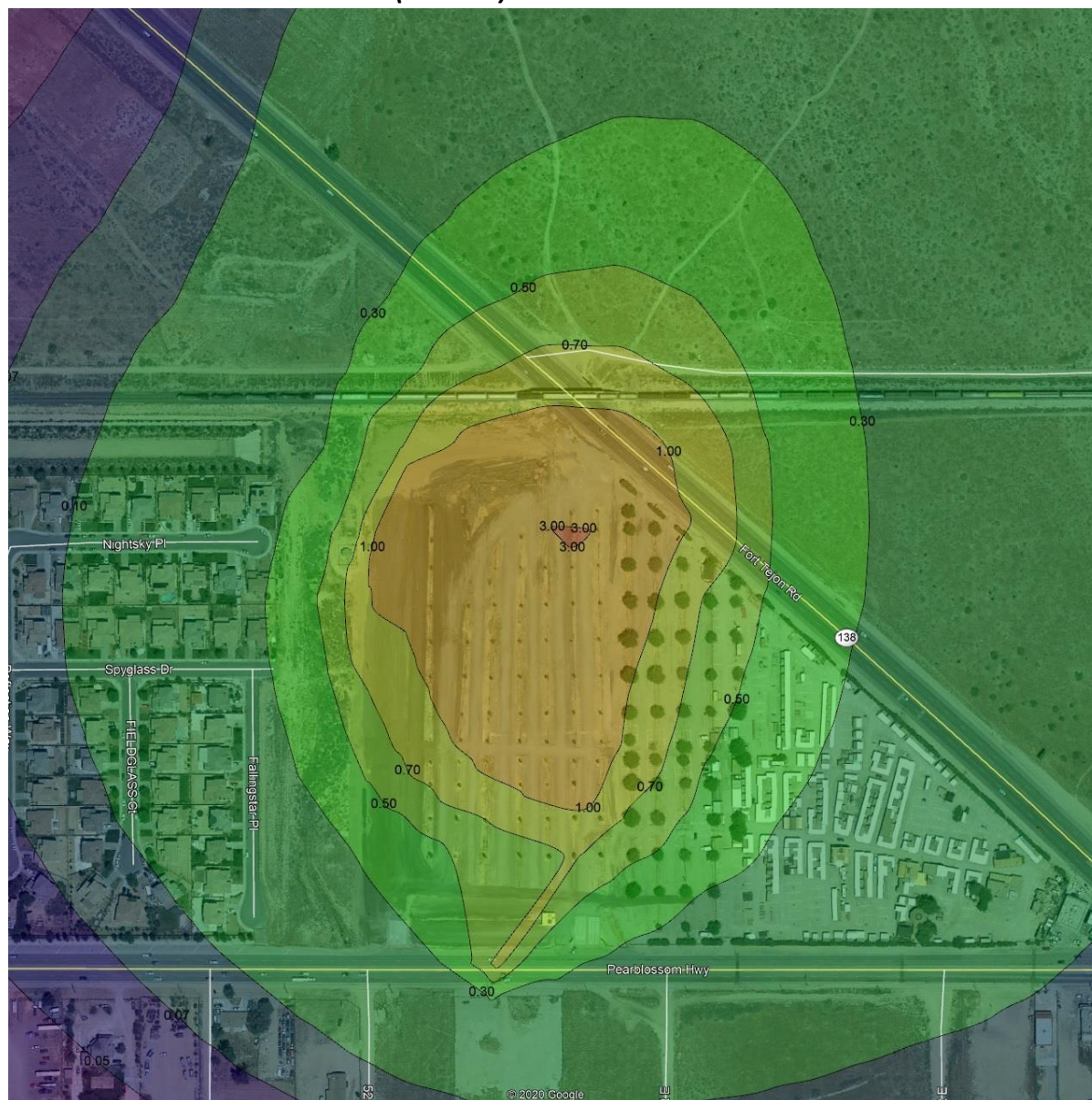
FIGURE-1: WIND PATTERNS (GENERAL WILLIAM J. FOX AIRFIELD - 2009-2014) AIRPORT LOCATION APPROXIMATELY 16.4 MILES NORTHWEST OF PROJECT SITE.



Sources: Prepared by De Novo Planning group (2021); Lakes Environmental AERMOD View 9.9.0

FIGURE-2: RESIDENTIAL CANCER RISK (70-YEAR) – OEHHA DERIVED METHOD

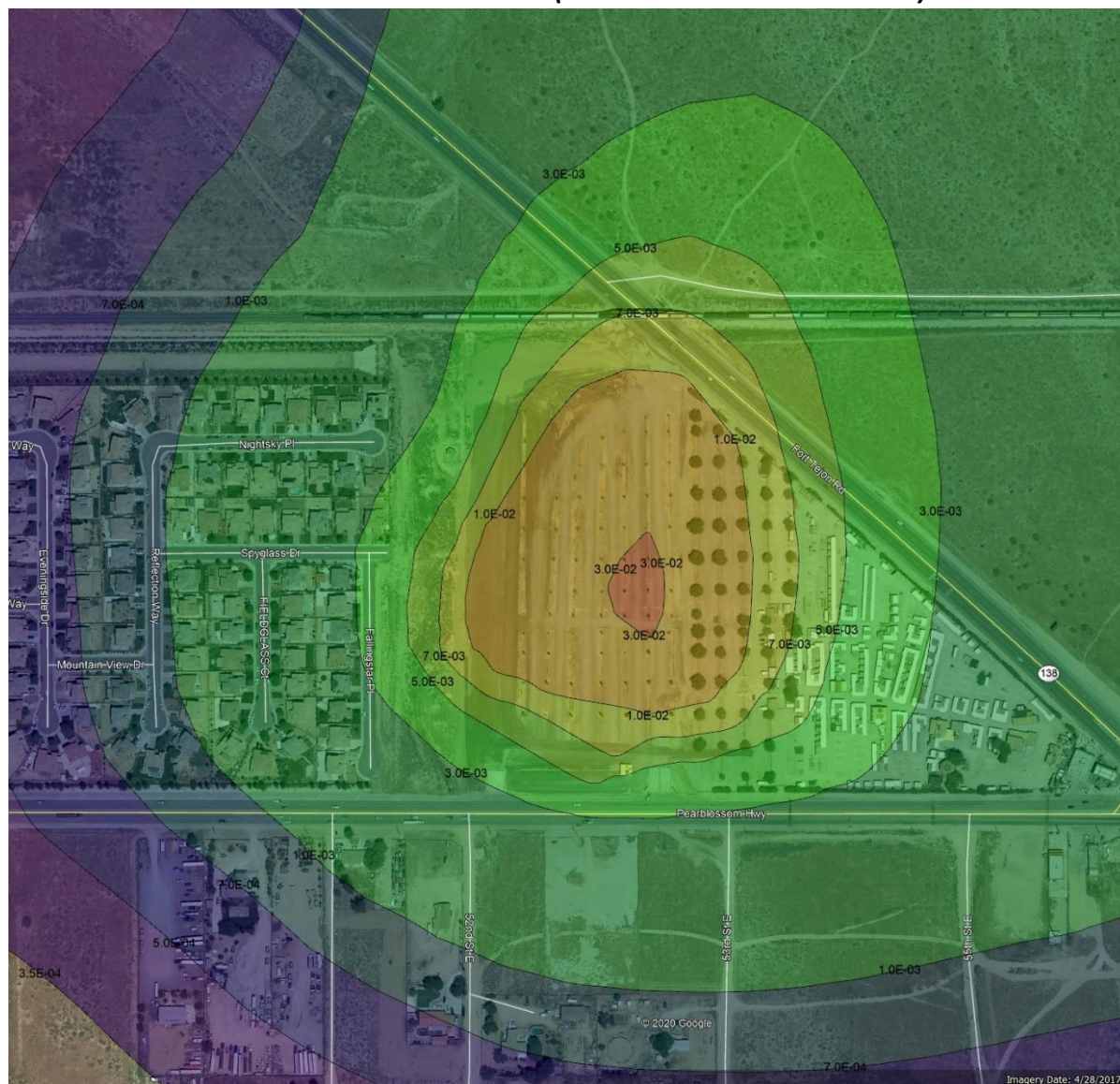
Sources: Prepared by De Novo Planning group (2021); Lakes Environmental AERMOD View 9.9.0; HARP-2 Air Dispersion and Risk Tool; Google Earth.

FIGURE-3: WORKPLACE CANCER RISK (40-YEAR) - OEHHA DERIVED METHOD

Sources: Prepared by De Novo Planning group (2021); Lakes Environmental AERMOD View 9.9.0; HARP-2 Air Dispersion and Risk Tool; Google Earth.

FIGURE-4: ACUTE MAXIMUM NON-CANCER RISK (SHORT-TERM EXPOSURE; HAZARD INDEX)

Sources: Prepared by De Novo Planning group (2021); Lakes Environmental AERMOD View 9.9.0; HARP-2 Air Dispersion and Risk Tool; Google Earth.

FIGURE-5: CHRONIC MAXIMUM NON-CANCER RISK (95TH PERCENTILE EXPOSURE RATE)

Sources: Prepared by De Novo Planning group (2021); Lakes Environmental AERMOD View 9.9.0; HARP-2 Air Dispersion and Risk Tool; Google Earth.

REPORT PREPARERS

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AVAQMD. 2016. California Environmental Quality Act (CEQA) and Federal Conformity Guidelines. August 2016.

United States Environmental Protection Agency Office of Air Quality Planning and Standards June 1998 *Locating and Estimating Air Emissions from Sources of Benzene*.

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Appendix 1 Emissions Calculations:

EMFAC2017 (v1.0.2) Emission Rates

Region Type: County

Region: LOS ANGELES

Calendar Year: 2021

Season: Annual

Vehicle Classification: EMFAC2011 Categories

Units: miles/day for VMT, g/mile for RUNEX, PMBW and PMTW. Note 'day' in the unit is operation day.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	PM10_RUNEX
LOS ANGELES	2021	T7 tractor	Aggregated		10 DSL	8430.135	0.129920723

Heavy-duty Truck PM₁₀ Adjustment Factor

Years of Data: 30

Exposure Years: 70

Risk Year	Period (years)	Age Sensitivity Factor	Sensitivity Weighting Factor	EMFAC Year	<u>Diesel</u>			
					VMT /1000	Tons /day	Emission Rate (g/vehicle- mile)	Sensitivity Weighted Emission Rate (g/vehicle- mile)
1	1	10	0.143	2021	2177	0.05	0.023	0.003289
2	1	10	0.143	2022	2221	0.05	0.02	0.00286
3	1	4.75	0.068	2023	2262	0.03	0.012	0.000816
4	1	3	0.043	2024	2288	0.03	0.011	0.000473
5	1	3	0.043	2025	2311	0.03	0.01	0.00043
6	1	3	0.043	2026	2334	0.02	0.01	0.00043
7	1	3	0.043	2027	2358	0.02	0.009	0.000387
8	1	3	0.043	2028	2383	0.02	0.008	0.000344
9	1	3	0.043	2029	2409	0.02	0.008	0.000344
10	1	3	0.043	2030	2437	0.02	0.007	0.000301
11	1	3	0.043	2031	2466	0.02	0.007	0.000301
12	1	3	0.043	2032	2495	0.02	0.007	0.000301
13	1	3	0.043	2033	2526	0.02	0.006	0.000258
14	1	3	0.043	2034	2557	0.02	0.006	0.000258
15	1	3	0.043	2035	2589	0.02	0.006	0.000258
16	1	3	0.043	2036	2622	0.02	0.006	0.000258
17	1	1.5	0.021	2037	2656	0.02	0.006	0.000126
18	1	1	0.014	2038	2690	0.02	0.005	0.00007
19	1	1	0.014	2039	2724	0.02	0.005	0.00007
20	1	1	0.014	2040	2758	0.02	0.005	0.00007
21	1	1	0.014	2041	2793	0.02	0.005	0.00007
22	1	1	0.014	2042	2828	0.02	0.005	0.00007
23	1	1	0.014	2043	2863	0.02	0.005	0.00007
24	1	1	0.014	2044	2898	0.02	0.005	0.00007
25	1	1	0.014	2045	2934	0.02	0.005	0.00007
26	1	1	0.014	2046	2969	0.02	0.005	0.00007
27	1	1	0.014	2047	3004	0.02	0.005	0.00007
28	1	1	0.014	2048	3040	0.02	0.005	0.00007
29	1	1	0.014	2049	3076	0.02	0.005	0.00007
30	41	1	0.574	2050	3112	0.02	0.005	0.00287
70		1.7					70 yr g/VMT	0.015144
Source: Data provided by SJVACPD (Leland Villalvazo) Note: Table updated to reflect 2021 as first year.							PM₁₀ Adjustment Factor: 65.84%	

Idling Emission Rates taken from tables 3.2-41 and 42, of the EMFAC2014 Volume III - Technical Documentation Guidebook:
<http://www.arb.ca.gov/msei/downloads/emfac2014/emfac2014-vol3-technical-documentation-052015.pdf>

pounds per gram: 0.002205

Note: using an average of the summer and winter high idle emissions rates for the emission factor calcs

PM10	0.003 g/hr-truck
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PM10	0.004 g/hr-truck
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Note: assuming 5 minutes of idling per truck

As provided by the Kimley Horn Traffic Study (2018):

26.00 Peak hour truck trips (maximum peak hour truck trips is used for the sake of a conservative analysis)

Annual Emissions:

0.05116464 lbs/year-281 trucks for each of the	1 idling points
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Max Hr Emissions: 0.0000167 for each sampling point, for max 1 hr

Truck TRU

0.02 g/hp-hr source: ARB		pounds per gram:	0.002205
34 hp rated TRU engines			
64 parking spaces as per site plan			
0.15 15% of trucks are refrigerated trucks (based on the # of 500,000 trucks in the U.S being reefers and approximately 3.2 million trucks in use nationwide).			Source ATA
0.5 Assume 50% of parking spaces are full during the nighttime			
0.15 Assume 15% of parking spaces are full during the daytime			
0.53 Load Factor of 0.53 based Walmart Riverwalk Marketplace HRA Impact Sciences, Inc			
0.25 Trucks are expected to run their TRUs for 15 minutes per hour (Leland Vilalvazo, phone conversation)		On/Off Cycle Factor	
4.8 # of refrigerated trucks parked at nighttime during any given hour			
1.44 # of refrigerated trucks parked at daytime during any given hour			
8 Hours in a night			
16 Hours in a day			
3.45984 Nighttime Emissions (g/day)			
2.075904 Daytime Emissions (g/day)			
Total			
5.535744 Emissions (g/day)			
2,021 Emissions (g/year)			
4.455 Emissions (lbs/year)			
0.445 Emissions (lbs/year)		Note: Split over 10 point sources	
Total Max 1 Hr			
0.43248 Emissions (g/hr)			
0.43248 Emissions (g/hour)			
0.00095 Emissions (lbs/hour)			
0.00010 Emissions (lbs/hour)		Note: Split over 10 point sources	

Mobile Truck Emissions Mobile

pounds per gram: 0.002205

<u>Assumptions:</u>		<u>Source:</u>
1. Average distanced travelled on-site per truck:	0.324356 miles	AERMOD
2. # of trucks per day visiting the project site:	281 trucks	Traffic MOU
3. PM10 Mobile Emissions Factors (Los Angeles County-Mojave, 10 MPH, T7 Instate Heavy):		
Year:	2021	0.12992072 g/mile
PM10 Adjustment Factor:		65.84%
PM 10 Adjusted Factor:		0.08554432 g/mile

Therefore:
Total daily PM10 On-site Mobile Emissions Generated by the project:
7.79685484 g/day-281 vehicles
0.0171891 lbs/day-281 vehicles
6.27402227 lbs/year-281 vehicles

Max Hr Emissions
Two times the average trip generation over the course of 1 hour, based on the given 24-hour daily totals (conservative estimate)
0.001432 lbs/hour-281 vehicles

Breathing loss (U/G tank)

	657,000 gallons of gasoline pumped per pump (conservative factor provided by the SJVAPCD).
	14 pumps at 7 stations
emission factor:	0.025 lbs gasoline vapor/thousand gallons of gasoline (source: SJVAPCD).
	0.000075 lbs benzene/thousand gallons of gasoline (source: SJVAPCD).
	690 thousand lbs of gasoline vapor/year
Annual result:	0.690 lbs of benzene vapor/year
	0.690 lbs of gasoline vapor/year
	365 days in a year
	24 hours in a day
Max Hr result:	0.00007875 max lbs of benzene vapor/hr

U/G Tank filling (Loading) loss (98%)

	657,000 1,800 gallons of gasoline pumped per pump (conservative factor provided by SJVAPCD), equ. to 657,000 gallons per year
	14 pumps at 7 stations
emission factor:	0.084 lbs gasoline vapor/thousand gallons of gasoline (source: SJVAPCD).
	0.000252 lbs benzene/thousand gallons of gasoline (source: SJVAPCD)
	2,318 thousand lbs of benzene vapor/year
Annual result:	2.318 lbs of benzene vapor/year
	2.318 lbs of benzene vapor/year
	365 days in a year
	24 hours in a day
Max Hr result:	0.0002646 max lbs of vapor/hr

Passenger Vehicle - Gasoline Dispensor

Refueling Vehicle fueling loss (95%) (Passenger Vehicle)

1,800 gallons gasoline pumped per pump/per day (conservative factor provided by SJVAPCD).
657,000 gallons gasoline pumped per pump/per year (conservative factor provided by SJVAPCD).
14 pumps at 7 stations.

emission factor:

0.00126 Benzene Emission Factor (lb/1,000 gal) (source: SJVAPCD).
11,589 thousand lbs of benzene vapor/year
Annual result: 11.59 lbs of Benzene/year (total)
1.66 lbs of Benzene/year (for each pump station)

1,800.00 gasoline per pump per day
75.00 max hour per pump average
0.00126 Benzene Emission Factor (lb/1,000 gal) (source: SJVAPCD)
14 pumps

Max Hr result: 0.001323 max lbs of benzene/hr
0.000189 lbs/pump station

Spillage (Passenger Vehicle)

657,000 1,800 per-pump/day of gasoline pumped (conservative factor provided by SJVAPCD).
14 pumps at 7 stations

emission factor:

0.0042 Benzene Emission Factor (lb/1,000 gal) (source: SJVAPCD).
38,632 thousand lbs of benzene vapor/year
Annual result: 38.63 lbs of Benzene/year (total)
5.52 lbs of Benzene/year (for each pump station)

1,800.00 gasoline per pump per day (source: SJVAPCD).
75.00 max hour per pump average
0.0042
Note: The 6 idling poin 14 pumps

Max Hr result: 0.00441 max lbs of benzene/hr
0.00063 lbs/pump station

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Gasoline/Service Station	8.00	Pump	7.00	1,129.40	0
Convenience Market With Gas Pumps	16.00	Pump	1.96	2,258.80	0
Fast Food Restaurant w/o Drive Thru	1.85	1000sqft	0.04	1,852.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics -

Land Use - Lot acreage per land use type is estimated based on site plan. Site assumed to encompass a total of 9.0 acres.

Construction Phase - Note: all exterior finishes are pre-finished, so no architectural coating phase.

Grading - Soil import/export, and total acres graded, as provided by the project applicant. 25 tons of soil import assumed (conservative estimate).

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Vehicle Trips - Trip rates provided by traffic study (Kimley Horn).

Fleet Mix - HHD uses allocated for truck refueling land use.

Construction Off-road Equipment Mitigation - Tier 4 engine tiers (off-road construction equipment) for all construction equipment used, per applicant. Additional construction mitigation not included.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
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tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	230.00	90.00
tblConstructionPhase	NumDays	20.00	6.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	20.00	31.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	PhaseEndDate	7/1/2022	10/8/2021
tblConstructionPhase	PhaseEndDate	7/16/2021	8/2/2021
tblConstructionPhase	PhaseEndDate	8/13/2021	6/30/2021
tblConstructionPhase	PhaseEndDate	7/29/2022	9/20/2021
tblConstructionPhase	PhaseEndDate	6/18/2021	6/11/2021
tblConstructionPhase	PhaseStartDate	8/14/2021	6/5/2021
tblConstructionPhase	PhaseStartDate	6/19/2021	7/26/2021
tblConstructionPhase	PhaseStartDate	7/17/2021	6/10/2021
tblConstructionPhase	PhaseStartDate	7/2/2022	8/9/2021
tblFleetMix	HHD	0.03	1.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.20	0.00

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tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.1430e-003	0.00
tblFleetMix	MCY	5.0780e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	8.9100e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	2.4790e-003	0.00
tblFleetMix	SBUS	6.8200e-004	0.00
tblFleetMix	UBUS	2.2700e-003	0.00
tblGrading	AcresOfGrading	7.50	2.50
tblGrading	AcresOfGrading	3.00	6.00
tblGrading	MaterialImported	0.00	7.00
tblGrading	MaterialImported	0.00	18.00
tblLandUse	LotAcreage	0.03	7.00
tblLandUse	LotAcreage	0.05	1.96
tblOffRoadEquipment	HorsePower	203.00	132.00
tblOffRoadEquipment	LoadFactor	0.46	0.46
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType	Paving Equipment	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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tblTripsAndVMT	HaulingTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	DV_TP	37.00	0.00
tblVehicleTrips	DV_TP	27.00	0.00
tblVehicleTrips	PB_TP	65.00	0.00
tblVehicleTrips	PB_TP	12.00	0.00
tblVehicleTrips	PB_TP	59.00	0.00
tblVehicleTrips	PR_TP	14.00	100.00
tblVehicleTrips	PR_TP	51.00	100.00
tblVehicleTrips	PR_TP	14.00	100.00
tblVehicleTrips	ST_TR	204.47	31.13
tblVehicleTrips	ST_TR	696.00	77.75
tblVehicleTrips	ST_TR	168.56	27.25
tblVehicleTrips	SU_TR	166.88	31.13
tblVehicleTrips	SU_TR	500.00	77.75
tblVehicleTrips	SU_TR	168.56	27.25
tblVehicleTrips	WD_TR	542.60	31.13
tblVehicleTrips	WD_TR	716.00	77.75
tblVehicleTrips	WD_TR	168.56	27.25

2.0 Emissions Summary

2.1 Overall Construction

Mitigated Construction

Percent Reduction	59.04	61.97	-5.16	0.00	0.00	0.00	68.06	27.28	0.00	67.20	36.99	0.00	0.00	0.00	0.00	0.00
ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	

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Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-7-2021	9-6-2021	1.1597	0.3803
2	9-7-2021	9-30-2021	0.2166	0.0994
		Highest	1.1597	0.3803

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0266	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e-004	4.6000e-004	0.0000	0.0000	4.9000e-004
Energy	2.4300e-003	0.0221	0.0186	1.3000e-004		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	63.8513	63.8513	2.1000e-003	7.8000e-004	64.1367
Mobile	0.3413	6.9938	3.4828	0.0204	0.8225	0.0185	0.8410	0.2220	0.0176	0.2395	0.0000	1,959.4286	1,959.4286	0.1478	0.0000	1,963.1242
Waste						0.0000	0.0000		0.0000	0.0000	5.2006	0.0000	5.2006	0.3074	0.0000	12.8843
Water						0.0000	0.0000		0.0000	0.0000	0.2649	4.1851	4.4500	0.0274	6.8000e-004	5.3368
Total	0.3703	7.0159	3.5017	0.0205	0.8225	0.0202	0.8427	0.2220	0.0193	0.2412	5.4656	2,027.4654	2,032.9310	0.4847	1.4600e-003	2,045.4825

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2.2 Overall Operational**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0266	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e-004	4.6000e-004	0.0000	0.0000	4.9000e-004
Energy	2.4300e-003	0.0221	0.0186	1.3000e-004		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	63.8513	63.8513	2.1000e-003	7.8000e-004	64.1367
Mobile	0.3413	6.9938	3.4828	0.0204	0.8225	0.0185	0.8410	0.2220	0.0176	0.2395	0.0000	1,959.4286	1,959.4286	0.1478	0.0000	1,963.1242
Waste						0.0000	0.0000		0.0000	0.0000	5.2006	0.0000	5.2006	0.3074	0.0000	12.8843
Water						0.0000	0.0000		0.0000	0.0000	0.2649	4.1851	4.4500	0.0274	6.8000e-004	5.3368
Total	0.3703	7.0159	3.5017	0.0205	0.8225	0.0202	0.8427	0.2220	0.0193	0.2412	5.4656	2,027.4654	2,032.9310	0.4847	1.4600e-003	2,045.4825

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

3.0 Construction Detail**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/7/2021	6/11/2021	5	5	
2	Grading (second phase)	Grading	7/26/2021	8/2/2021	5	6	
3	Grading	Grading	6/10/2021	6/30/2021	5	15	
4	Building Construction	Building Construction	6/5/2021	10/8/2021	5	90	
5	Paving	Paving	8/9/2021	9/20/2021	5	31	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 0

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

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading (second phase)	Excavators	1	8.00	158	0.38
Grading (second phase)	Graders	1	8.00	187	0.41
Grading (second phase)	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Paving	Sweepers/Scrubbers	1	8.00	64	0.46
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Grading (second phase)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Paving	Rubber Tired Loaders	1	8.00	132	0.36
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Trips and VMT

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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
Grading (second phase)	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	1.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	2.00	1.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

3.2 Site Preparation - 2021**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					0.0151	0.0000	0.0151	8.2800e-003	0.0000	8.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0800e-003	0.0322	0.0158	3.0000e-005		1.6100e-003	1.6100e-003		1.4800e-003	1.4800e-003	0.0000	2.5588	2.5588	8.3000e-004	0.0000	2.5795
Total	3.0800e-003	0.0322	0.0158	3.0000e-005	0.0151	1.6100e-003	0.0167	8.2800e-003	1.4800e-003	9.7600e-003	0.0000	2.5588	2.5588	8.3000e-004	0.0000	2.5795

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3.2 Site Preparation - 2021**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	6.0000e-005	5.0000e-005	5.3000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1409	0.1409	0.0000	0.0000	0.1410
Total	6.0000e-005	5.0000e-005	5.3000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1409	0.1409	0.0000	0.0000	0.1410

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					0.0151	0.0000	0.0151	8.2800e-003	0.0000	8.2800e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e-004	3.4100e-003	0.0154	3.0000e-005		1.6000e-004	1.6000e-004		1.5000e-004	1.5000e-004	0.0000	2.5588	2.5588	8.3000e-004	0.0000	2.5795
Total	5.2000e-004	3.4100e-003	0.0154	3.0000e-005	0.0151	1.6000e-004	0.0152	8.2800e-003	1.5000e-004	8.4300e-003	0.0000	2.5588	2.5588	8.3000e-004	0.0000	2.5795

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3.2 Site Preparation - 2021**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	6.0000e-005	5.0000e-005	5.3000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1409	0.1409	0.0000	0.0000	0.1410
Total	6.0000e-005	5.0000e-005	5.3000e-004	0.0000	1.6000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	4.0000e-005	0.0000	0.1409	0.1409	0.0000	0.0000	0.1410

3.3 Grading (second phase) - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.3100e-003	0.0685	0.0408	8.0000e-005		3.1400e-003	3.1400e-003		2.8900e-003	2.8900e-003	0.0000	6.9972	6.9972	2.2600e-003	0.0000	7.0538
Total	6.3100e-003	0.0685	0.0408	8.0000e-005	0.0213	3.1400e-003	0.0244	0.0103	2.8900e-003	0.0132	0.0000	6.9972	6.9972	2.2600e-003	0.0000	7.0538

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3.3 Grading (second phase) - 2021**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	1.9000e-004	1.5000e-004	1.6600e-003	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4397	0.4397	1.0000e-005	0.0000	0.4400
Total	1.9000e-004	1.5000e-004	1.6600e-003	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4397	0.4397	1.0000e-005	0.0000	0.4400

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0213	0.0000	0.0213	0.0103	0.0000	0.0103	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3600e-003	8.6900e-003	0.0460	8.0000e-005		4.1000e-004	4.1000e-004		3.8000e-004	3.8000e-004	0.0000	6.9972	6.9972	2.2600e-003	0.0000	7.0538
Total	1.3600e-003	8.6900e-003	0.0460	8.0000e-005	0.0213	4.1000e-004	0.0217	0.0103	3.8000e-004	0.0107	0.0000	6.9972	6.9972	2.2600e-003	0.0000	7.0538

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3.3 Grading (second phase) - 2021**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	1.9000e-004	1.5000e-004	1.6600e-003	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4397	0.4397	1.0000e-005	0.0000	0.4400
Total	1.9000e-004	1.5000e-004	1.6600e-003	0.0000	4.9000e-004	0.0000	4.9000e-004	1.3000e-004	0.0000	1.3000e-004	0.0000	0.4397	0.4397	1.0000e-005	0.0000	0.4400

3.4 Grading - 2021**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					0.0465	0.0000	0.0465	0.0250	0.0000	0.0250	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0144	0.1571	0.0850	1.8000e-004		7.0200e-003	7.0200e-003		6.4600e-003	6.4600e-003	0.0000	15.4457	15.4457	5.0000e-003	0.0000	15.5706
Total	0.0144	0.1571	0.0850	1.8000e-004	0.0465	7.0200e-003	0.0535	0.0250	6.4600e-003	0.0314	0.0000	15.4457	15.4457	5.0000e-003	0.0000	15.5706

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3.4 Grading - 2021**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	1.4000e-004	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0381	0.0381	0.0000	0.0000	0.0382
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	3.6000e-004	2.8000e-004	3.2000e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8455	0.8455	2.0000e-005	0.0000	0.8461
Total	3.6000e-004	4.2000e-004	3.2300e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8836	0.8836	2.0000e-005	0.0000	0.8843

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					0.0465	0.0000	0.0465	0.0250	0.0000	0.0250	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.6400e-003	0.0149	0.0978	1.8000e-004		6.3000e-004	6.3000e-004		6.0000e-004	6.0000e-004	0.0000	15.4457	15.4457	5.0000e-003	0.0000	15.5706
Total	2.6400e-003	0.0149	0.0978	1.8000e-004	0.0465	6.3000e-004	0.0471	0.0250	6.0000e-004	0.0256	0.0000	15.4457	15.4457	5.0000e-003	0.0000	15.5706

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3.4 Grading - 2021**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	1.4000e-004	3.0000e-005	0.0000	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0381	0.0381	0.0000	0.0000	0.0382
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	3.6000e-004	2.8000e-004	3.2000e-003	1.0000e-005	9.4000e-004	1.0000e-005	9.5000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8455	0.8455	2.0000e-005	0.0000	0.8461
Total	3.6000e-004	4.2000e-004	3.2300e-003	1.0000e-005	9.5000e-004	1.0000e-005	9.6000e-004	2.5000e-004	1.0000e-005	2.6000e-004	0.0000	0.8836	0.8836	2.0000e-005	0.0000	0.8843

3.5 Building Construction - 2021**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	0.0739	0.6783	0.6408	1.0700e-003		0.0356	0.0356		0.0336	0.0336	0.0000	92.1506	92.1506	0.0212	0.0000	92.6815
Total	0.0739	0.6783	0.6408	1.0700e-003		0.0356	0.0356		0.0336	0.0336	0.0000	92.1506	92.1506	0.0212	0.0000	92.6815

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3.5 Building Construction - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.3600e-003	1.1800e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0712	1.0712	7.0000e-005	0.0000	1.0729
Worker	4.3000e-004	3.4000e-004	3.8400e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	1.0146	1.0146	3.0000e-005	0.0000	1.0153
Total	5.7000e-004	4.7000e-003	5.0200e-003	2.0000e-005	1.4000e-003	2.0000e-005	1.4200e-003	3.8000e-004	2.0000e-005	4.0000e-004	0.0000	2.0858	2.0858	1.0000e-004	0.0000	2.0882

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	0.0338	0.3108	0.6603	1.0700e-003		0.0142	0.0142		0.0137	0.0137	0.0000	92.1505	92.1505	0.0212	0.0000	92.6814
Total	0.0338	0.3108	0.6603	1.0700e-003		0.0142	0.0142		0.0137	0.0137	0.0000	92.1505	92.1505	0.0212	0.0000	92.6814

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3.5 Building Construction - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4000e-004	4.3600e-003	1.1800e-003	1.0000e-005	2.7000e-004	1.0000e-005	2.8000e-004	8.0000e-005	1.0000e-005	9.0000e-005	0.0000	1.0712	1.0712	7.0000e-005	0.0000	1.0729
Worker	4.3000e-004	3.4000e-004	3.8400e-003	1.0000e-005	1.1300e-003	1.0000e-005	1.1400e-003	3.0000e-004	1.0000e-005	3.1000e-004	0.0000	1.0146	1.0146	3.0000e-005	0.0000	1.0153
Total	5.7000e-004	4.7000e-003	5.0200e-003	2.0000e-005	1.4000e-003	2.0000e-005	1.4200e-003	3.8000e-004	2.0000e-005	4.0000e-004	0.0000	2.0858	2.0858	1.0000e-004	0.0000	2.0882

3.6 Paving - 2021**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	0.0207	0.2023	0.2265	3.4000e-004		0.0113	0.0113		0.0104	0.0104	0.0000	30.0449	30.0449	9.7200e-003	0.0000	30.2878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0207	0.2023	0.2265	3.4000e-004		0.0113	0.0113		0.0104	0.0104	0.0000	30.0449	30.0449	9.7200e-003	0.0000	30.2878

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3.6 Paving - 2021**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	5.9000e-004	6.6100e-003	2.0000e-005	1.9400e-003	2.0000e-005	1.9600e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.7473	1.7473	5.0000e-005	0.0000	1.7486
Total	7.4000e-004	5.9000e-004	6.6100e-003	2.0000e-005	1.9400e-003	2.0000e-005	1.9600e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.7473	1.7473	5.0000e-005	0.0000	1.7486

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	9.0800e-003	0.0914	0.2423	3.4000e-004		3.3200e-003	3.3200e-003		3.0900e-003	3.0900e-003	0.0000	30.0449	30.0449	9.7200e-003	0.0000	30.2878
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.0800e-003	0.0914	0.2423	3.4000e-004		3.3200e-003	3.3200e-003		3.0900e-003	3.0900e-003	0.0000	30.0449	30.0449	9.7200e-003	0.0000	30.2878

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3.6 Paving - 2021**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4000e-004	5.9000e-004	6.6100e-003	2.0000e-005	1.9400e-003	2.0000e-005	1.9600e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.7473	1.7473	5.0000e-005	0.0000	1.7486
Total	7.4000e-004	5.9000e-004	6.6100e-003	2.0000e-005	1.9400e-003	2.0000e-005	1.9600e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.7473	1.7473	5.0000e-005	0.0000	1.7486

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

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	ROG	NOx	CO	SO2	Fugitive 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	0.3413	6.9938	3.4828	0.0204	0.8225	0.0185	0.8410	0.2220	0.0176	0.2395	0.0000	1,959.4286	1,959.4286	0.1478	0.0000	1,963.1242
Unmitigated	0.3413	6.9938	3.4828	0.0204	0.8225	0.0185	0.8410	0.2220	0.0176	0.2395	0.0000	1,959.4286	1,959.4286	0.1478	0.0000	1,963.1242

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	498.00	498.00	498.00	1,208,142	1,208,142
Fast Food Restaurant w/o Drive Thru	144.00	144.00	144.00	352,314	352,314
Gasoline/Service Station	218.00	218.00	218.00	536,578	536,578
Total	860.00	860.00	860.00	2,097,034	2,097,034

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
Convenience Market With Gas	14.70	6.60	6.60	0.80	80.20	19.00	100	0	0
Fast Food Restaurant w/o Drive	14.70	6.60	6.60	1.50	79.50	19.00	100	0	0
Gasoline/Service Station	14.70	6.60	6.60	2.00	79.00	19.00	100	0	0

4.4 Fleet Mix

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Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Fast Food Restaurant w/o Drive Thru	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Gasoline/Service Station	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	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	0.0000	39.7568	39.7568	1.6400e-003	3.4000e-004	39.8990
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	39.7568	39.7568	1.6400e-003	3.4000e-004	39.8990
NaturalGas Mitigated	2.4300e-003	0.0221	0.0186	1.3000e-004		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	24.0945	24.0945	4.6000e-004	4.4000e-004	24.2377
NaturalGas Unmitigated	2.4300e-003	0.0221	0.0186	1.3000e-004		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	24.0945	24.0945	4.6000e-004	4.4000e-004	24.2377

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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					
Convenience Market With Gas Pumps	3704.43	2.0000e-005	1.8000e-004	1.5000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1977	0.1977	0.0000	0.0000	0.1989
Fast Food Restaurant w/o Drive Thru	427368	2.3000e-003	0.0210	0.0176	1.3000e-004		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003	0.0000	22.8060	22.8060	4.4000e-004	4.2000e-004	22.9415
Gasoline/Service Station	20442.1	1.1000e-004	1.0000e-003	8.4000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.0909	1.0909	2.0000e-005	2.0000e-005	1.0974
Total		2.4300e-003	0.0221	0.0186	1.4000e-004		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	24.0945	24.0945	4.6000e-004	4.4000e-004	24.2377

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					
Convenience Market With Gas Pumps	3704.43	2.0000e-005	1.8000e-004	1.5000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	0.1977	0.1977	0.0000	0.0000	0.1989
Fast Food Restaurant w/o Drive Thru	427368	2.3000e-003	0.0210	0.0176	1.3000e-004		1.5900e-003	1.5900e-003		1.5900e-003	1.5900e-003	0.0000	22.8060	22.8060	4.4000e-004	4.2000e-004	22.9415
Gasoline/Service Station	20442.1	1.1000e-004	1.0000e-003	8.4000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005	0.0000	1.0909	1.0909	2.0000e-005	2.0000e-005	1.0974
Total		2.4300e-003	0.0221	0.0186	1.4000e-004		1.6800e-003	1.6800e-003		1.6800e-003	1.6800e-003	0.0000	24.0945	24.0945	4.6000e-004	4.4000e-004	24.2377

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5.3 Energy by Land Use - Electricity**Unmitigated**

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	30493.8	9.7160	4.0000e-004	8.0000e-005	9.7507
Fast Food Restaurant w/o Drive Thru	81747.3	26.0464	1.0800e-003	2.2000e-004	26.1396
Gasoline/Service Station	12536.3	3.9944	1.6000e-004	3.0000e-005	4.0086
Total		39.7568	1.6400e-003	3.3000e-004	39.8990

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Convenience Market With Gas Pumps	30493.8	9.7160	4.0000e-004	8.0000e-005	9.7507
Fast Food Restaurant w/o Drive Thru	81747.3	26.0464	1.0800e-003	2.2000e-004	26.1396
Gasoline/Service Station	12536.3	3.9944	1.6000e-004	3.0000e-005	4.0086
Total		39.7568	1.6400e-003	3.3000e-004	39.8990

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6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0266	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e-004	4.6000e-004	0.0000	0.0000	4.9000e-004
Unmitigated	0.0266	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e-004	4.6000e-004	0.0000	0.0000	4.9000e-004

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6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0205					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e-004	4.6000e-004	0.0000	0.0000	4.9000e-004
Total	0.0266	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e-004	4.6000e-004	0.0000	0.0000	4.9000e-004

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	6.0700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0205					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	2.0000e-005	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e-004	4.6000e-004	0.0000	0.0000	4.9000e-004
Total	0.0266	0.0000	2.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	4.6000e-004	4.6000e-004	0.0000	0.0000	4.9000e-004

7.0 Water Detail

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7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	4.4500	0.0274	6.8000e-004	5.3368
Unmitigated	4.4500	0.0274	6.8000e-004	5.3368

7.2 Water by Land Use**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Convenience Market With Gas Pumps	0.167315 / 0.102548	1.1102	5.5000e-003	1.4000e-004	1.2887
Fast Food Restaurant w/o Drive Thru	0.561537 / 0.0358428	2.6347	0.0184	4.5000e-004	3.2297
Gasoline/Service Station	0.106255 / 0.0651241	0.7051	3.4900e-003	9.0000e-005	0.8184
Total		4.4500	0.0274	6.8000e-004	5.3368

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7.2 Water by Land Use**Mitigated**

	Indoor/Outdoor Use	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Land Use	Mgal	MT/yr			
Convenience	0.167315 /	1.1102	5.5000e-003	1.4000e-004	1.2887
Market With Gas Pumps	0.102548				
Fast Food Restaurant w/o Drive Thru	0.561537 / 0.0358428	2.6347	0.0184	4.5000e-004	3.2297
Gasoline/Service Station	0.106255 / 0.0651241	0.7051	3.4900e-003	9.0000e-005	0.8184
Total		4.4500	0.0274	6.8000e-004	5.3368

8.0 Waste Detail**8.1 Mitigation Measures Waste**

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Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	5.2006	0.3074	0.0000	12.8843
Unmitigated	5.2006	0.3074	0.0000	12.8843

8.2 Waste by Land Use**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant w/o Drive Thru	21.31	4.3257	0.2556	0.0000	10.7168
Gasoline/Service Station	4.31	0.8749	0.0517	0.0000	2.1675
Total		5.2006	0.3073	0.0000	12.8843

8.2 Waste by Land Use

Mitigated

Waste Disposed	Land Use	tons	MT/yr				Total
			Total CO2	CH4	N2O	CO2e	
Fast Food Restaurant w/o Drive Thru		21.31	4.3257	0.2556	0.0000	10.7168	Gasoline/Service Station
			0.8749	0.0517	0.0000	2.1675	
			5.2006	0.3073	0.0000	12.8843	

9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

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Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

Palmdale Pilot Flying J
Los Angeles-Mojave Desert County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Gasoline/Service Station	8.00	Pump	7.00	1,129.40	0
Convenience Market With Gas Pumps	16.00	Pump	1.96	2,258.80	0
Fast Food Restaurant w/o Drive Thru	1.85	1000sqft	0.04	1,852.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

Project Characteristics -

Land Use - Lot acreage per land use type is estimated based on site plan. Site assumed to encompass a total of 9.0 acres.

Construction Phase - Note: all exterior finishes are pre-finished, so no architectural coating phase.

Grading - Soil import/export, and total acres graded, as provided by the project applicant. 25 tons of soil import assumed (conservative estimate).

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Vehicle Trips - Trip rates provided by traffic study (Kimley Horn).

Fleet Mix - HHD uses allocated for truck refueling land use.

Construction Off-road Equipment Mitigation - Tier 4 engine tiers (off-road construction equipment) for all construction equipment used, per applicant. Additional construction mitigation not included.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

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tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	230.00	90.00
tblConstructionPhase	NumDays	20.00	6.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	20.00	31.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	PhaseEndDate	7/1/2022	10/8/2021
tblConstructionPhase	PhaseEndDate	7/16/2021	8/2/2021
tblConstructionPhase	PhaseEndDate	8/13/2021	6/30/2021
tblConstructionPhase	PhaseEndDate	7/29/2022	9/20/2021
tblConstructionPhase	PhaseEndDate	6/18/2021	6/11/2021
tblConstructionPhase	PhaseStartDate	8/14/2021	6/5/2021
tblConstructionPhase	PhaseStartDate	6/19/2021	7/26/2021
tblConstructionPhase	PhaseStartDate	7/17/2021	6/10/2021
tblConstructionPhase	PhaseStartDate	7/2/2022	8/9/2021
tblFleetMix	HHD	0.03	1.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.20	0.00

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tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.1430e-003	0.00
tblFleetMix	MCY	5.0780e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	8.9100e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	2.4790e-003	0.00
tblFleetMix	SBUS	6.8200e-004	0.00
tblFleetMix	UBUS	2.2700e-003	0.00
tblGrading	AcresOfGrading	7.50	2.50
tblGrading	AcresOfGrading	3.00	6.00
tblGrading	MaterialImported	0.00	7.00
tblGrading	MaterialImported	0.00	18.00
tblLandUse	LotAcreage	0.03	7.00
tblLandUse	LotAcreage	0.05	1.96
tblOffRoadEquipment	HorsePower	203.00	132.00
tblOffRoadEquipment	LoadFactor	0.46	0.46
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType	Paving Equipment	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

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tblTripsAndVMT	HaulingTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	DV_TP	37.00	0.00
tblVehicleTrips	DV_TP	27.00	0.00
tblVehicleTrips	PB_TP	65.00	0.00
tblVehicleTrips	PB_TP	12.00	0.00
tblVehicleTrips	PB_TP	59.00	0.00
tblVehicleTrips	PR_TP	14.00	100.00
tblVehicleTrips	PR_TP	51.00	100.00
tblVehicleTrips	PR_TP	14.00	100.00
tblVehicleTrips	ST_TR	204.47	31.13
tblVehicleTrips	ST_TR	696.00	77.75
tblVehicleTrips	ST_TR	168.56	27.25
tblVehicleTrips	SU_TR	166.88	31.13
tblVehicleTrips	SU_TR	500.00	77.75
tblVehicleTrips	SU_TR	168.56	27.25
tblVehicleTrips	WD_TR	542.60	31.13
tblVehicleTrips	WD_TR	716.00	77.75
tblVehicleTrips	WD_TR	168.56	27.25

2.0 Emissions Summary

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

2.1 Overall Construction (Maximum Daily Emission)**Unmitigated Construction**

	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Year	lb/day										lb/day					
2021	4.8760	49.0559	32.6774	0.0614	12.4454	2.3738	14.8192	6.6992	2.2033	8.9025	0.0000	5,908.583	5,908.583	1.6278	0.0000	5,949.278 ²
Maximum	4.8760	49.0559	32.6774	0.0614	12.4454	2.3738	14.8192	6.6992	2.2033	8.9025	0.0000	5,908.583	5,908.583	1.6278	0.0000	5,949.278 ²

Mitigated Construction

	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Year	lb/day										lb/day					
2021	1.3963	12.9394	34.6498	0.0614	12.4454	0.5310	12.9116	6.6992	0.5055	7.1475	0.0000	5,908.583	5,908.583	1.6278	0.0000	5,949.278 ²
Maximum	1.3963	12.9394	34.6498	0.0614	12.4454	0.5310	12.9116	6.6992	0.5055	7.1475	0.0000	5,908.583	5,908.583	1.6278	0.0000	5,949.278 ²

	ROG	NOx	CO	SO ₂	Fugitive PM ₁₀	Exhaust PM ₁₀	PM ₁₀ Total	Fugitive PM _{2.5}	Exhaust PM _{2.5}	PM _{2.5} Total	Bio- CO ₂	NBio- CO ₂	Total CO ₂	CH ₄	N ₂ O	CO ₂ e
Percent Reduction	71.36	73.62	-6.04	0.00	0.00	77.63	12.87	0.00	77.06	19.71	0.00	0.00	0.00	0.00	0.00	0.00

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003
Energy	0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5323	145.5323	2.7900e-003	2.6700e-003	146.3972
Mobile	1.9151	37.8688	19.0893	0.1149	4.6054	0.1007	4.7061	1.2407	0.0955	1.3362		12,164.11 12	12,164.11 12	0.8775		12,186.04 89
Total	2.0741	37.9901	19.1939	0.1156	4.6054	0.1099	4.7153	1.2407	0.1047	1.3455		12,309.64 92	12,309.64 92	0.8803	2.6700e-003	12,332.45 21

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003
Energy	0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5323	145.5323	2.7900e-003	2.6700e-003	146.3972
Mobile	1.9151	37.8688	19.0893	0.1149	4.6054	0.1007	4.7061	1.2407	0.0955	1.3362		12,164.11 12	12,164.11 12	0.8775		12,186.04 89
Total	2.0741	37.9901	19.1939	0.1156	4.6054	0.1099	4.7153	1.2407	0.1047	1.3455		12,309.64 92	12,309.64 92	0.8803	2.6700e-003	12,332.45 21

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/7/2021	6/11/2021	5	5	
2	Grading (second phase)	Grading	7/26/2021	8/2/2021	5	6	
3	Grading	Grading	6/10/2021	6/30/2021	5	15	
4	Building Construction	Building Construction	6/5/2021	10/8/2021	5	90	
5	Paving	Paving	8/9/2021	9/20/2021	5	31	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 0

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

OffRoad Equipment

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading (second phase)	Excavators	1	8.00	158	0.38
Grading (second phase)	Graders	1	8.00	187	0.41
Grading (second phase)	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Paving	Sweepers/Scrubbers	1	8.00	64	0.46
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Grading (second phase)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Paving	Rubber Tired Loaders	1	8.00	132	0.36
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Trips and VMT

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

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
Grading (second phase)	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	1.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	2.00	1.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

3.2 Site Preparation - 2021**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					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.2336	12.8671	6.2980	0.0116		0.6442	0.6442		0.5927	0.5927		1,128.2523	1,128.2523	0.3649		1,137.3748
Total	1.2336	12.8671	6.2980	0.0116	6.0221	0.6442	6.6663	3.3102	0.5927	3.9029		1,128.2523	1,128.2523	0.3649		1,137.3748

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

3.2 Site Preparation - 2021**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
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
Worker	0.0238	0.0167	0.2276	6.5000e-004	0.0639	5.1000e-004	0.0644	0.0169	4.7000e-004	0.0174		64.9119	64.9119	1.9000e-003		64.9595
Total	0.0238	0.0167	0.2276	6.5000e-004	0.0639	5.1000e-004	0.0644	0.0169	4.7000e-004	0.0174		64.9119	64.9119	1.9000e-003		64.9595

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					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	0.2067	1.3621	6.1405	0.0116		0.0649	0.0649		0.0610	0.0610	0.0000	1,128.2523	1,128.2523	0.3649		1,137.3748
Total	0.2067	1.3621	6.1405	0.0116	6.0221	0.0649	6.0870	3.3102	0.0610	3.3713	0.0000	1,128.2523	1,128.2523	0.3649		1,137.3748

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

3.2 Site Preparation - 2021**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
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
Worker	0.0238	0.0167	0.2276	6.5000e-004	0.0639	5.1000e-004	0.0644	0.0169	4.7000e-004	0.0174		64.9119	64.9119	1.9000e-003		64.9595
Total	0.0238	0.0167	0.2276	6.5000e-004	0.0639	5.1000e-004	0.0644	0.0169	4.7000e-004	0.0174		64.9119	64.9119	1.9000e-003		64.9595

3.3 Grading (second phase) - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0829	0.0000	7.0829	3.4248	0.0000	3.4248			0.0000			0.0000
Off-Road	2.1031	22.8409	13.5972	0.0265		1.0481	1.0481		0.9643	0.9643		2,571.0284	2,571.0284	0.8315		2,591.8165
Total	2.1031	22.8409	13.5972	0.0265	7.0829	1.0481	8.1310	3.4248	0.9643	4.3891		2,571.0284	2,571.0284	0.8315		2,591.8165

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

3.3 Grading (second phase) - 2021**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
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
Worker	0.0618	0.0433	0.5917	1.6900e-003	0.1661	1.3300e-003	0.1674	0.0440	1.2300e-003	0.0453		168.7709	168.7709	4.9500e-003		168.8946
Total	0.0618	0.0433	0.5917	1.6900e-003	0.1661	1.3300e-003	0.1674	0.0440	1.2300e-003	0.0453		168.7709	168.7709	4.9500e-003		168.8946

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					7.0829	0.0000	7.0829	3.4248	0.0000	3.4248			0.0000			0.0000
Off-Road	0.4536	2.8980	15.3403	0.0265		0.1351	0.1351		0.1274	0.1274	0.0000	2,571.0284	2,571.0284	0.8315		2,591.8165
Total	0.4536	2.8980	15.3403	0.0265	7.0829	0.1351	7.2180	3.4248	0.1274	3.5522	0.0000	2,571.0284	2,571.0284	0.8315		2,591.8165

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

3.3 Grading (second phase) - 2021**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
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
Worker	0.0618	0.0433	0.5917	1.6900e-003	0.1661	1.3300e-003	0.1674	0.0440	1.2300e-003	0.0453		168.7709	168.7709	4.9500e-003		168.8946
Total	0.0618	0.0433	0.5917	1.6900e-003	0.1661	1.3300e-003	0.1674	0.0440	1.2300e-003	0.0453		168.7709	168.7709	4.9500e-003		168.8946

3.4 Grading - 2021**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					6.1989	0.0000	6.1989	3.3293	0.0000	3.3293			0.0000			0.0000
Off-Road	1.9158	20.9451	11.3370	0.0234		0.9364	0.9364		0.8615	0.8615		2,270.1284	2,270.1284	0.7342		2,288.4835
Total	1.9158	20.9451	11.3370	0.0234	6.1989	0.9364	7.1352	3.3293	0.8615	4.1908		2,270.1284	2,270.1284	0.7342		2,288.4835

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

3.4 Grading - 2021**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	5.6000e-004	0.0179	4.1900e-003	5.0000e-005	1.1700e-003	5.0000e-005	1.2200e-003	3.2000e-004	5.0000e-005	3.7000e-004		5.6430	5.6430	3.8000e-004		5.6526
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
Worker	0.0475	0.0333	0.4552	1.3000e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		129.8238	129.8238	3.8100e-003		129.9189
Total	0.0481	0.0512	0.4594	1.3500e-003	0.1289	1.0700e-003	0.1300	0.0342	9.9000e-004	0.0352		135.4667	135.4667	4.1900e-003		135.5715

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					6.1989	0.0000	6.1989	3.3293	0.0000	3.3293			0.0000			0.0000
Off-Road	0.3514	1.9890	13.0334	0.0234		0.0842	0.0842		0.0803	0.0803	0.0000	2,270.1284	2,270.1284	0.7342		2,288.4835
Total	0.3514	1.9890	13.0334	0.0234	6.1989	0.0842	6.2831	3.3293	0.0803	3.4097	0.0000	2,270.1284	2,270.1284	0.7342		2,288.4835

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

3.4 Grading - 2021**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	5.6000e-004	0.0179	4.1900e-003	5.0000e-005	1.1700e-003	5.0000e-005	1.2200e-003	3.2000e-004	5.0000e-005	3.7000e-004		5.6430	5.6430	3.8000e-004		5.6526
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
Worker	0.0475	0.0333	0.4552	1.3000e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		129.8238	129.8238	3.8100e-003		129.9189
Total	0.0481	0.0512	0.4594	1.3500e-003	0.1289	1.0700e-003	0.1300	0.0342	9.9000e-004	0.0352		135.4667	135.4667	4.1900e-003		135.5715

3.5 Building Construction - 2021**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	1.6423	15.0739	14.2395	0.0239		0.7912	0.7912		0.7473	0.7473		2,257.3022	2,257.3022	0.5203		2,270.3088
Total	1.6423	15.0739	14.2395	0.0239		0.7912	0.7912		0.7473	0.7473		2,257.3022	2,257.3022	0.5203		2,270.3088

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

3.5 Building Construction - 2021**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
Vendor	2.9700e-003	0.0954	0.0249	2.5000e-004	6.1200e-003	1.9000e-004	6.3200e-003	1.7600e-003	1.8000e-004	1.9500e-003		26.5568	26.5568	1.5900e-003		26.5964
Worker	9.5000e-003	6.6600e-003	0.0910	2.6000e-004	0.0256	2.0000e-004	0.0258	6.7700e-003	1.9000e-004	6.9600e-003		25.9648	25.9648	7.6000e-004		25.9838
Total	0.0125	0.1021	0.1159	5.1000e-004	0.0317	3.9000e-004	0.0321	8.5300e-003	3.7000e-004	8.9100e-003		52.5215	52.5215	2.3500e-003		52.5802

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	0.7503	6.9067	14.6731	0.0239		0.3152	0.3152		0.3051	0.3051	0.0000	2,257.3022	2,257.3022	0.5203		2,270.3088
Total	0.7503	6.9067	14.6731	0.0239		0.3152	0.3152		0.3051	0.3051	0.0000	2,257.3022	2,257.3022	0.5203		2,270.3088

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

3.5 Building Construction - 2021**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
Vendor	2.9700e-003	0.0954	0.0249	2.5000e-004	6.1200e-003	1.9000e-004	6.3200e-003	1.7600e-003	1.8000e-004	1.9500e-003		26.5568	26.5568	1.5900e-003		26.5964
Worker	9.5000e-003	6.6600e-003	0.0910	2.6000e-004	0.0256	2.0000e-004	0.0258	6.7700e-003	1.9000e-004	6.9600e-003		25.9648	25.9648	7.6000e-004		25.9838
Total	0.0125	0.1021	0.1159	5.1000e-004	0.0317	3.9000e-004	0.0321	8.5300e-003	3.7000e-004	8.9100e-003		52.5215	52.5215	2.3500e-003		52.5802

3.6 Paving - 2021**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	1.3363	13.0513	14.6112	0.0221		0.7275	0.7275		0.6693	0.6693		2,136.6997	2,136.6997	0.6911		2,153.9760
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3363	13.0513	14.6112	0.0221		0.7275	0.7275		0.6693	0.6693		2,136.6997	2,136.6997	0.6911		2,153.9760

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

3.6 Paving - 2021**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
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
Worker	0.0475	0.0333	0.4552	1.3000e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		129.8238	129.8238	3.8100e-003		129.9189
Total	0.0475	0.0333	0.4552	1.3000e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		129.8238	129.8238	3.8100e-003		129.9189

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	0.5860	5.8973	15.6334	0.0221		0.2145	0.2145		0.1991	0.1991	0.0000	2,136.6997	2,136.6997	0.6911		2,153.9760
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5860	5.8973	15.6334	0.0221		0.2145	0.2145		0.1991	0.1991	0.0000	2,136.6997	2,136.6997	0.6911		2,153.9760

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

3.6 Paving - 2021**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
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
Worker	0.0475	0.0333	0.4552	1.3000e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		129.8238	129.8238	3.8100e-003		129.9189
Total	0.0475	0.0333	0.4552	1.3000e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		129.8238	129.8238	3.8100e-003		129.9189

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

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9151	37.8688	19.0893	0.1149	4.6054	0.1007	4.7061	1.2407	0.0955	1.3362		12,164.11 12	12,164.11 12	0.8775		12,186.04 89
Unmitigated	1.9151	37.8688	19.0893	0.1149	4.6054	0.1007	4.7061	1.2407	0.0955	1.3362		12,164.11 12	12,164.11 12	0.8775		12,186.04 89

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	498.00	498.00	498.00	1,208,142	1,208,142
Fast Food Restaurant w/o Drive Thru	144.00	144.00	144.00	352,314	352,314
Gasoline/Service Station	218.00	218.00	218.00	536,578	536,578
Total	860.00	860.00	860.00	2,097,034	2,097,034

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
Convenience Market With Gas	14.70	6.60	6.60	0.80	80.20	19.00	100	0	0
Fast Food Restaurant w/o Drive	14.70	6.60	6.60	1.50	79.50	19.00	100	0	0
Gasoline/Service Station	14.70	6.60	6.60	2.00	79.00	19.00	100	0	0

4.4 Fleet Mix

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Fast Food Restaurant w/o Drive Thru	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Gasoline/Service Station	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	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	0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5323	145.5323	2.7900e-003	2.6700e-003	146.3972
NaturalGas Unmitigated	0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5323	145.5323	2.7900e-003	2.6700e-003	146.3972

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

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					
Convenience Market With Gas Pumps	10.1491	1.1000e-004	1.0000e-003	8.4000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.1940	1.1940	2.0000e-005	2.0000e-005	1.2011
Fast Food Restaurant w/o Drive Thru	1170.87	0.0126	0.1148	0.0964	6.9000e-004		8.7200e-003	8.7200e-003		8.7200e-003	8.7200e-003		137.7494	137.7494	2.6400e-003	2.5300e-003	138.5680
Gasoline/Service Station	56.0059	6.0000e-004	5.4900e-003	4.6100e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.5889	6.5889	1.3000e-004	1.2000e-004	6.6281
Total		0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5324	145.5324	2.7900e-003	2.6700e-003	146.3972

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					
Convenience Market With Gas Pumps	0.0101491	1.1000e-004	1.0000e-003	8.4000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.1940	1.1940	2.0000e-005	2.0000e-005	1.2011
Fast Food Restaurant w/o Drive Thru	1.17087	0.0126	0.1148	0.0964	6.9000e-004		8.7200e-003	8.7200e-003		8.7200e-003	8.7200e-003		137.7494	137.7494	2.6400e-003	2.5300e-003	138.5680
Gasoline/Service Station	0.0560059	6.0000e-004	5.4900e-003	4.6100e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.5889	6.5889	1.3000e-004	1.2000e-004	6.6281
Total		0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5324	145.5324	2.7900e-003	2.6700e-003	146.3972

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003
Unmitigated	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

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	0.0333					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1121					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003
Total	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003

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	0.0333					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1121					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003
Total	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003

7.0 Water Detail

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Summer

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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11.0 Vegetation

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

Palmdale Pilot Flying J
Los Angeles-Mojave Desert County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Gasoline/Service Station	8.00	Pump	7.00	1,129.40	0
Convenience Market With Gas Pumps	16.00	Pump	1.96	2,258.80	0
Fast Food Restaurant w/o Drive Thru	1.85	1000sqft	0.04	1,852.00	0

1.2 Other Project Characteristics

Urbanization	Rural	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

Project Characteristics -

Land Use - Lot acreage per land use type is estimated based on site plan. Site assumed to encompass a total of 9.0 acres.

Construction Phase - Note: all exterior finishes are pre-finished, so no architectural coating phase.

Grading - Soil import/export, and total acres graded, as provided by the project applicant. 25 tons of soil import assumed (conservative estimate).

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Off-road Equipment - Off-road construction equipment provided by project applicant.

Vehicle Trips - Trip rates provided by traffic study (Kimley Horn).

Fleet Mix - HHD uses allocated for truck refueling land use.

Construction Off-road Equipment Mitigation - Tier 4 engine tiers (off-road construction equipment) for all construction equipment used, per applicant. Additional construction mitigation not included.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstEquipMitigation	Tier	No Change	Tier 4 Final
tblConstructionPhase	NumDays	230.00	90.00
tblConstructionPhase	NumDays	20.00	6.00
tblConstructionPhase	NumDays	20.00	15.00
tblConstructionPhase	NumDays	20.00	31.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	PhaseEndDate	7/1/2022	10/8/2021
tblConstructionPhase	PhaseEndDate	7/16/2021	8/2/2021
tblConstructionPhase	PhaseEndDate	8/13/2021	6/30/2021
tblConstructionPhase	PhaseEndDate	7/29/2022	9/20/2021
tblConstructionPhase	PhaseEndDate	6/18/2021	6/11/2021
tblConstructionPhase	PhaseStartDate	8/14/2021	6/5/2021
tblConstructionPhase	PhaseStartDate	6/19/2021	7/26/2021
tblConstructionPhase	PhaseStartDate	7/17/2021	6/10/2021
tblConstructionPhase	PhaseStartDate	7/2/2022	8/9/2021
tblFleetMix	HHD	0.03	1.00
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.20	0.00

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.1430e-003	0.00
tblFleetMix	MCY	5.0780e-003	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	8.9100e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	2.4790e-003	0.00
tblFleetMix	SBUS	6.8200e-004	0.00
tblFleetMix	UBUS	2.2700e-003	0.00
tblGrading	AcresOfGrading	7.50	2.50
tblGrading	AcresOfGrading	3.00	6.00
tblGrading	MaterialImported	0.00	7.00
tblGrading	MaterialImported	0.00	18.00
tblLandUse	LotAcreage	0.03	7.00
tblLandUse	LotAcreage	0.05	1.96
tblOffRoadEquipment	HorsePower	203.00	132.00
tblOffRoadEquipment	LoadFactor	0.46	0.46
tblOffRoadEquipment	OffRoadEquipmentType		Sweepers/Scrubbers
tblOffRoadEquipment	OffRoadEquipmentType	Paving Equipment	Rubber Tired Loaders
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	1.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

tblTripsAndVMT	HaulingTripNumber	2.00	0.00
tblTripsAndVMT	WorkerTripNumber	15.00	10.00
tblVehicleTrips	DV_TP	21.00	0.00
tblVehicleTrips	DV_TP	37.00	0.00
tblVehicleTrips	DV_TP	27.00	0.00
tblVehicleTrips	PB_TP	65.00	0.00
tblVehicleTrips	PB_TP	12.00	0.00
tblVehicleTrips	PB_TP	59.00	0.00
tblVehicleTrips	PR_TP	14.00	100.00
tblVehicleTrips	PR_TP	51.00	100.00
tblVehicleTrips	PR_TP	14.00	100.00
tblVehicleTrips	ST_TR	204.47	31.13
tblVehicleTrips	ST_TR	696.00	77.75
tblVehicleTrips	ST_TR	168.56	27.25
tblVehicleTrips	SU_TR	166.88	31.13
tblVehicleTrips	SU_TR	500.00	77.75
tblVehicleTrips	SU_TR	168.56	27.25
tblVehicleTrips	WD_TR	542.60	31.13
tblVehicleTrips	WD_TR	716.00	77.75
tblVehicleTrips	WD_TR	168.56	27.25

2.0 Emissions Summary

Unmitigated Construction

Mitigated Construction

	Percent Reduction	71.28	73.62	-6.05	0.00	0.00	77.63	12.87	0.00	77.06	19.71	0.00	0.00	0.00	0.00	0.00
	ROG		NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2 NBio-CO2	Total CO2	CH4	N2O	CO2e

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

2.2 Overall Operational**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003
Energy	0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5323	145.5323	2.7900e-003	2.6700e-003	146.3972
Mobile	1.9279	37.6843	19.4907	0.1098	4.6054	0.1036	4.7090	1.2407	0.0983	1.3391		11,629.72 92	11,629.72 92	0.9226		11,652.79 49
Total	2.0869	37.8056	19.5952	0.1105	4.6054	0.1129	4.7183	1.2407	0.1075	1.3483		11,775.26 72	11,775.26 72	0.9254	2.6700e-003	11,799.19 81

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003
Energy	0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5323	145.5323	2.7900e-003	2.6700e-003	146.3972
Mobile	1.9279	37.6843	19.4907	0.1098	4.6054	0.1036	4.7090	1.2407	0.0983	1.3391		11,629.72 92	11,629.72 92	0.9226		11,652.79 49
Total	2.0869	37.8056	19.5952	0.1105	4.6054	0.1129	4.7183	1.2407	0.1075	1.3483		11,775.26 72	11,775.26 72	0.9254	2.6700e-003	11,799.19 81

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	6/7/2021	6/11/2021	5	5	
2	Grading (second phase)	Grading	7/26/2021	8/2/2021	5	6	
3	Grading	Grading	6/10/2021	6/30/2021	5	15	
4	Building Construction	Building Construction	6/5/2021	10/8/2021	5	90	
5	Paving	Paving	8/9/2021	9/20/2021	5	31	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 2.5

Acres of Paving: 0

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

OffRoad Equipment

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading (second phase)	Excavators	1	8.00	158	0.38
Grading (second phase)	Graders	1	8.00	187	0.41
Grading (second phase)	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Excavators	1	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	1	8.00	89	0.20
Paving	Sweepers/Scrubbers	1	8.00	64	0.46
Paving	Pavers	1	8.00	130	0.42
Paving	Rollers	1	8.00	80	0.38
Grading (second phase)	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Generator Sets	1	8.00	84	0.74
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Welders	1	8.00	46	0.45
Paving	Rubber Tired Loaders	1	8.00	132	0.36
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37

Trips and VMT

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

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
Grading (second phase)	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	1.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	2.00	1.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

3.2 Site Preparation - 2021**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					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	1.2336	12.8671	6.2980	0.0116		0.6442	0.6442		0.5927	0.5927		1,128.2523	1,128.2523	0.3649		1,137.3748
Total	1.2336	12.8671	6.2980	0.0116	6.0221	0.6442	6.6663	3.3102	0.5927	3.9029		1,128.2523	1,128.2523	0.3649		1,137.3748

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

3.2 Site Preparation - 2021**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
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
Worker	0.0266	0.0184	0.2074	6.1000e-004	0.0639	5.1000e-004	0.0644	0.0169	4.7000e-004	0.0174		61.1140	61.1140	1.7900e-003		61.1587
Total	0.0266	0.0184	0.2074	6.1000e-004	0.0639	5.1000e-004	0.0644	0.0169	4.7000e-004	0.0174		61.1140	61.1140	1.7900e-003		61.1587

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					6.0221	0.0000	6.0221	3.3102	0.0000	3.3102			0.0000			0.0000
Off-Road	0.2067	1.3621	6.1405	0.0116		0.0649	0.0649		0.0610	0.0610	0.0000	1,128.2523	1,128.2523	0.3649		1,137.3748
Total	0.2067	1.3621	6.1405	0.0116	6.0221	0.0649	6.0870	3.3102	0.0610	3.3713	0.0000	1,128.2523	1,128.2523	0.3649		1,137.3748

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

3.2 Site Preparation - 2021**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
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
Worker	0.0266	0.0184	0.2074	6.1000e-004	0.0639	5.1000e-004	0.0644	0.0169	4.7000e-004	0.0174		61.1140	61.1140	1.7900e-003		61.1587
Total	0.0266	0.0184	0.2074	6.1000e-004	0.0639	5.1000e-004	0.0644	0.0169	4.7000e-004	0.0174		61.1140	61.1140	1.7900e-003		61.1587

3.3 Grading (second phase) - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0829	0.0000	7.0829	3.4248	0.0000	3.4248			0.0000			0.0000
Off-Road	2.1031	22.8409	13.5972	0.0265		1.0481	1.0481		0.9643	0.9643		2,571.0284	2,571.0284	0.8315		2,591.8165
Total	2.1031	22.8409	13.5972	0.0265	7.0829	1.0481	8.1310	3.4248	0.9643	4.3891		2,571.0284	2,571.0284	0.8315		2,591.8165

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

3.3 Grading (second phase) - 2021**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
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
Worker	0.0691	0.0479	0.5392	1.5900e-003	0.1661	1.3300e-003	0.1674	0.0440	1.2300e-003	0.0453		158.8964	158.8964	4.6500e-003		159.0126
Total	0.0691	0.0479	0.5392	1.5900e-003	0.1661	1.3300e-003	0.1674	0.0440	1.2300e-003	0.0453		158.8964	158.8964	4.6500e-003		159.0126

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					7.0829	0.0000	7.0829	3.4248	0.0000	3.4248			0.0000			0.0000
Off-Road	0.4536	2.8980	15.3403	0.0265		0.1351	0.1351		0.1274	0.1274	0.0000	2,571.0284	2,571.0284	0.8315		2,591.8165
Total	0.4536	2.8980	15.3403	0.0265	7.0829	0.1351	7.2180	3.4248	0.1274	3.5522	0.0000	2,571.0284	2,571.0284	0.8315		2,591.8165

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

3.3 Grading (second phase) - 2021**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
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
Worker	0.0691	0.0479	0.5392	1.5900e-003	0.1661	1.3300e-003	0.1674	0.0440	1.2300e-003	0.0453		158.8964	158.8964	4.6500e-003		159.0126
Total	0.0691	0.0479	0.5392	1.5900e-003	0.1661	1.3300e-003	0.1674	0.0440	1.2300e-003	0.0453		158.8964	158.8964	4.6500e-003		159.0126

3.4 Grading - 2021**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					6.1989	0.0000	6.1989	3.3293	0.0000	3.3293			0.0000			0.0000
Off-Road	1.9158	20.9451	11.3370	0.0234		0.9364	0.9364		0.8615	0.8615		2,270.1284	2,270.1284	0.7342		2,288.4835
Total	1.9158	20.9451	11.3370	0.0234	6.1989	0.9364	7.1352	3.3293	0.8615	4.1908		2,270.1284	2,270.1284	0.7342		2,288.4835

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

3.4 Grading - 2021**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	5.7000e-004	0.0181	4.4500e-003	5.0000e-005	1.1700e-003	6.0000e-005	1.2200e-003	3.2000e-004	5.0000e-005	3.7000e-004		5.5452	5.5452	4.0000e-004		5.5551
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
Worker	0.0532	0.0369	0.4148	1.2300e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		122.2280	122.2280	3.5700e-003		122.3174
Total	0.0537	0.0550	0.4192	1.2800e-003	0.1289	1.0800e-003	0.1300	0.0342	9.9000e-004	0.0352		127.7733	127.7733	3.9700e-003		127.8725

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					6.1989	0.0000	6.1989	3.3293	0.0000	3.3293			0.0000			0.0000
Off-Road	0.3514	1.9890	13.0334	0.0234		0.0842	0.0842		0.0803	0.0803	0.0000	2,270.1284	2,270.1284	0.7342		2,288.4835
Total	0.3514	1.9890	13.0334	0.0234	6.1989	0.0842	6.2831	3.3293	0.0803	3.4097	0.0000	2,270.1284	2,270.1284	0.7342		2,288.4835

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

3.4 Grading - 2021**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	5.7000e-004	0.0181	4.4500e-003	5.0000e-005	1.1700e-003	6.0000e-005	1.2200e-003	3.2000e-004	5.0000e-005	3.7000e-004		5.5452	5.5452	4.0000e-004		5.5551
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
Worker	0.0532	0.0369	0.4148	1.2300e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		122.2280	122.2280	3.5700e-003		122.3174
Total	0.0537	0.0550	0.4192	1.2800e-003	0.1289	1.0800e-003	0.1300	0.0342	9.9000e-004	0.0352		127.7733	127.7733	3.9700e-003		127.8725

3.5 Building Construction - 2021**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	1.6423	15.0739	14.2395	0.0239		0.7912	0.7912		0.7473	0.7473		2,257.3022	2,257.3022	0.5203		2,270.3088
Total	1.6423	15.0739	14.2395	0.0239		0.7912	0.7912		0.7473	0.7473		2,257.3022	2,257.3022	0.5203		2,270.3088

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

3.5 Building Construction - 2021**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
Vendor	3.1200e-003	0.0951	0.0276	2.4000e-004	6.1200e-003	2.0000e-004	6.3200e-003	1.7600e-003	1.9000e-004	1.9500e-003		25.8032	25.8032	1.6900e-003		25.8456
Worker	0.0106	7.3800e-003	0.0830	2.5000e-004	0.0256	2.0000e-004	0.0258	6.7700e-003	1.9000e-004	6.9600e-003		24.4456	24.4456	7.1000e-004		24.4635
Total	0.0138	0.1025	0.1105	4.9000e-004	0.0317	4.0000e-004	0.0321	8.5300e-003	3.8000e-004	8.9100e-003		50.2489	50.2489	2.4000e-003		50.3090

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	0.7503	6.9067	14.6731	0.0239		0.3152	0.3152		0.3051	0.3051	0.0000	2,257.3022	2,257.3022	0.5203		2,270.3088
Total	0.7503	6.9067	14.6731	0.0239		0.3152	0.3152		0.3051	0.3051	0.0000	2,257.3022	2,257.3022	0.5203		2,270.3088

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

3.5 Building Construction - 2021**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
Vendor	3.1200e-003	0.0951	0.0276	2.4000e-004	6.1200e-003	2.0000e-004	6.3200e-003	1.7600e-003	1.9000e-004	1.9500e-003		25.8032	25.8032	1.6900e-003		25.8456
Worker	0.0106	7.3800e-003	0.0830	2.5000e-004	0.0256	2.0000e-004	0.0258	6.7700e-003	1.9000e-004	6.9600e-003		24.4456	24.4456	7.1000e-004		24.4635
Total	0.0138	0.1025	0.1105	4.9000e-004	0.0317	4.0000e-004	0.0321	8.5300e-003	3.8000e-004	8.9100e-003		50.2489	50.2489	2.4000e-003		50.3090

3.6 Paving - 2021**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	1.3363	13.0513	14.6112	0.0221		0.7275	0.7275		0.6693	0.6693		2,136.6997	2,136.6997	0.6911		2,153.9760
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.3363	13.0513	14.6112	0.0221		0.7275	0.7275		0.6693	0.6693		2,136.6997	2,136.6997	0.6911		2,153.9760

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

3.6 Paving - 2021**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
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
Worker	0.0532	0.0369	0.4148	1.2300e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		122.2280	122.2280	3.5700e-003		122.3174
Total	0.0532	0.0369	0.4148	1.2300e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		122.2280	122.2280	3.5700e-003		122.3174

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	0.5860	5.8973	15.6334	0.0221		0.2145	0.2145		0.1991	0.1991	0.0000	2,136.6997	2,136.6997	0.6911		2,153.9760
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.5860	5.8973	15.6334	0.0221		0.2145	0.2145		0.1991	0.1991	0.0000	2,136.6997	2,136.6997	0.6911		2,153.9760

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

3.6 Paving - 2021**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
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
Worker	0.0532	0.0369	0.4148	1.2300e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		122.2280	122.2280	3.5700e-003		122.3174
Total	0.0532	0.0369	0.4148	1.2300e-003	0.1277	1.0200e-003	0.1288	0.0339	9.4000e-004	0.0348		122.2280	122.2280	3.5700e-003		122.3174

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

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9279	37.6843	19.4907	0.1098	4.6054	0.1036	4.7090	1.2407	0.0983	1.3391		11,629.72 92	11,629.72 92	0.9226		11,652.79 49
Unmitigated	1.9279	37.6843	19.4907	0.1098	4.6054	0.1036	4.7090	1.2407	0.0983	1.3391		11,629.72 92	11,629.72 92	0.9226		11,652.79 49

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Convenience Market With Gas Pumps	498.00	498.00	498.00	1,208,142	1,208,142
Fast Food Restaurant w/o Drive Thru	144.00	144.00	144.00	352,314	352,314
Gasoline/Service Station	218.00	218.00	218.00	536,578	536,578
Total	860.00	860.00	860.00	2,097,034	2,097,034

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
Convenience Market With Gas	14.70	6.60	6.60	0.80	80.20	19.00	100	0	0
Fast Food Restaurant w/o Drive	14.70	6.60	6.60	1.50	79.50	19.00	100	0	0
Gasoline/Service Station	14.70	6.60	6.60	2.00	79.00	19.00	100	0	0

4.4 Fleet Mix

Palmdale Pilot Flying J - Los Angeles-Mojave Desert County, Winter

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Convenience Market With Gas Pumps	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Fast Food Restaurant w/o Drive Thru	0.547192	0.045177	0.202743	0.121510	0.016147	0.006143	0.019743	0.029945	0.002479	0.002270	0.005078	0.000682	0.000891
Gasoline/Service Station	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	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	0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5323	145.5323	2.7900e-003	2.6700e-003	146.3972
NaturalGas Unmitigated	0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5323	145.5323	2.7900e-003	2.6700e-003	146.3972

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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					
Convenience Market With Gas Pumps	10.1491	1.1000e-004	1.0000e-003	8.4000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.1940	1.1940	2.0000e-005	2.0000e-005	1.2011
Fast Food Restaurant w/o Drive Thru	1170.87	0.0126	0.1148	0.0964	6.9000e-004		8.7200e-003	8.7200e-003		8.7200e-003	8.7200e-003		137.7494	137.7494	2.6400e-003	2.5300e-003	138.5680
Gasoline/Service Station	56.0059	6.0000e-004	5.4900e-003	4.6100e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.5889	6.5889	1.3000e-004	1.2000e-004	6.6281
Total		0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5324	145.5324	2.7900e-003	2.6700e-003	146.3972

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					
Convenience Market With Gas Pumps	0.0101491	1.1000e-004	1.0000e-003	8.4000e-004	1.0000e-005		8.0000e-005	8.0000e-005		8.0000e-005	8.0000e-005		1.1940	1.1940	2.0000e-005	2.0000e-005	1.2011
Fast Food Restaurant w/o Drive Thru	1.17087	0.0126	0.1148	0.0964	6.9000e-004		8.7200e-003	8.7200e-003		8.7200e-003	8.7200e-003		137.7494	137.7494	2.6400e-003	2.5300e-003	138.5680
Gasoline/Service Station	0.0560059	6.0000e-004	5.4900e-003	4.6100e-003	3.0000e-005		4.2000e-004	4.2000e-004		4.2000e-004	4.2000e-004		6.5889	6.5889	1.3000e-004	1.2000e-004	6.6281
Total		0.0133	0.1213	0.1019	7.3000e-004		9.2200e-003	9.2200e-003		9.2200e-003	9.2200e-003		145.5324	145.5324	2.7900e-003	2.6700e-003	146.3972

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6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003
Unmitigated	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003

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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	0.0333					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1121					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003
Total	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003

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	0.0333					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1121					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	2.5000e-004	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003
Total	0.1457	2.0000e-005	2.6500e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		5.6600e-003	5.6600e-003	2.0000e-005		6.0300e-003

7.0 Water Detail

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7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment**Fire Pumps and Emergency Generators**

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

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

Equipment Type	Number
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11.0 Vegetation
