



Date: November 10, 2021
 To: Mr. Henrik Nazarian, D & D Engineering, Inc.
 From: M. S. Hatch Consulting, LLC
Subject: Air Quality Study – FedEx Ground Distribution Facility, Lancaster, CA

M. S. Hatch Consulting, LLC (MSHC) appreciates the opportunity to prepare the air quality study for the proposed construction and operation of the FedEx Ground Distribution Facility for D & D Engineering, Inc. This project consists of a warehouse, loading docks, and parking for employees, vans, trucks, and pieces of equipment (e.g., forklifts and dollies) on 37.45 acres in the City of Lancaster. This air quality study includes the estimated criteria pollutant and greenhouse gas emissions from the construction and operation of the proposed project.

Executive Summary

Table 1 and Table 2 compare the estimated annual and daily emissions summaries from the construction and operation of the proposed FedEx Distribution Facility to the significant emission thresholds described in the Antelope Valley Air Quality Management District (AVAQMD) California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, dated August 2016, included in Attachment A. The estimated emissions of criteria pollutants and greenhouse gases for each year of construction and the total operational emissions **are below the applicable thresholds**. Greenhouse gas emissions are presented in units of carbon dioxide equivalent (CO₂e). The AVAQMD CEQA Guidelines require certain project types be evaluated for potentially exposing sensitive receptors to substantial pollutant concentrations.¹ The proposed project is considered a distribution center, but the project site is not located within the specified distance (1,000 feet) to sensitive receptors. As such, hazardous air pollutants (HAP) emissions were not calculated, and the project was not evaluated for potential health risks to sensitive receptors.

Table 1. Annual Emissions Summary and Significance Thresholds

Emissions Source	Total Emissions (tons per year)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO ₂ e
Year 1 Construction Emissions (2022)	0.33	2.49	3.06	0.01	0.60	0.24	803
Year 2 Construction Emissions (2023)	0.89	1.05	1.66	< 0.01	0.30	0.10	447
Total Operational Emissions	1.49	3.90	5.24	0.03	1.87	0.54	3,463
Significant Emissions Threshold	25	25	100	25	15	12	100,000

¹ Residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated using significance threshold criteria number 4 (refer to the significance threshold discussion): any industrial project within 1000 feet; a distribution center (40 or more trucks per day) within 1000 feet; a major transportation project (50,000 or more vehicles per day) within 1000 feet; a dry cleaner using perchloroethylene within 500 feet; or a gasoline dispensing facility within 300 feet.

Table 2. Daily Emissions Summary and Significance Thresholds

Emissions Source	Total Emissions (pounds per day)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
Year 1 Construction Emissions (2022)	4.94	39.46	48.29	0.14	9.43	5.46	14,076
Year 2 Construction Emissions (2023)	72.67	26.25	45.38	0.13	8.22	2.75	13,662
Total Operational Emissions	8.70	20.24	31.90	0.17	10.45	3.00	18,045
Significant Emissions Threshold	137	137	548	137	82	65	548,000

ROG: Reactive Organic Compounds, used interchangeably with Volatile Organic Compounds (VOC); NO_x: oxides of nitrogen; CO: Carbon monoxide; SO_x: Oxides of sulfur; PM_{2.5}: particulate matter less than 2.5 micrometers in diameter; PM₁₀: particulate matter less than 10 micrometers in diameter; CO_{2e}: Carbon dioxide equivalent

Project Description

The proposed project includes the construction of a warehouse, loading docks, and parking for employees, vans, trucks, and pieces of equipment (e.g., forklifts and dollies) on 37.45 acres. The project site is currently a vacant lot located northeast of the intersection of West Avenue G and 30th Street West in Lancaster, CA. The site location is included in Figure 1 and the proposed site plan is included in Figure 2.

Figure 1. Regional Vicinity

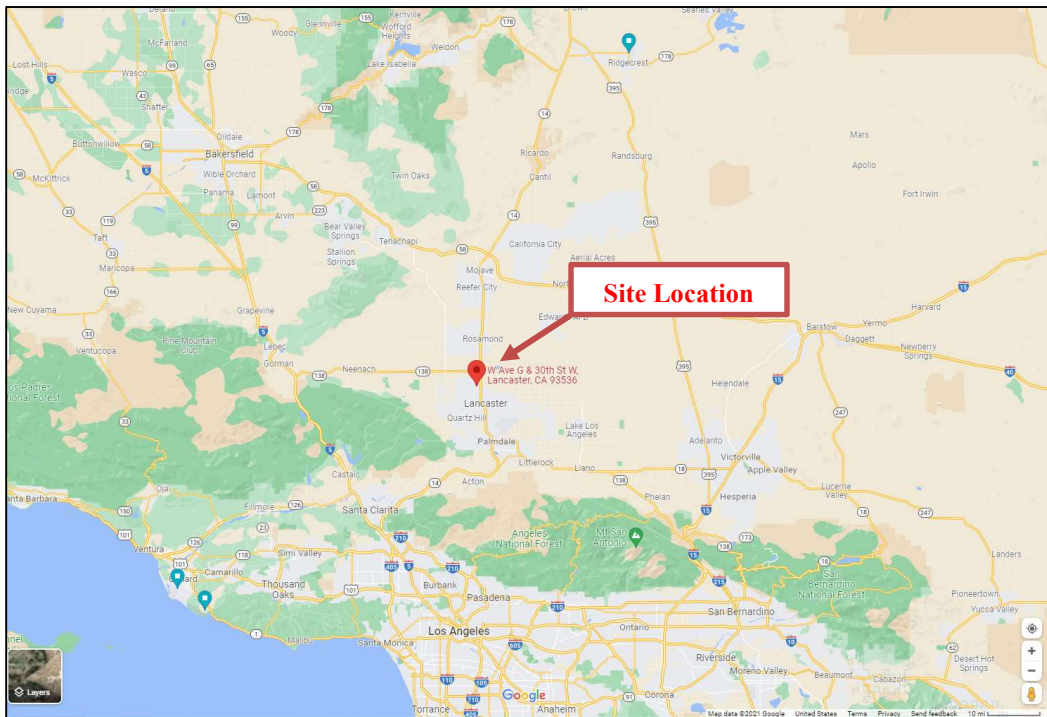
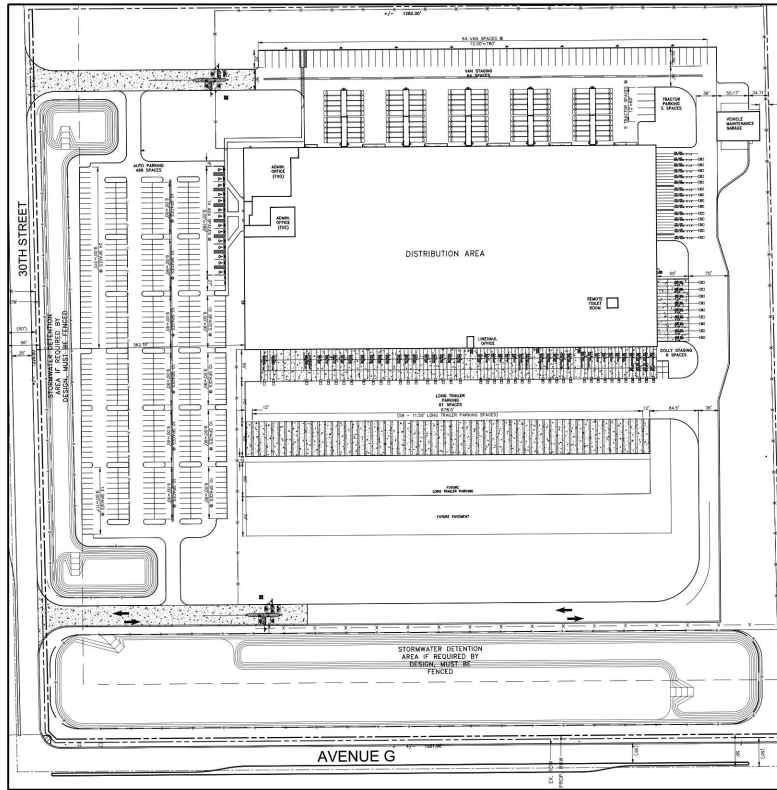


Figure 2. Site Plan – Proposed FedEx Distribution Facility - Lancaster, CA



Sources of Emissions

The emissions associated with the proposed project consist of construction and operational emissions from the FedEx Distribution Facility. Construction emissions are temporary and include emissions of criteria pollutants and greenhouse gases from construction activities during site preparation, grading, paving, building construction, and the application of architectural coatings. Operational emissions consist of area sources (e.g., re-applying architectural coatings, consumer products, and landscaping equipment), energy use (i.e., electricity and natural gas use), mobile sources (e.g., commuting), off-road equipment, solid waste disposal, and water and wastewater use (i.e., supplying and treating water and wastewater).

Emissions Estimates

Tables 3 and 4 present the annual and daily emissions summaries from the construction and operation of the proposed project, respectively. Emissions were estimated using CalEEMod Version 2020.4.0. The detailed emissions model outputs are included in Attachment B.

As previously discussed, the proposed project would not be located within the specified distance to sensitive receptors; as such, HAP emissions were not calculated, and the project was not evaluated for potential health risks to sensitive receptors.

Table 3. Annual Construction and Operational Emissions Summary

Emissions Source	Total Emissions (tons per year)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
Construction Emissions							
Year 1 Construction Emissions (2022)	0.33	2.49	3.06	0.01	0.60	0.24	803
Year 2 Construction Emissions (2023)	0.89	1.05	1.66	< 0.01	0.30	0.10	447
Operational Emissions							
Area Sources	1.10	< 0.01	0.01	0.00	< 0.01	< 0.01	< 1
Energy	< 0.01	0.01	0.01	< 0.01	< 0.01	< 0.01	192
Mobile Sources	0.39	3.89	5.22	0.03	1.87	0.54	2,894
Offroad (Electric Forklifts)	0.00	0.00	0.00	0.00	0.00	0.00	0
Waste	N/A	N/A	N/A	N/A	0.00	0.00	119
Water	N/A	N/A	N/A	N/A	0.00	0.00	257
Total Operational Emissions	1.49	3.90	5.24	0.03	1.87	0.54	3,463
Significant Emissions Threshold	25	25	100	25	15	12	100,000

Table 4. Daily Construction and Operational Emissions Summary

Emissions Source	Total Emissions (pounds per day)						
	ROG	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}	CO _{2e}
Construction Emissions							
Year 1 Construction Emissions (2022)	4.94	39.46	48.29	0.14	9.43	5.46	14,076
Year 2 Construction Emissions (2023)	72.67	26.25	45.38	0.13	8.22	2.75	13,662
Operational Emissions							
Area Sources	6.02	< 0.01	0.09	< 0.01	< 0.01	< 0.01	< 1
Energy	0.01	0.06	0.05	< 0.01	< 0.01	< 0.01	70
Mobile	2.68	20.18	31.76	0.17	10.45	3.00	17,974
Offroad (Electric Forklifts)	0.00	0.00	0.00	0.00	0.00	0.00	0
Waste	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Water	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Operational Emissions	8.70	20.24	31.90	0.17	10.45	3.00	18,045
Significant Emissions Threshold	137	137	548	137	82	65	548,000

ROG: Reactive Organic Compounds, used interchangeably with Volatile Organic Compounds (VOC); NO_x: oxides of nitrogen; CO: Carbon monoxide; SO_x: Oxides of sulfur; PM_{2.5}: particulate matter less than 2.5 micrometers in diameter; PM₁₀: particulate matter less than 10 micrometers in diameter; CO_{2e}: Carbon dioxide equivalent

Emissions Calculation Methodology

Construction and operational emissions were based on five CalEEMod land use types: *Unrefrigerated Warehouse – No Rail, Parking Lot, Other Asphalt Surfaces, Other Non-Asphalt Surfaces, and City Park*. A discussion on the land use types that were used for the emissions modeling is included below.

CalEEMod Land Use Type: Unrefrigerated Warehouse – No Rail

The *Unrefrigerated Warehouse – No Rail* land use type was used to model the emissions associated with the FedEx Ground Facility warehouse. The building square footage (250,944 square feet) and acreage (5.75 acres) was provided by D & D Engineering, Inc.

CalEEMod Land Use Type: Parking Lot

The *Parking Lot* land use type was used to model the emissions associated with the parking areas for the facility. The parking acreage (3.50 acres) was provided by D & D Engineering, Inc.

CalEEMod Land Use Type: Other Asphalt Surfaces

The *Other Asphalt Surfaces* land use type was used to model the emissions associated with the asphalt surfaces that are not dedicated to parking (e.g., drive aisles, new or repaved streets) for the FedEx Distribution Facility. The acreage (7 acres) was provided by D & D Engineering, Inc.

CalEEMod Land Use Type: Other Non-Asphalt Surfaces

The *Other Non-Asphalt Surfaces* land use type was used to model the emissions associated with non-asphalt surfaces (e.g., sidewalks, loading docks) for the facility. The acreage (2.7 acres) was provided by D & D Engineering, Inc.

CalEEMod Land Use Type: City Park

The *City Park* land use type was used to model the emissions associated with the FedEx Distribution Facility's open space (e.g., landscaped area, detention basins). The acreage (18.5 acres) was provided by D & D Engineering, Inc.

Construction Emissions

Construction emissions were calculated using CalEEMod defaults and input provided by D & D Engineering, Inc. The construction equipment and anticipated construction schedule was reviewed and verified by D & D Engineering, Inc.

Table 5 provides the anticipated construction schedule. D & D Engineering, Inc. provided the proposed start date (6/1/2022) and end date (6/1/2023) and indicated that work would be conducted five days per week. To better estimate the construction schedule with the provided start and end dates, the phase durations

(i.e., number of workdays) were based on the default values for a project that is between 15 and 20 acres since this project is comprised of 18.95 acres of developed land and 18.5 acres of minimally developed open space (e.g., landscaped area, detention basins). The *Building Construction* phase was further shortened to complete the project by the anticipated end date.

Table 6 provides the anticipated number of equipment that will be used during each construction phase, the hours per day the equipment will be operated, and the horsepower of the equipment. The values in Table 6 are based on CalEEMod default values.

Based on input from D & D Engineering, Inc., this project will require 1,000 cubic yards of material import during the *Grading* phase; as such, the emissions for material haul trips were included in the construction emissions. For fugitive dust emissions, CalEEMod defaults do not include any control of fugitive dust from project construction sites. AVAQMD Rule 403 requires that fugitive dust from any “active operation, open storage pile, or disturbed surface area” be controlled so that no presence of dust remains visible beyond the property line. To meet this requirement, the standard operation is watering active sites three times per day. Although the addition of watering for dust control is listed as a mitigation measure in CalEEMod, within the AVAQMD this is a requirement, and is therefore included.

For architectural coating operations, VOC emissions were calculated based on the assumption that the coatings would be compliant with the VOC content limits of AVAQMD Rule 1113.²

Table 5. Construction Schedule

Construction Phase	Start Date	End Date	Days/week	Workdays
Demolition	N/A	N/A	N/A	N/A
Site Preparation	6/1/2022	6/14/2022	5	10
Grading	6/15/2022	7/26/2022	5	30
Building Construction	7/27/2022	4/6/2023	5	182
Paving	4/7/2023	5/4/2023	5	20
Architectural Coating	5/5/2023	6/1/2023	5	20

² For building coatings, assumed to be 90% flat paints (50 g/L) and 10% non-flat paints (100 g/L). For the parking lot coatings, assumed to be compliant with the Traffic Marking Coating category (100 g/L). VOC limits based on AVAQMD Rule 1113.

Table 6. Construction Equipment

Construction Phase	Equipment	Number of Equipment	Hours per day	Horsepower
Site Preparation	Rubber Tired Dozers	3	8	247
	Tractors/Loaders/Backhoes	4	8	97
Grading	Excavators	2	8	158
	Graders	1	8	187
	Rubber Tired Dozers	1	8	247
	Scrapers	2	8	367
	Tractors/Loaders/Backhoes	2	8	97
Building Construction	Cranes	1	7	231
	Forklifts	3	8	89
	Generator Sets	1	8	84
	Tractors/Loaders/Backhoes	3	7	97
	Welders	1	8	46
Paving	Pavers	2	8	130
	Paving Equipment	2	8	132
	Rollers	2	8	80
Architectural Coating	Air Compressors	1	6	78

Operational Emissions

Operational emissions consist of area sources (i.e., re-applying architectural coatings, consumer products, and landscaping equipment), energy use (i.e., electricity and natural gas), mobile sources (e.g., commuting), off-road equipment, solid waste disposal, and water and wastewater use (i.e., supplying and treating water and wastewater).

For architectural coating operations (i.e., re-applying coatings), VOC emissions were calculated based on the assumption that the coatings would be compliant with the VOC content limits of AVAQMD Rule 1113.³

For mobile sources, a Local Travel Assessment was provided by D & D Engineering, Inc. The average daily trip rate was updated to match the number of daily trips (1,532 trips) presented in the Local Transportation Assessment. The fleet mix was updated based on the number of daily trips for the various trip types (i.e., Truck Trips, Employee Trips, Package and Delivery Automobile Trips, and Package and Delivery Van Trips) presented in the Local Transportation Assessment⁴ and correspondence regarding the

³ For building coatings, assumed to be 90% flat paints (50 g/L) and 10% non-flat paints (100 g/L). For the parking lot coatings, assumed to be compliant with the Traffic Marking Coating category (100 g/L). VOC limits based on AVAQMD Rule 1113.

⁴ Example: 126 daily truck trips/1,532 total trips results in 8.22% of the fleet being Heavy Heavy Duty (HHD).

vehicle classes and trip types with D & D Engineering, Inc.⁵ In addition, it was assumed that there would not be any external vehicle trips to the project's open space, modeled under the *City Park* land use type.

For operational off-road equipment, D & D Engineering, Inc. indicated that twelve electric forklifts are expected to be used at the facility.⁶ The emissions from the forklifts were based on CalEEMod default factors. All other operational emissions sources were calculated using CalEEMod default factors.

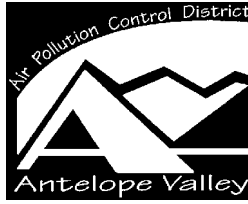
Findings

The estimated emissions of criteria pollutants and greenhouse gases for each year of construction and the total operational emissions **are below the applicable AVAQMD Significant Emissions Thresholds**; therefore, this project does not have a significant air quality impact on the environment. In addition, this project is not expected to expose sensitive receptors to substantial pollutant concentrations. Since the construction and operational emissions are below the significance thresholds, emissions mitigation measures are not required.

⁵ Based on emails on 10/13/2021 and a call with D & D Engineering, Inc. on 10/15/2021.

⁶ Based on a call with D & D Engineering, Inc. on 10/26/2021.

**ATTACHMENT A – Antelope Valley AQMD California Environmental Quality Act
(CEQA) and Federal Conformity Guidelines**



Antelope Valley AQMD

California Environmental Quality Act
(CEQA)

and

Federal Conformity

Guidelines

August 2016

AVAQMD Planning, Rule-making and Grants Section
AVAQMD Air Monitoring Section

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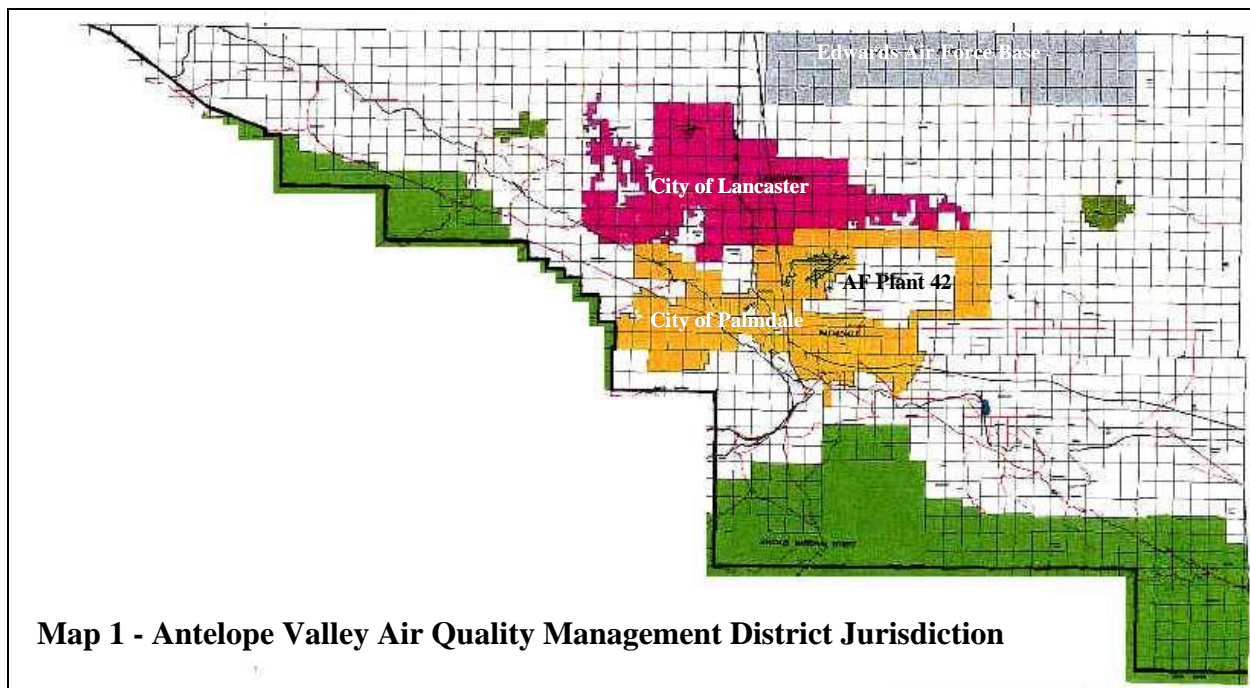
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Background

Under the California Environmental Quality Act (CEQA), the AVAQMD (District) is an expert commenting agency on air quality and related matters within its jurisdiction (or impacting on its jurisdiction). The District has dedicated resources to reviewing projects to ensure that they will not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan. The District has adopted a federal attainment plan for ozone pursuant to the Federal Clean Air Act.

Purpose

These Guidelines are intended to assist persons preparing environmental analysis or review documents for any project within the jurisdiction of the District by providing background information and guidance on the preferred analysis approach.



Jurisdiction

The District has jurisdiction over the northern, desert portion of Los Angeles County (please refer to Map 1). This region includes the incorporated cities of Lancaster and Palmdale, Air Force Plant 42, and the southern portion of Edwards Air Force Base. The Kern County-Los Angeles County boundary forms the northern boundary of the District; the San Bernardino-Los Angeles County boundary forms the eastern boundary of the District.

Non-attainment Designations and Classification Status

The United States Environmental Protection Agency and the California Air Resources Board have designated portions of the District non-attainment for a variety of pollutants, and some of those designations have an associated classification. Please refer to Table 1 for a chart of these designations and classifications.

Table 1 – AVAQMD Designations and Classifications

Ambient Air Quality Standard	AVAQMD
One-hour Ozone (Federal) – standard has been revoked, this is historical information only	Proposed attainment in 2014; historical classification Severe-17
Eight-hour Ozone (Federal 84 ppb (1997))	Subpart 2 Nonattainment; classified Severe-15
Eight-hour Ozone (Federal 75 ppb (2008))	Nonattainment, classified Severe-15
Eight-hour Ozone (Federal 70 ppb (2015))	Expected nonattainment; classification to be determined
Ozone (State)	Nonattainment; classified Extreme
PM ₁₀ 24-hour (Federal)	Unclassifiable/attainment
PM _{2.5} Annual (Federal)	Unclassified/attainment
PM _{2.5} 24-hour (Federal)	Unclassified/attainment
PM _{2.5} (State)	Unclassified
PM ₁₀ (State)	Nonattainment
Carbon Monoxide (State and Federal)	Attainment
Nitrogen Dioxide (State and Federal)	Attainment/unclassified
Sulfur Dioxide (State and Federal)	Attainment/unclassified
Lead (State and Federal)	Attainment
Particulate Sulfate (State)	Unclassified
Hydrogen Sulfide (State)	Unclassified
Visibility Reducing Particles (State)	Unclassified

Attainment Plans

The District has adopted a single attainment plan for ozone. Please refer to Table 2 for information regarding this attainment plan.

Table 2 – AVAQMD Attainment Plans

Name of Plan	Date of Adoption	Standard(s) Targeted	Applicable Area	Pollutant(s) Targeted	Attainment Date*
AVAQMD 2004 Ozone Attainment Plan (State and Federal)	4/2004	Federal one hour ozone	Entire District	NO _x and VOC	2007
AVAQMD Federal 8-Hour Ozone Attainment Plan	5/20/2008	Federal eight hour ozone (84 ppb)	Entire District	NO _x and VOC	2019 (revised from 2021)

*Note: A historical attainment date given in an attainment plan does not necessarily mean that the affected area has been re-designated to attainment; please refer to Table 1.

Rules and Regulations

The District maintains a set of Rules and Regulations to improve air quality and maintain good air quality. Please contact the District to obtain a copy of the District rulebook, or visit www.avaqmd.ca.gov.

Recommended Environmental Setting Elements

Air Quality Data

The District gathers a variety of air quality data at the Lancaster monitoring site. Table 3 details the data available from the District for this site.

Table 3 - Available Air Quality Data

Site	Address	Pollutants	Dates
Lancaster	W. Ponderosa	O ₃ , NO _x , CO, PM ₁₀ (Hi-Vol and TEOM)	7/1/97 to 11/01
Lancaster	W. Ponderosa	PM _{2.5}	1/1/99 to 11/01
Lancaster	43301 Division St.	O ₃ , NO _x , CO, PM ₁₀ (hourly), PM _{2.5}	11/01 to present

Meteorological Data

A variety of meteorological data is available from the District for the Lancaster site. Table 4 contains a list of the data available for the Lancaster site.

Table 4 - Available Meteorological Data

Site	Address	Data	Dates
Lancaster	W. Ponderosa	Wind speed/direction, pressure, temperature, humidity	7/1/97 to 11/01
Lancaster	43301 Division St.	Wind speed/direction, pressure, temperature, humidity	11/01 to present

Topography and Climate Discussion

The District covers a western portion of the Mojave Desert Air Basin (MDAB). The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains which dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds in the MDAB are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada mountains to the north; air masses pushed onshore in southern California by differential heating are channeled through the MDAB. The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. The Antelope Valley is bordered in the northwest by the Tehachapi Mountains, separated from the Sierra Nevadas in the north by the Tehachapi Pass (3,800 ft elevation). The Antelope Valley is bordered in the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 ft).

During the summer the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. MDAB annual average precipitation is presented in Table 5; the data displayed is 1981-2010 averages from the NOAA National Climate Data Center. The MDAB is classified as a dry-hot desert climate (BWh), with portions classified as dry-very hot desert (BWwh), to indicate at least three months have maximum average temperatures over 100.4° F.

Table 5 - MDAB Average Annual Precipitation

Site	County	District	Precipitation (inches)
Baker	San Bernardino	MDAQMD	4.48
Barstow Daggett Airport	San Bernardino	MDAQMD	4.06
Barstow	San Bernardino	MDAQMD	5.30
Blythe Airport	Riverside	MDAQMD	3.77
Desert Center 2 NNE	Riverside	SCAQMD	3.92
Eagle Mountain	Riverside	SCAQMD	4.10
Goldstone Echo Number 2	San Bernardino	MDAQMD	5.88
Joshua Tree	San Bernardino	MDAQMD	5.11
Lancaster Wm J Fox Field	Los Angeles	AVAQMD	7.38
Mitchell Caverns	San Bernardino	MDAQMD	11.50
Mojave	Kern	EKAPCD	6.67
Mountain Pass 1 SE	San Bernardino	MDAQMD	9.94
Needles Airport	San Bernardino	MDAQMD	4.62
Palmdale Airport	Los Angeles	AVAQMD	8.30
Palmdale	Los Angeles	AVAQMD	7.40

Site	County	District	Precipitation (inches)
Parker Reservoir	San Bernardino	MDAQMD	6.16
Pearblossom	Los Angeles	AVAQMD	6.73
Randsburg	Kern	EKAPCD	7.26
Trona	San Bernardino	MDAQMD	3.88
Twentynine Palms	San Bernardino	MDAQMD	4.46
Victorville Pump Plant	San Bernardino	MDAQMD	6.15
Wrightwood	Los Angeles	AVAQMD	22.61

Recommended Impacts Discussion Elements

Direct Impacts

Direct impacts are the result of the project itself (from its construction and operation), in the form of project activity and trips generated by the project. For example, in the case of a subdivision project, construction emissions (equipment exhaust, wind erosion, vehicle exhaust), housing use activity (natural gas consumption) and trips to and from the housing (vehicle exhaust, tire wear) represent direct impacts. In the case of a new mine project, construction emissions (equipment exhaust, wind erosion, vehicle exhaust), material handling (drilling, blasting, transfers, crushing, screening, bagging), operational emissions (wind erosion, vehicle travel, vehicle exhaust, tire wear), and employee/customer/delivery travel (vehicle exhaust, tire wear) represent direct impacts.

Indirect Impacts

Indirect impacts are the result of changes that would not occur without the project. In the case of a subdivision project, indirect impacts on the surrounding community can be generated in many ways: nearby construction of roadways (or roadway modifications) and other infrastructure to support the subdivision, construction and operation of new commercial/retail establishments, changes in traffic/circulation patterns that result in increased congestion/delays, etc. In the case of a new mine project, indirect impacts can be generated by nearby construction of infrastructure to support the mine, housing constructed and/or occupied by mine employees, changes in traffic/circulation patterns that result in increased congestion/delays, etc.

Cumulative Impacts

Cumulative impacts are similar to direct and indirect impacts of the project, which the project contributes to. In the case of a subdivision project, a given project has a cumulative impact with all other subdivision projects, from the standpoint of each type of impact (cumulative construction emissions, residential natural gas consumption, solvent use, transportation emissions, congestion, etc.). Similarly, a new mine project has a cumulative impact with all other mining projects, from the standpoint of each type of impact (cumulative construction emissions, diesel equipment emissions, blasting emissions, fugitive emissions, transportation, congestion, etc.).

Conformity Impacts

A project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with all applicable District rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan). Conformity with growth forecasts can be established by demonstrating that the project is consistent with the land use plan that was used to generate the growth forecast. An example of a non-conforming project would be one that increases the gross number of dwelling units, increases the number of trips, and/or increases the overall vehicle miles traveled in an affected area (relative to the applicable land use plan).

Sensitive Receptor Land Uses

Residences, schools, daycare centers, playgrounds and medical facilities are considered sensitive receptor land uses. The following project types proposed for sites within the specified distance to an existing or planned (zoned) sensitive receptor land use must be evaluated using significance threshold criteria number 4 (refer to the significance threshold discussion):

- Any industrial project within 1000 feet;
- A distribution center (40 or more trucks per day) within 1000 feet;
- A major transportation project (50,000 or more vehicles per day) within 1000 feet;
- A dry cleaner using perchloroethylene within 500 feet;
- A gasoline dispensing facility within 300 feet.

Recommended Substantiation Discussion Elements

For projects applying the emissions-based significance thresholds, project emissions quantification is required. In addition the environmental documentation must include support for the quantification methodology used, including emission factors, emission factors source, assumptions, and sample calculations where necessary. For projects using a calculation tool such as CalEEMod or URBEMIS, the support section must specify the inputs and settings used for the evaluation.

Significance Thresholds

Any project is significant if it triggers or exceeds the most appropriate evaluation criteria. The District will clarify upon request which threshold is most appropriate for a given project; in general, the emissions comparison (criteria number 1) is sufficient:

1. Generates total emissions (direct and indirect) in excess of the thresholds given in Table 6;
2. Generates a violation of any ambient air quality standard when added to the local background;
3. Does not conform with the applicable attainment or maintenance plan(s)¹;

¹ A project is deemed to not exceed this threshold, and hence not be significant, if it is consistent with the existing land use plan. Zoning changes, specific plans, general plan amendments and similar land use plan changes which do not increase dwelling unit density, do not increase vehicle trips, and do not increase vehicle miles traveled are also deemed to not exceed this threshold.

4. Exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million and/or a Hazard Index (HI) (non-cancerous) greater than or equal to 1.*

**Refer to the Sensitive Receptor Land Use discussion above*

A significant project must incorporate mitigation sufficient to reduce its impact to a level that is not significant. A project that cannot be mitigated to a level that is not significant must incorporate all feasible mitigation. Note that the emission thresholds are given as a daily value and an annual value, so that a multi-phased project (such as a project with a construction phase and a separate operational phase) with phases shorter than one year can be compared to the daily value.

Table 6 – Significant Emissions Thresholds

Criteria Pollutant	Annual Threshold (tons)	Daily Threshold (pounds)
Greenhouse Gases (CO ₂ e)	100,000	548,000
Carbon Monoxide (CO)	100	548
Oxides of Nitrogen (NO _x)	25	137
Volatile Organic Compounds (VOC)	25	137
Oxides of Sulfur (SO _x)	25	137
Particulate Matter (PM ₁₀)	15	82
Particulate Matter (PM _{2.5})	12	65
Hydrogen Sulfide (H ₂ S)	10	54
Lead (Pb)	0.6	3

District Contacts

If an address is not listed, please use the general address, to the attention of the listed individual.

AVAQMD General and Rulebook	Crystal Goree (661) 723-8070 x1 Mailing and Physical Address: 43301 Division St., Suite 206 Lancaster, CA 93535-4649
Planning and Rules	Tracy Walters (760) 245-1661 x6122
Air Quality and Meteorological Data	Orlando Salinas (760) 245-1661 x1810
CEQA and Conformity	Alan De Salvio (760) 245-1661 x6726
Permitting	Bret Banks (661) 723-8070 x2

Appendix A – Basic Definitions of Major Air Pollutants

Technical and/or legal definitions exist for many of these pollutants, depending on context. The following definitions are for general, introductory purposes only:

Carbon Dioxide (CO₂) – Common product of combustion. Not a criteria pollutant, but considered an important “greenhouse gas.” Important on a national or global scale.

Carbon Monoxide (CO) – Common product of incomplete combustion. A criteria pollutant with state and federal standards. Not a primary photochemical reaction compound, but involved in photochemical reactions. Dissipates rapidly, and is therefore only important on a local scale near sources.

Criteria Pollutants – Those air pollutants specifically identified for control under the Federal Clean Air Act (currently six: carbon monoxide, nitrogen oxides, lead, sulfur oxides, ozone and particulates).

Lead (Pb) – A heavy metal, present in the environment mainly due to historical use in motor vehicle fuel. Primarily associated with lead smelting operations. A criteria pollutant with state and federal standards. Primarily of concern near sources.

Oxides of Nitrogen (NO_x) – Common product of combustion in the presence of nitrogen. Includes NO₂, which is a criteria pollutant with state and federal standards. Locally and regionally important due to its involvement in the photochemical formation of ozone.

Oxides of Sulfur (SO_x) – Common product of combustion in the presence of sulfur. Associated primarily with diesel and coal burning. Includes SO₂, a criteria pollutant with state and federal standards. Primarily of concern near sources.

Ozone (O₃) – A gas mainly produced by a photochemical reaction between reactive organic gases and oxides of nitrogen in the presence of sunlight (also produced by molecular oxygen in the presence of ultraviolet light or electrical discharge). A strong oxidant that is damaging at ground level but necessary at high altitude (in the stratosphere, where it absorbs dangerous ultraviolet light). Also considered an important greenhouse gas. A criteria pollutant with state and federal standards.

Particulate Matter (TSP or PM₃₀) – Solid or liquid matter suspended in the atmosphere, excluding water. Includes aerosols and droplets that form in the atmosphere. Locally and regionally important.

Reactive/Volatile Organic Compounds/Gases (ROG, VOC, NMOG, NMOC) – A portion of total organic compounds or gases, excludes methane, ethane and acetone (due to low photochemical reactivity). “ROG” is generally used by the California Air Resources Board, “VOC” is generally used by the United States Environmental Protection Agency, but all four terms are interchangeable for most uses. Regionally important due to its involvement in the photochemical reaction that produces ozone.

Respirable Particulate Matter (coarse or PM₁₀, and fine or PM_{2.5}) – That portion of particulate matter that tends to penetrate into the human lung. The subscript refers to aerodynamic diameter. Criteria pollutants with state and federal standards. Locally and regionally important.

Total Organic Compounds/Gases (TOC or TOG) – Compounds containing at least one atom of carbon, except carbon monoxide, carbon dioxide, carbonic acid, metallic carbides and metallic carbonates. Primarily methane in the atmosphere, a “greenhouse gas.”

ATTACHMENT B – CalEEMod Emissions Model Output

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

Air Quality Study - FedEx Ground Facility, Lancaster, CA

Antelope Valley APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	250.94	1000sqft	5.75	250,944.00	0
Other Asphalt Surfaces	7.00	Acre	7.00	304,920.00	0
Other Non-Asphalt Surfaces	2.70	Acre	2.70	117,612.00	0
Parking Lot	625.00	Space	3.50	152,460.00	0
City Park	18.50	Acre	18.50	805,860.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Information provided by client.

Vehicle Trips - All areas modeled as City Park are within the development and no additional vehicle trips are expected. Updated the trip rates to match the total daily trips from the Local Transportation Assessment.

Fleet Mix - Fleet mix type updated based on the daily trip rates provided on the Local Transportation Assessment and the assigned vehicle classes for the various trip types that were discussed with the client.

Area Coating - VOC limits from AVAQMD Rule 1113. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L.

Operational Off-Road Equipment - Off-road equipment information and days per year were provided by the client.

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

Construction Off-road Equipment Mitigation - Assumes that construction site will be watered 3 times per day to be in compliance with AVAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	55.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	55.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	55.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	55.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	55
tblAreaCoating	Area_EF_Nonresidential_Interior	250	55
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	55
tblAreaCoating	Area_EF_Residential_Interior	250	55
tblConstructionPhase	NumDays	55.00	20.00
tblConstructionPhase	NumDays	740.00	182.00
tblConstructionPhase	NumDays	75.00	30.00
tblConstructionPhase	NumDays	55.00	20.00
tblConstructionPhase	NumDays	30.00	10.00
tblFleetMix	HHD	8.9920e-003	0.08
tblFleetMix	LDA	0.59	0.29
tblFleetMix	LDT1	0.05	0.15
tblFleetMix	LDT2	0.14	0.15
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.4090e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	6.9080e-003	0.00
tblFleetMix	MHD	0.01	0.33
tblFleetMix	OBUS	6.7100e-004	0.00
tblFleetMix	SBUS	2.5580e-003	0.00

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

tblFleetMix	UBUS	4.9700e-004	0.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LandUseSquareFeet	250,940.00	250,944.00
tblLandUse	LandUseSquareFeet	250,000.00	152,460.00
tblLandUse	LotAcreage	5.76	5.75
tblLandUse	LotAcreage	5.63	3.50
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	12.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	6.10
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	6.10
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	6.10

2.0 Emissions Summary

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3255	2.4907	3.0603	8.5800e-003	0.6529	0.0871	0.7400	0.2183	0.0814	0.2996	0.0000	786.2576	786.2576	0.0759	0.0515	803.4924
2023	0.8890	1.0501	1.6578	4.7600e-003	0.2640	0.0329	0.2969	0.0715	0.0309	0.1024	0.0000	436.9332	436.9332	0.0328	0.0298	446.6372
Maximum	0.8890	2.4907	3.0603	8.5800e-003	0.6529	0.0871	0.7400	0.2183	0.0814	0.2996	0.0000	786.2576	786.2576	0.0759	0.0515	803.4924

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.3255	2.4907	3.0603	8.5800e-003	0.5086	0.0871	0.5958	0.1540	0.0814	0.2354	0.0000	786.2573	786.2573	0.0759	0.0515	803.4921
2023	0.8890	1.0501	1.6578	4.7600e-003	0.2640	0.0329	0.2969	0.0715	0.0309	0.1024	0.0000	436.9331	436.9331	0.0328	0.0298	446.6371
Maximum	0.8890	2.4907	3.0603	8.5800e-003	0.5086	0.0871	0.5958	0.1540	0.0814	0.2354	0.0000	786.2573	786.2573	0.0759	0.0515	803.4921

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	15.73	0.00	13.91	22.17	0.00	15.98	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2022	8-31-2022	1.2760	1.2760
2	9-1-2022	11-30-2022	1.1383	1.1383
3	12-1-2022	2-28-2023	1.0445	1.0445
4	3-1-2023	5-31-2023	1.2532	1.2532
5	6-1-2023	8-31-2023	0.0265	0.0265
		Highest	1.2760	1.2760

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

2.2 Overall Operational

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	1.0975	8.0000e-005	8.3100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0162	0.0162	4.0000e-005	0.0000	0.0172
Energy	1.1600e-003	0.0106	8.8900e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	191.4294	191.4294	0.0154	2.0500e-003	192.4260
Mobile	0.3923	3.8909	5.2219	0.0298	1.8455	0.0221	1.8676	0.5161	0.0209	0.5371	0.0000	2,804.0317	2,804.0317	0.0438	0.2977	2,893.8529
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	48.2043	0.0000	48.2043	2.8488	0.0000	119.4240
Water						0.0000	0.0000		0.0000	0.0000	18.4102	177.4339	195.8441	1.9059	0.0465	257.3373
Total	1.4910	3.9016	5.2391	0.0298	1.8455	0.0230	1.8684	0.5161	0.0218	0.5379	66.6145	3,172.9111	3,239.5256	4.8139	0.3463	3,463.0574

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.0975	8.0000e-005	8.3100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0162	0.0162	4.0000e-005	0.0000	0.0172
Energy	1.1600e-003	0.0106	8.8900e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	191.4294	191.4294	0.0154	2.0500e-003	192.4260
Mobile	0.3923	3.8909	5.2219	0.0298	1.8455	0.0221	1.8676	0.5161	0.0209	0.5371	0.0000	2,804.0317	2,804.0317	0.0438	0.2977	2,893.8529
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	48.2043	0.0000	48.2043	2.8488	0.0000	119.4240
Water						0.0000	0.0000		0.0000	0.0000	18.4102	177.4339	195.8441	1.9059	0.0465	257.3373
Total	1.4910	3.9016	5.2391	0.0298	1.8455	0.0230	1.8684	0.5161	0.0218	0.5379	66.6145	3,172.9111	3,239.5256	4.8139	0.3463	3,463.0574

	ROG	NOx	CO	SO2	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	6/1/2022	6/14/2022	5	10	
2	Grading	Grading	6/15/2022	7/26/2022	5	30	

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3	Building Construction	Building Construction	7/27/2022	4/6/2023	5	182
4	Paving	Paving	4/7/2023	5/4/2023	5	20
5	Architectural Coating	Architectural Coating	5/5/2023	6/1/2023	5	20

Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 13.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 376,416; Non-Residential Outdoor: 125,472; Striped Parking Area: 34,500 (Architectural Coating – sqft)

OffRoad Equipment

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

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Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	685.00	267.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	137.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0983	0.0000	0.0983	0.0505	0.0000	0.0505	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	0.0159	0.1654	0.0985	1.9000e-004	0.0983	8.0600e-003	0.1064	0.0505	7.4200e-003	0.0579	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549

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3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.6000e-004	3.0800e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6138	0.6138	2.0000e-005	2.0000e-005	0.6208
Total	3.0000e-004	2.6000e-004	3.0800e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6138	0.6138	2.0000e-005	2.0000e-005	0.6208

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0383	0.0000	0.0383	0.0197	0.0000	0.0197	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0159	0.1654	0.0985	1.9000e-004		8.0600e-003	8.0600e-003		7.4200e-003	7.4200e-003	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549
Total	0.0159	0.1654	0.0985	1.9000e-004	0.0383	8.0600e-003	0.0464	0.0197	7.4200e-003	0.0271	0.0000	16.7197	16.7197	5.4100e-003	0.0000	16.8549

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

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e-004	2.6000e-004	3.0800e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6138	0.6138	2.0000e-005	2.0000e-005	0.6208
Total	3.0000e-004	2.6000e-004	3.0800e-003	1.0000e-005	7.2000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.6138	0.6138	2.0000e-005	2.0000e-005	0.6208

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1381	0.0000	0.1381	0.0548	0.0000	0.0548	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633
Total	0.0544	0.5827	0.4356	9.3000e-004	0.1381	0.0245	0.1626	0.0548	0.0226	0.0774	0.0000	81.8019	81.8019	0.0265	0.0000	82.4633

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

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	8.9200e-003	2.0300e-003	4.0000e-005	1.0800e-003	6.0000e-005	1.1300e-003	3.0000e-004	6.0000e-005	3.5000e-004	0.0000	3.5031	3.5031	2.0000e-005	5.5000e-004	3.6679
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	1.0100e-003	8.7000e-004	0.0103	2.0000e-005	2.4200e-003	2.0000e-005	2.4300e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	2.0460	2.0460	8.0000e-005	7.0000e-005	2.0692
Total	1.2200e-003	9.7900e-003	0.0123	6.0000e-005	3.5000e-003	8.0000e-005	3.5600e-003	9.4000e-004	7.0000e-005	1.0100e-003	0.0000	5.5491	5.5491	1.0000e-004	6.2000e-004	5.7371

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					0.0539	0.0000	0.0539	0.0214	0.0000	0.0214	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0544	0.5827	0.4356	9.3000e-004		0.0245	0.0245		0.0226	0.0226	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632
Total	0.0544	0.5827	0.4356	9.3000e-004	0.0539	0.0245	0.0784	0.0214	0.0226	0.0439	0.0000	81.8018	81.8018	0.0265	0.0000	82.4632

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

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	2.1000e-004	8.9200e-003	2.0300e-003	4.0000e-005	1.0800e-003	6.0000e-005	1.1300e-003	3.0000e-004	6.0000e-005	3.5000e-004	0.0000	3.5031	3.5031	2.0000e-005	5.5000e-004	3.6679
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	1.0100e-003	8.7000e-004	0.0103	2.0000e-005	2.4200e-003	2.0000e-005	2.4300e-003	6.4000e-004	1.0000e-005	6.6000e-004	0.0000	2.0460	2.0460	8.0000e-005	7.0000e-005	2.0692
Total	1.2200e-003	9.7900e-003	0.0123	6.0000e-005	3.5000e-003	8.0000e-005	3.5600e-003	9.4000e-004	7.0000e-005	1.0100e-003	0.0000	5.5491	5.5491	1.0000e-004	6.2000e-004	5.7371

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0964	0.8823	0.9245	1.5200e-003		0.0457	0.0457		0.0430	0.0430	0.0000	130.9248	130.9248	0.0314	0.0000	131.7089
Total	0.0964	0.8823	0.9245	1.5200e-003		0.0457	0.0457		0.0430	0.0430	0.0000	130.9248	130.9248	0.0314	0.0000	131.7089

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

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0266	0.7380	0.2609	3.0000e-003	0.1006	6.6800e-003	0.1072	0.0290	6.3900e-003	0.0354	0.0000	286.6972	286.6972	2.0100e-003	0.0417	299.1584
Worker	0.1308	0.1123	1.3254	2.8800e-003	0.3117	2.0800e-003	0.3138	0.0828	1.9200e-003	0.0847	0.0000	263.9511	263.9511	0.0105	9.1800e-003	266.9491
Total	0.1574	0.8503	1.5863	5.8800e-003	0.4122	8.7600e-003	0.4210	0.1118	8.3100e-003	0.1201	0.0000	550.6483	550.6483	0.0126	0.0508	566.1074

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	0.0964	0.8823	0.9245	1.5200e-003		0.0457	0.0457		0.0430	0.0430	0.0000	130.9246	130.9246	0.0314	0.0000	131.7088
Total	0.0964	0.8823	0.9245	1.5200e-003		0.0457	0.0457		0.0430	0.0430	0.0000	130.9246	130.9246	0.0314	0.0000	131.7088

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3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0266	0.7380	0.2609	3.0000e-003	0.1006	6.6800e-003	0.1072	0.0290	6.3900e-003	0.0354	0.0000	286.6972	286.6972	2.0100e-003	0.0417	299.1584
Worker	0.1308	0.1123	1.3254	2.8800e-003	0.3117	2.0800e-003	0.3138	0.0828	1.9200e-003	0.0847	0.0000	263.9511	263.9511	0.0105	9.1800e-003	266.9491
Total	0.1574	0.8503	1.5863	5.8800e-003	0.4122	8.7600e-003	0.4210	0.1118	8.3100e-003	0.1201	0.0000	550.6483	550.6483	0.0126	0.0508	566.1074

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0543	0.4963	0.5604	9.3000e-004		0.0241	0.0241		0.0227	0.0227	0.0000	79.9726	79.9726	0.0190	0.0000	80.4482
Total	0.0543	0.4963	0.5604	9.3000e-004		0.0241	0.0241		0.0227	0.0227	0.0000	79.9726	79.9726	0.0190	0.0000	80.4482

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

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0106	0.3743	0.1444	1.7600e-003	0.0614	1.6700e-003	0.0631	0.0177	1.5900e-003	0.0193	0.0000	168.2264	168.2264	9.7000e-004	0.0243	175.4985
Worker	0.0738	0.0607	0.7414	1.7000e-003	0.1903	1.2000e-003	0.1915	0.0506	1.1000e-003	0.0517	0.0000	156.1132	156.1132	5.8000e-003	5.1600e-003	157.7955
Total	0.0843	0.4350	0.8857	3.4600e-003	0.2517	2.8700e-003	0.2546	0.0683	2.6900e-003	0.0710	0.0000	324.3395	324.3395	6.7700e-003	0.0295	333.2940

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	0.0543	0.4963	0.5604	9.3000e-004		0.0241	0.0241		0.0227	0.0227	0.0000	79.9725	79.9725	0.0190	0.0000	80.4482
Total	0.0543	0.4963	0.5604	9.3000e-004		0.0241	0.0241		0.0227	0.0227	0.0000	79.9725	79.9725	0.0190	0.0000	80.4482

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3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0106	0.3743	0.1444	1.7600e-003	0.0614	1.6700e-003	0.0631	0.0177	1.5900e-003	0.0193	0.0000	168.2264	168.2264	9.7000e-004	0.0243	175.4985
Worker	0.0738	0.0607	0.7414	1.7000e-003	0.1903	1.2000e-003	0.1915	0.0506	1.1000e-003	0.0517	0.0000	156.1132	156.1132	5.8000e-003	5.1600e-003	157.7955
Total	0.0843	0.4350	0.8857	3.4600e-003	0.2517	2.8700e-003	0.2546	0.0683	2.6900e-003	0.0710	0.0000	324.3395	324.3395	6.7700e-003	0.0295	333.2940

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888
Paving	0.0138					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0241	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0269	20.0269	6.4800e-003	0.0000	20.1888

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3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.9000e-004	4.7100e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9909	0.9909	4.0000e-005	3.0000e-005	1.0016
Total	4.7000e-004	3.9000e-004	4.7100e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9909	0.9909	4.0000e-005	3.0000e-005	1.0016

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	0.0103	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888
Paving	0.0138					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0241	0.1019	0.1458	2.3000e-004		5.1000e-003	5.1000e-003		4.6900e-003	4.6900e-003	0.0000	20.0268	20.0268	6.4800e-003	0.0000	20.1888

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3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.7000e-004	3.9000e-004	4.7100e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9909	0.9909	4.0000e-005	3.0000e-005	1.0016
Total	4.7000e-004	3.9000e-004	4.7100e-003	1.0000e-005	1.2100e-003	1.0000e-005	1.2200e-003	3.2000e-004	1.0000e-005	3.3000e-004	0.0000	0.9909	0.9909	4.0000e-005	3.0000e-005	1.0016

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7197					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.7216	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

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3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2800e-003	3.5200e-003	0.0430	1.0000e-004	0.0110	7.0000e-005	0.0111	2.9300e-003	6.0000e-005	2.9900e-003	0.0000	9.0500	9.0500	3.4000e-004	3.0000e-004	9.1476
Total	4.2800e-003	3.5200e-003	0.0430	1.0000e-004	0.0110	7.0000e-005	0.0111	2.9300e-003	6.0000e-005	2.9900e-003	0.0000	9.0500	9.0500	3.4000e-004	3.0000e-004	9.1476

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7197					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.9200e-003	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571
Total	0.7216	0.0130	0.0181	3.0000e-005		7.1000e-004	7.1000e-004		7.1000e-004	7.1000e-004	0.0000	2.5533	2.5533	1.5000e-004	0.0000	2.5571

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3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2800e-003	3.5200e-003	0.0430	1.0000e-004	0.0110	7.0000e-005	0.0111	2.9300e-003	6.0000e-005	2.9900e-003	0.0000	9.0500	9.0500	3.4000e-004	3.0000e-004	9.1476
Total	4.2800e-003	3.5200e-003	0.0430	1.0000e-004	0.0110	7.0000e-005	0.0111	2.9300e-003	6.0000e-005	2.9900e-003	0.0000	9.0500	9.0500	3.4000e-004	3.0000e-004	9.1476

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3923	3.8909	5.2219	0.0298	1.8455	0.0221	1.8676	0.5161	0.0209	0.5371	0.0000	2,804.0317	2,804.0317	0.0438	0.2977	2,893.8529
Unmitigated	0.3923	3.8909	5.2219	0.0298	1.8455	0.0221	1.8676	0.5161	0.0209	0.5371	0.0000	2,804.0317	2,804.0317	0.0438	0.2977	2,893.8529

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,531.98	1,531.98	1,531.98	4,472,620	4,472,620
Total	1,531.98	1,531.98	1,531.98	4,472,620	4,472,620

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
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586674	0.052043	0.144557	0.122690	0.027604	0.007409	0.011177	0.008992	0.000671	0.000497	0.028220	0.002558	0.006908
Other Asphalt Surfaces	0.586674	0.052043	0.144557	0.122690	0.027604	0.007409	0.011177	0.008992	0.000671	0.000497	0.028220	0.002558	0.006908
Other Non-Asphalt Surfaces	0.586674	0.052043	0.144557	0.122690	0.027604	0.007409	0.011177	0.008992	0.000671	0.000497	0.028220	0.002558	0.006908
Parking Lot	0.586674	0.052043	0.144557	0.122690	0.027604	0.007409	0.011177	0.008992	0.000671	0.000497	0.028220	0.002558	0.006908
Unrefrigerated Warehouse-No Rail	0.293734	0.146867	0.146867	0.000000	0.000000	0.000000	0.330287	0.082245	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	179.9129	179.9129	0.0152	1.8400e-003	180.8410
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	179.9129	179.9129	0.0152	1.8400e-003	180.8410
NaturalGas Mitigated	1.1600e-003	0.0106	8.8900e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.5165	11.5165	2.2000e-004	2.1000e-004	11.5850
NaturalGas Unmitigated	1.1600e-003	0.0106	8.8900e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.5165	11.5165	2.2000e-004	2.1000e-004	11.5850

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	215812	1.1600e-003	0.0106	8.8900e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.5165	11.5165	2.2000e-004	2.1000e-004	11.5850
Total		1.1600e-003	0.0106	8.8900e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.5165	11.5165	2.2000e-004	2.1000e-004	11.5850

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

5.2 Energy by Land Use - NaturalGas

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					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	215812	1.1600e-003	0.0106	8.8900e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.5165	11.5165	2.2000e-004	2.1000e-004	11.5850
Total		1.1600e-003	0.0106	8.8900e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.5165	11.5165	2.2000e-004	2.1000e-004	11.5850

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	53361	9.4633	8.0000e-004	1.0000e-004	9.5122
Unrefrigerated Warehouse-No Rail	961116	170.4496	0.0144	1.7400e-003	171.3289
Total		179.9129	0.0152	1.8400e-003	180.8410

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	53361	9.4633	8.0000e-004	1.0000e-004	9.5122
Unrefrigerated Warehouse-No Rail	961116	170.4496	0.0144	1.7400e-003	171.3289
Total		179.9129	0.0152	1.8400e-003	180.8410

6.0 Area Detail

6.1 Mitigation Measures Area

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.0975	8.0000e-005	8.3100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0162	0.0162	4.0000e-005	0.0000	0.0172
Unmitigated	1.0975	8.0000e-005	8.3100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0162	0.0162	4.0000e-005	0.0000	0.0172

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0720					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0248					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.7000e-004	8.0000e-005	8.3100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0162	0.0162	4.0000e-005	0.0000	0.0172
Total	1.0976	8.0000e-005	8.3100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0162	0.0162	4.0000e-005	0.0000	0.0172

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0720					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0248					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.7000e-004	8.0000e-005	8.3100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0162	0.0162	4.0000e-005	0.0000	0.0172
Total	1.0976	8.0000e-005	8.3100e-003	0.0000		3.0000e-005	3.0000e-005		3.0000e-005	3.0000e-005	0.0000	0.0162	0.0162	4.0000e-005	0.0000	0.0172

7.0 Water Detail

7.1 Mitigation Measures Water

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	195.8441	1.9059	0.0465	257.3373
Unmitigated	195.8441	1.9059	0.0465	257.3373

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 22.0424	43.4304	3.6700e-003	4.4000e-004	43.6544
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	58.0299 / 0	152.4137	1.9022	0.0460	213.6829
Total		195.8441	1.9059	0.0465	257.3373

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 22.0424	43.4304	3.6700e-003	4.4000e-004	43.6544
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	58.0299 / 0	152.4137	1.9022	0.0460	213.6829
Total		195.8441	1.9059	0.0465	257.3373

8.0 Waste Detail

8.1 Mitigation Measures Waste

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	48.2043	2.8488	0.0000	119.4240
Unmitigated	48.2043	2.8488	0.0000	119.4240

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.59	0.3228	0.0191	0.0000	0.7996
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	235.88	47.8815	2.8297	0.0000	118.6244
Total		48.2043	2.8488	0.0000	119.4240

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	1.59	0.3228	0.0191	0.0000	0.7996
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	235.88	47.8815	2.8297	0.0000	118.6244
Total		48.2043	2.8488	0.0000	119.4240

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	12	8.00	365	89	0.20	Electrical

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Annual

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

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Forklifts	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

Air Quality Study - FedEx Ground Facility, Lancaster, CA

Antelope Valley APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	250.94	1000sqft	5.75	250,944.00	0
Other Asphalt Surfaces	7.00	Acre	7.00	304,920.00	0
Other Non-Asphalt Surfaces	2.70	Acre	2.70	117,612.00	0
Parking Lot	625.00	Space	3.50	152,460.00	0
City Park	18.50	Acre	18.50	805,860.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9	Operational Year		2023	
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Information provided by client.

Vehicle Trips - All areas modeled as City Park are within the development and no additional vehicle trips are expected. Updated the trip rates to match the total daily trips from the Local Transportation Assessment.

Fleet Mix - Fleet mix type updated based on the daily trip rates provided on the Local Transportation Assessment and the assigned vehicle classes for the various trip types that were discussed with the client.

Area Coating - VOC limits from AVAQMD Rule 1113. For the building, assumes 90% flat paint (50 g/L) and 10% non-flat (100 g/L). For parking lot coatings, assumed to be compliant with the Traffic Marking Coating category VOC limit of 100 g/L.

Operational Off-Road Equipment - Off-road equipment information and days per year were provided by the client.

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

Construction Off-road Equipment Mitigation - Assumes that construction site will be watered 3 times per day to be in compliance with AVAQMD Rule 403.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	55.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	55.00
tblArchitecturalCoating	EF_Parking	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	55.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	55.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	250	55
tblAreaCoating	Area_EF_Nonresidential_Interior	250	55
tblAreaCoating	Area_EF_Parking	250	100
tblAreaCoating	Area_EF_Residential_Exterior	250	55
tblAreaCoating	Area_EF_Residential_Interior	250	55
tblConstructionPhase	NumDays	55.00	20.00
tblConstructionPhase	NumDays	740.00	182.00
tblConstructionPhase	NumDays	75.00	30.00
tblConstructionPhase	NumDays	55.00	20.00
tblConstructionPhase	NumDays	30.00	10.00
tblFleetMix	HHD	8.9920e-003	0.08
tblFleetMix	LDA	0.59	0.29
tblFleetMix	LDT1	0.05	0.15
tblFleetMix	LDT2	0.14	0.15
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD2	7.4090e-003	0.00
tblFleetMix	MCY	0.03	0.00
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	6.9080e-003	0.00
tblFleetMix	MHD	0.01	0.33
tblFleetMix	OBUS	6.7100e-004	0.00
tblFleetMix	SBUS	2.5580e-003	0.00

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

tblFleetMix	UBUS	4.9700e-004	0.00
tblGrading	MaterialImported	0.00	1,000.00
tblLandUse	LandUseSquareFeet	250,940.00	250,944.00
tblLandUse	LandUseSquareFeet	250,000.00	152,460.00
tblLandUse	LotAcreage	5.76	5.75
tblLandUse	LotAcreage	5.63	3.50
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	Electrical
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	12.00
tblVehicleTrips	CC_TL	7.30	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	7.30	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	9.50	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	1.74	6.10
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	1.74	6.10
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	1.74	6.10

2.0 Emissions Summary

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.9386	39.4578	48.2858	0.1355	19.8049	1.6399	21.4184	10.1417	1.5089	11.6261	0.0000	13,763.3404	13,763.3404	1.9518	0.9777	14,075.9653
2023	72.6671	26.2502	45.3802	0.1317	7.4359	0.7827	8.2185	2.0133	0.7365	2.7498	0.0000	13,365.2450	13,365.2450	0.8185	0.9288	13,662.4899
Maximum	72.6671	39.4578	48.2858	0.1355	19.8049	1.6399	21.4184	10.1417	1.5089	11.6261	0.0000	13,763.3404	13,763.3404	1.9518	0.9777	14,075.9653

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.9386	39.4578	48.2858	0.1355	7.8141	1.6399	9.4276	3.9792	1.5089	5.4636	0.0000	13,763.3404	13,763.3404	1.9518	0.9777	14,075.9653
2023	72.6671	26.2502	45.3802	0.1317	7.4359	0.7827	8.2185	2.0133	0.7365	2.7498	0.0000	13,365.2450	13,365.2450	0.8185	0.9288	13,662.4899
Maximum	72.6671	39.4578	48.2858	0.1355	7.8141	1.6399	9.4276	3.9792	1.5089	5.4636	0.0000	13,763.3404	13,763.3404	1.9518	0.9777	14,075.9653

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	44.02	0.00	40.46	50.70	0.00	42.87	0.00	0.00	0.00	0.00	0.00	0.00

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0183	8.4000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1979	0.1979	5.2000e-004		0.2109
Energy	6.3800e-003	0.0580	0.0487	3.5000e-004		4.4100e-003	4.4100e-003		4.4100e-003	4.4100e-003		69.5606	69.5606	1.3300e-003	1.2800e-003	69.9740
Mobile	2.6788	20.1842	31.7620	0.1679	10.3235	0.1216	10.4451	2.8809	0.1151	2.9960		17,434.8119	17,434.8119	0.2535	1.7895	17,974.4078
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	8.7034	20.2430	31.9030	0.1683	10.3235	0.1264	10.4499	2.8809	0.1198	3.0007	0.0000	17,504.5704	17,504.5704	0.2554	1.7907	18,044.5926

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.0183	8.4000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1979	0.1979	5.2000e-004		0.2109
Energy	6.3800e-003	0.0580	0.0487	3.5000e-004		4.4100e-003	4.4100e-003		4.4100e-003	4.4100e-003		69.5606	69.5606	1.3300e-003	1.2800e-003	69.9740
Mobile	2.6788	20.1842	31.7620	0.1679	10.3235	0.1216	10.4451	2.8809	0.1151	2.9960		17,434.8119	17,434.8119	0.2535	1.7895	17,974.4078
Offroad	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	8.7034	20.2430	31.9030	0.1683	10.3235	0.1264	10.4499	2.8809	0.1198	3.0007	0.0000	17,504.5704	17,504.5704	0.2554	1.7907	18,044.5926

	ROG	NOx	CO	SO2	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	6/1/2022	6/14/2022	5	10	
2	Grading	Grading	6/15/2022	7/26/2022	5	30	
3	Building Construction	Building Construction	7/27/2022	4/6/2023	5	182	
4	Paving	Paving	4/7/2023	5/4/2023	5	20	

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

5	Architectural Coating	Architectural Coating	5/5/2023	6/1/2023	5	20
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Acres of Grading (Site Preparation Phase): 15

Acres of Grading (Grading Phase): 90

Acres of Paving: 13.2

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 376,416; Non-Residential Outdoor: 125,472; Striped Parking Area: 34,500 (Architectural Coating – sqft)

OffRoad Equipment

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

Trips and VMT

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	125.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	685.00	267.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	137.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836		3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	19.6570	1.6126	21.2696	10.1025	1.4836	11.5860		3,686.0619	3,686.0619	1.1922		3,715.8655

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.2 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0723	0.0468	0.7192	1.4600e-003	0.1479	9.7000e-004	0.1488	0.0392	8.9000e-004	0.0401		147.6544	147.6544	5.2500e-003	4.3800e-003	149.0898
Total	0.0723	0.0468	0.7192	1.4600e-003	0.1479	9.7000e-004	0.1488	0.0392	8.9000e-004	0.0401		147.6544	147.6544	5.2500e-003	4.3800e-003	149.0898

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.6662	0.0000	7.6662	3.9400	0.0000	3.9400			0.0000			0.0000
Off-Road	3.1701	33.0835	19.6978	0.0380		1.6126	1.6126		1.4836	1.4836	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655
Total	3.1701	33.0835	19.6978	0.0380	7.6662	1.6126	9.2788	3.9400	1.4836	5.4235	0.0000	3,686.0619	3,686.0619	1.1922		3,715.8655

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.2 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0723	0.0468	0.7192	1.4600e-003	0.1479	9.7000e-004	0.1488	0.0392	8.9000e-004	0.0401		147.6544	147.6544	5.2500e-003	4.3800e-003	149.0898
Total	0.0723	0.0468	0.7192	1.4600e-003	0.1479	9.7000e-004	0.1488	0.0392	8.9000e-004	0.0401		147.6544	147.6544	5.2500e-003	4.3800e-003	149.0898

3.3 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2074	0.0000	9.2074	3.6543	0.0000	3.6543			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	9.2074	1.6349	10.8423	3.6543	1.5041	5.1584		6,011.4105	6,011.4105	1.9442		6,060.0158

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.3 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0142	0.5624	0.1338	2.4300e-003	0.0729	3.9700e-003	0.0769	0.0200	3.8000e-003	0.0238		257.3207	257.3207	1.8000e-003	0.0405	269.4209
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0803	0.0520	0.7991	1.6200e-003	0.1643	1.0800e-003	0.1654	0.0436	9.9000e-004	0.0446		164.0604	164.0604	5.8300e-003	4.8600e-003	165.6553
Total	0.0945	0.6144	0.9328	4.0500e-003	0.2372	5.0500e-003	0.2423	0.0636	4.7900e-003	0.0684		421.3812	421.3812	7.6300e-003	0.0453	435.0762

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.5909	0.0000	3.5909	1.4252	0.0000	1.4252			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	3.5909	1.6349	5.2258	1.4252	1.5041	2.9293	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.3 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0142	0.5624	0.1338	2.4300e-003	0.0729	3.9700e-003	0.0769	0.0200	3.8000e-003	0.0238		257.3207	257.3207	1.8000e-003	0.0405	269.4209
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0803	0.0520	0.7991	1.6200e-003	0.1643	1.0800e-003	0.1654	0.0436	9.9000e-004	0.0446		164.0604	164.0604	5.8300e-003	4.8600e-003	165.6553
Total	0.0945	0.6144	0.9328	4.0500e-003	0.2372	5.0500e-003	0.2423	0.0636	4.7900e-003	0.0684		421.3812	421.3812	7.6300e-003	0.0453	435.0762

3.4 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.4 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4830	12.3871	4.5542	0.0530	1.8087	0.1180	1.9267	0.5207	0.1129	0.6336		5,589.937 2	5,589.937 2	0.0397	0.8111	5,832.639 0
Worker	2.7494	1.7813	27.3682	0.0556	5.6271	0.0369	5.6640	1.4926	0.0339	1.5265		5,619.069 7	5,619.069 7	0.1997	0.1666	5,673.694 1
Total	3.2324	14.1684	31.9224	0.1086	7.4359	0.1549	7.5907	2.0133	0.1468	2.1601		11,209.00 69	11,209.00 69	0.2394	0.9777	11,506.33 31

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.4 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.4830	12.3871	4.5542	0.0530	1.8087	0.1180	1.9267	0.5207	0.1129	0.6336		5,589.937 2	5,589.937 2	0.0397	0.8111	5,832.639 0
Worker	2.7494	1.7813	27.3682	0.0556	5.6271	0.0369	5.6640	1.4926	0.0339	1.5265		5,619.069 7	5,619.069 7	0.1997	0.1666	5,673.694 1
Total	3.2324	14.1684	31.9224	0.1086	7.4359	0.1549	7.5907	2.0133	0.1468	2.1601		11,209.00 69	11,209.00 69	0.2394	0.9777	11,506.33 31

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3191	10.2883	4.1304	0.0509	1.8088	0.0482	1.8570	0.5207	0.0461	0.5669		5,368.961 3	5,368.961 3	0.0314	0.7754	5,600.808 1
Worker	2.5406	1.5771	25.0058	0.0538	5.6271	0.0347	5.6619	1.4926	0.0320	1.5246		5,441.073 8	5,441.073 8	0.1793	0.1534	5,491.275 7
Total	2.8597	11.8654	29.1362	0.1047	7.4359	0.0830	7.5188	2.0133	0.0781	2.0914		10,810.03 50	10,810.03 50	0.2107	0.9288	11,092.08 38

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3191	10.2883	4.1304	0.0509	1.8088	0.0482	1.8570	0.5207	0.0461	0.5669		5,368.961 3	5,368.961 3	0.0314	0.7754	5,600.808 1
Worker	2.5406	1.5771	25.0058	0.0538	5.6271	0.0347	5.6619	1.4926	0.0320	1.5246		5,441.073 8	5,441.073 8	0.1793	0.1534	5,491.275 7
Total	2.8597	11.8654	29.1362	0.1047	7.4359	0.0830	7.5188	2.0133	0.0781	2.0914		10,810.03 50	10,810.03 50	0.2107	0.9288	11,092.08 38

3.5 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	1.3755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.4082	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.5 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0556	0.0345	0.5476	1.1800e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		119.1476	119.1476	3.9300e-003	3.3600e-003	120.2469
Total	0.0556	0.0345	0.5476	1.1800e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		119.1476	119.1476	3.9300e-003	3.3600e-003	120.2469

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	1.3755					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	2.4082	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.5 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0556	0.0345	0.5476	1.1800e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		119.1476	119.1476	3.9300e-003	3.3600e-003	120.2469
Total	0.0556	0.0345	0.5476	1.1800e-003	0.1232	7.6000e-004	0.1240	0.0327	7.0000e-004	0.0334		119.1476	119.1476	3.9300e-003	3.3600e-003	120.2469

3.6 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.9673					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	72.1589	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.6 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.5081	0.3154	5.0012	0.0108	1.1254	6.9500e-003	1.1324	0.2985	6.4000e-003	0.3049		1,088.2148	1,088.2148	0.0359	0.0307	1,098.2551
Total	0.5081	0.3154	5.0012	0.0108	1.1254	6.9500e-003	1.1324	0.2985	6.4000e-003	0.3049		1,088.2148	1,088.2148	0.0359	0.0307	1,098.2551

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	71.9673					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	72.1589	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

3.6 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.5081	0.3154	5.0012	0.0108	1.1254	6.9500e-003	1.1324	0.2985	6.4000e-003	0.3049		1,088.2148	1,088.2148	0.0359	0.0307	1,098.2551
Total	0.5081	0.3154	5.0012	0.0108	1.1254	6.9500e-003	1.1324	0.2985	6.4000e-003	0.3049		1,088.2148	1,088.2148	0.0359	0.0307	1,098.2551

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6788	20.1842	31.7620	0.1679	10.3235	0.1216	10.4451	2.8809	0.1151	2.9960		17,434.81 19	17,434.81 19	0.2535	1.7895	17,974.40 78
Unmitigated	2.6788	20.1842	31.7620	0.1679	10.3235	0.1216	10.4451	2.8809	0.1151	2.9960		17,434.81 19	17,434.81 19	0.2535	1.7895	17,974.40 78

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	1,531.98	1,531.98	1,531.98	4,472,620	4,472,620
Total	1,531.98	1,531.98	1,531.98	4,472,620	4,472,620

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
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	9.50	7.30	7.30	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.586674	0.052043	0.144557	0.122690	0.027604	0.007409	0.011177	0.008992	0.000671	0.000497	0.028220	0.002558	0.006908
Other Asphalt Surfaces	0.586674	0.052043	0.144557	0.122690	0.027604	0.007409	0.011177	0.008992	0.000671	0.000497	0.028220	0.002558	0.006908
Other Non-Asphalt Surfaces	0.586674	0.052043	0.144557	0.122690	0.027604	0.007409	0.011177	0.008992	0.000671	0.000497	0.028220	0.002558	0.006908
Parking Lot	0.586674	0.052043	0.144557	0.122690	0.027604	0.007409	0.011177	0.008992	0.000671	0.000497	0.028220	0.002558	0.006908
Unrefrigerated Warehouse-No Rail	0.293734	0.146867	0.146867	0.000000	0.000000	0.000000	0.330287	0.082245	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	6.3800e-003	0.0580	0.0487	3.5000e-004		4.4100e-003	4.4100e-003		4.4100e-003	4.4100e-003		69.5606	69.5606	1.3300e-003	1.2800e-003	69.9740
NaturalGas Unmitigated	6.3800e-003	0.0580	0.0487	3.5000e-004		4.4100e-003	4.4100e-003		4.4100e-003	4.4100e-003		69.5606	69.5606	1.3300e-003	1.2800e-003	69.9740

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	591.265	6.3800e-003	0.0580	0.0487	3.5000e-004		4.4100e-003	4.4100e-003		4.4100e-003	4.4100e-003		69.5606	69.5606	1.3300e-003	1.2800e-003	69.9740
Total		6.3800e-003	0.0580	0.0487	3.5000e-004		4.4100e-003	4.4100e-003		4.4100e-003	4.4100e-003		69.5606	69.5606	1.3300e-003	1.2800e-003	69.9740

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.591265	6.3800e-003	0.0580	0.0487	3.5000e-004		4.4100e-003	4.4100e-003		4.4100e-003	4.4100e-003		69.5606	69.5606	1.3300e-003	1.2800e-003	69.9740
Total		6.3800e-003	0.0580	0.0487	3.5000e-004		4.4100e-003	4.4100e-003		4.4100e-003	4.4100e-003		69.5606	69.5606	1.3300e-003	1.2800e-003	69.9740

6.0 Area Detail

6.1 Mitigation Measures Area

Air Quality Study - FedEx Ground Facility, Lancaster, CA - Antelope Valley APCD Air District, Summer

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

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.0183	8.4000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1979	0.1979	5.2000e-004		0.2109
Unmitigated	6.0183	8.4000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1979	0.1979	5.2000e-004		0.2109

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	0.3943					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.5500e-003	8.4000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1979	0.1979	5.2000e-004		0.2109
Total	6.0183	8.4000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1979	0.1979	5.2000e-004		0.2109

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

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3943					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.6154					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	8.5500e-003	8.4000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1979	0.1979	5.2000e-004		0.2109
Total	6.0183	8.4000e-004	0.0923	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004		0.1979	0.1979	5.2000e-004		0.2109

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Forklifts	12	8.00	365	89	0.20	Electrical

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

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Forklifts	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Total	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000

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