# Appendix F CalEEMod Emission Summary

Grand Terrace Assembly and Light Manufacturing Building INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

# **CalEEMod Emission Summary**

TO: Konstanza Dobreva, EPD Solutions, Inc.

FROM: Vince Mirabella DATE: July 5, 2023

SUBJECT: Comparison of Air Quality, Greenhouse Gas, Energy, and Fuel Usage for the Proposed Barton Road Development Project and the Existing Land Use, Grand Terrace, CA

# **SECTION 1: PROJECT INFORMATION**

# 1.1 - Project Name

Barton Road Development Project (Project)

# 1.2 - Purpose of this Report

This report has been prepared to identify the air quality and greenhouse gas (GHG) emissions and petroleum and energy usage associated with the Project's construction and operation and compare these impacts to the operation of the existing land use located at the Project site.

# 1.3 - Environmental Setting

# 1.3.1 Project Location

The Project is an approximately 171,500 SF assembly and light manufacturing building located at 21801 & 21823 Barton Road in the City of Grand Terrace within San Bernardino County. Regional access to the Project site is provided byInterstate 215 (I-215) located approximately 0.5 miles east of the site. The site is located between the cities of Highgrove and Colton, along the 215 highway. The site is primarily surrounded by commercial and industrial uses. Figure 1 shows The project site and surrounding regional area. The site is identified by Assessor's Parcel Numbers 1167-121, -02, -03, -04, -07, a portion of 08& 1167-131-11.

# 1.3.2 Existing Project Site

The Project boundary encompasses roughly 9.20 acres, including the development site and offsite improvement areas. The development site encompasses five parcels totaling approximately 9.02 acres. The building site is identified by Assessor's Parcel Numbers 1167-121-02, -03, -04, -07, and a portion of 1167-121-08. The eastern portion of the site is developed with three (3) buildings totaling 12,950 square feet. The western portion of the building site is currently vacant with building pads. The site is relatively flat and is partially developed with non-native plant species. The site is currently accessible via one point of access along Barton Road, which provides ingress and egress. The Project site's existing conditions are shown in Figure 2.

The City of Riverside owns APN 1167-121-08 and runs diagonally through the southeast of the site. A portion of the site will be utilized for parking through a licensing agreement. APN 1167-131-011 is part of

the Project boundary and lies southwest of the proposed site. This parcel is currently vacant with some shrubbery sprinkled throughout the site. It contains utility posts along the south side of the property line to De Berry Street. A portion of this parcel will be disturbed and utilized for offsite improvements.

# 1.3.3 Existing Land Uses and Zoning Designations of the Project Site

The Project site is within the Light Industrial (LI) General Plan designation and has a zoning designation of Restricted Manufacturing (MR) zone. The assembly and light manufacturing facility use is permitted by right and is consistent with the site's General Plan Land Use and zoning designations.

# 1.3.4 Project Description

The proposed Project will consist of the redevelopment of the existing site and the construction of an approximately 171,500 square-foot assembly and light manufacturing building, which will encompass 50,723 square feet of assembly, 116,377 square feet of assembly storage, 4,400 square feet of office space, 18 dock doors, and 240 auto parking spaces. The Project site plan shows 170,152 square feet of building area, to account for changes in the site plan that can occur during the planning process, the Project is conservatively evaluated in the memorandum as 171,500 square feet. Figure 3 provides the conceptual site plan.

#### **Landscaping and Screening**

The Project site includes landscaping along Barton Road to enhance the frontage of the proposed building. The parking lot areas north of the proposed building would include fifteen 24-inch box trees and shrubs. The Project would include approximately 26,705 SF of landscape, totaling 6.8% of the Project site area.

#### **Access and Circulation**

The Project site will be accessed via an existing driveway along Barton Rd. This driveway will be expanded to be roughly 70ft wide and is located to the north of the proposed building. A second 30ft driveway is proposed for emergency vehicle access only along the eastern portion of the site that will be gated. Internal circulation will be via a 30 ft drive aisle.

## **Development and Operational Summary**

The proposed Project will consist of approximately 171,500 square feet of assembly, light manufacturing, ground floor, and a mezzanine office. The total parking provided will include two hundred forty (240) total parking spaces. Standard spaces will consist of 233 parking stalls (9'x19') and seven (7) ADA parking spaces.

#### **Construction and Phasing**

Construction activities for the Project would occur over one phase and include demolition, site preparation, grading, building construction, paving, landscaping, and architectural coatings. The Project construction completion timeline from start to finish will total approximately 14 months.

## **Operational Characteristics**

The proposed Project is a speculative industrial building but assumed operations include assembly and light manufacturing. Typical operational characteristics include employees and customers traveling to and

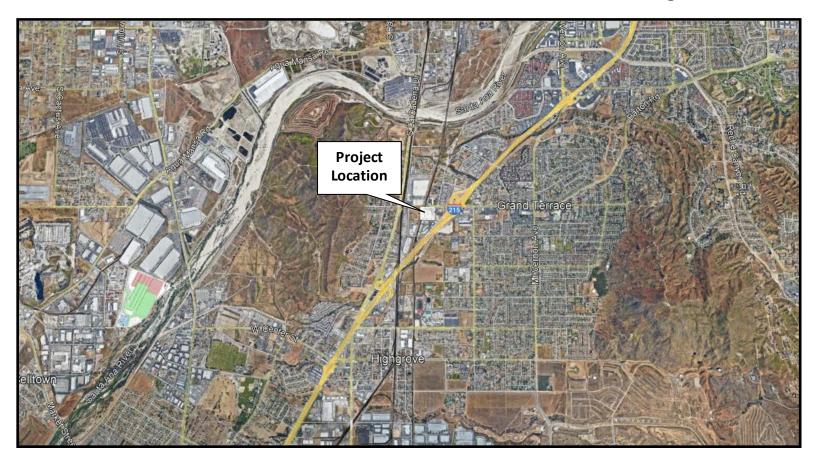
from the site, delivering materials and supplies, loading and unloading trucks, and manufacturing activities. It is assumed that no cold storage would be associated with the operation of the building. According to the Southern California Association of Governments, the generation rate for employees required for operation of an industrial project is 1 employee for every 1,195 SF of industrial space, but to be conservative it is assumed this Project would generate approximately 175 employees.

The proposed hours of operations are assumed to be 6:00 am to 11:00 pm, but to be conservative, all technical studies have assumed 24/7 hours of operations. The proposed Project was assumed to commence operation in 2025.

# 1.4 - Conclusions

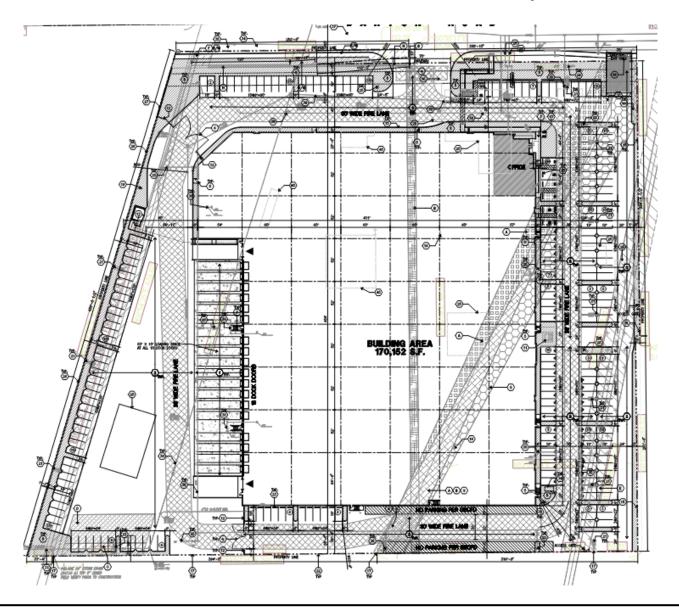
- The Project's construction emissions would not exceed the project-level or cumulative regional
  emission significance thresholds recommended by the South Coast Air Quality Management
  District (SCAQMD). Therefore, the Project construction would not have a potentially significant
  impact.
- The Project's regional and local operational emissions are greater than the emissions from the Existing Land Use. However, the net differences in regional and local emissions and the Project's individual operational emissions are less than the operational significance thresholds recommended by the SCAQMD.
- The Project's construction and operational GHG emissions are greater than the GHG emissions
  from the Existing Land Use. However, the net difference in GHG emissions is less than the GHG
  significance threshold adopted for this Project. Therefore, the Project's GHG emissions would not
  result in a significant GHG impact.
- The Project construction would not result in the wasteful, inefficient, and unnecessary consumption of energy, especially fossil fuels such as coal, natural gas, and petroleum, associated with the Project design, location, the use of electricity and/or natural gas, and/or the use of fuel by vehicles anticipated to travel to and from the Project during construction.
- The Project's operational fuel use, vehicle miles travel, and energy usage are greater than the Existing Land Use levels. However, the Project operation would be subject to several Statemandated energy and air emission programs designed to minimize energy and fuel consumption. Thus, the Project operation would not result in the wasteful, inefficient, and unnecessary consumption of energy, especially fossil fuels such as coal, natural gas, and petroleum, associated with Project design, location, the use of electricity and/or natural gas, and/or the use of fuel by vehicles anticipated to travel to and from the Project during operation. Therefore, impacts associated with the potential of the Project to conflict with a state or local renewable energy or energy efficiency plan would be less than significant.

# **Regional Location**



# **Existing Site**





**Barton Road Development Project City of Grand Terrace** 

Figure 3

# **SECTION 2: CALEEMOD CRITERIA EMISSION ESTIMATE**

This section quantifies the Project's construction and operational air pollutant emissions for the Project and the Existing Land Use. using the California Emissions Estimator Model (CalEEMod) land-use emission model (Version 2022.1). This analysis quantifies potential differences between the Project's air quality, GHG, energy, fuel use and compares those impacts with those from the Existing Land Use. The bases for determining the significance of the estimated emission differences were the numerical regional and local air quality emission significance thresholds and the greenhouse gas significance threshold recommended by the SCAQMD and San Bernardino County.

# 2.1 - Significance Thresholds-Criteria Pollutants

The SCAQMD recommends the application of several criteria pollutant<sup>1</sup> significance thresholds that apply to the construction and operation of projects located within the jurisdiction of the SCAQMD for use in CEQA assessments.

# 2.1.1 Regional Emission Significance Thresholds

The SCAQMD's regional significance thresholds define maximum daily emissions whose exceedance by a project's construction or operation may add to the overall cumulative emission burden within the SCAQMD and impact the attainment maintenance of the ambient air quality standards.

The regional thresholds apply to the criteria pollutant emissions of carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), oxides of sulfur (SO<sub>x</sub>), particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), and reactive organic gases (ROG). The quantification of regional emissions includes those project emissions generated from onsite emission sources (i.e., off-road construction equipment, fugitive dust, fugitive VOC sources) and offsite emission sources (vehicle travel away from the Project). Table 1 shows the SCAQMD's regional significance thresholds.

**Table 1: SCAQMD Regional Emission Significance Thresholds** 

Air Pollutant	Maximum Daily Emissions (pounds/day)			
	Construction	Operation		
Carbon Monoxide	550	550		
Oxides of Nitrogen	100	55		
Sulfur Oxides	150	150		
PM <sub>10</sub>	150	150		
PM <sub>2.5</sub>	55	55		
Reactive Organic Gases	75	55		

<sup>&</sup>lt;sup>1</sup> The EPA has established national ambient air quality standards (NAAQS) for six of the most common air pollutants— carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as "criteria" air pollutants (or simply "criteria pollutants")

Source: SCAQMD<sup>2</sup>

# 2.1.2 Localized Significance Thresholds

Project-related construction air emissions may have the potential to exceed the State or national air quality standards in the project vicinity, even though these pollutant emissions may not be significant enough to create a regional impact on the SCAQMD. As a result, the SCAQMD recommends the assessment of localized significance thresholds (LSTs). The LSTs represent the maximum rates of daily construction emissions from a project site that would not result in air pollution levels exceeding a national or State ambient air quality standard (SCAQMD 2003³,2008⁴). There are three principal differences between the regional thresholds and the LSTs.

- First, the regional thresholds include all project construction emissions from onsite and offsite emission sources. The LSTs only consider the emissions generated from onsite emission sources.
- Second, the LSTs only apply to CO, NO<sub>X</sub>, and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), while the regional thresholds also include ROG and SO<sub>X</sub>.
- Third, the regional thresholds apply to emission sources located within the SCAQMD, while the LSTs depend on project location, the size of the project area (maximum site area to be disturbed in a day), and emission location relative to nearby sensitive receptors<sup>5</sup>.

The SCAQMD provides emission screening lookup tables for projects that disturb less than or equal to 5 acres in size in a day for the localized assessment. The SCAQMD developed the lookup tables to determine if a project's daily CO, NOx, PM10, and PM2.5 emissions could significantly impact the local air quality during construction and operation. The appropriate LSTs are determined based on the Project's source receptor area (SRA)<sup>6</sup>, maximum disturbed area size, and distance to the nearest sensitive receptor. The SCAQMD has divided the SCAQMD into 38 SRAs, each with a unique set of LSTs that depend on the air pollutant, project size, and distance to the nearest sensitive receptor. The Project site is located within SRA 34, Central San Bernardino Valley. The localized assessment applied the LSTs for this SRA.

#### Construction

The SCAQMD published a "Fact Sheet for Applying CalEEMod to Localized Significance Thresholds" to guide the determination of emission significance during construction. The CalEEMod model was used to calculate

<sup>&</sup>lt;sup>2</sup> SCAQMD April 2023. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf

<sup>&</sup>lt;sup>3</sup> SCAQMD 2003. Final Localized Significance Threshold Methodology. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2

<sup>&</sup>lt;sup>4</sup> SCAQMD 2008: Final Localized Significance Threshold Methodology. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf

<sup>&</sup>lt;sup>5</sup> A sensitive receptor is defined as an individual who is most health wise susceptible to exposures to air pollutants including children the elderly, and adults with chronic health issues. Such receptors include residences, schools, elderly care centers, and hospitals.

<sup>&</sup>lt;sup>6</sup> A source-receptor area (SRA) is a geographic area within the SCAQMD that can act as both a source of emissions and a receptor of emission impacts

<sup>&</sup>lt;sup>7</sup> SCAQMD 2011: Fact Sheet for Applying CalEEMod to Localized Significance Thresholds. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf

construction emissions based on the intensity of the project development, the number and types of construction equipment, equipment hours, rates of emission, and the maximum daily disturbance activity possible for each piece of equipment. During construction, the maximum disturbed area, location, and distance to the nearest receptor determine the value of the LSTs. Table 2 shows the maximum daily disturbed acreage during demolition, site preparation, and grading activities, contributing to the highest daily onsite emissions of all construction activities. Table 2 shows that the maximum daily area disturbed during construction is 3.5 acres during the site preparation construction activity. Therefore, the analysis set the maximum daily disturbed area during construction as 3.5 acres for the localized assessment of construction impacts.

**Table 2: Project Equipment-Specific Disturbed Construction Area Rates** 

Activity	Equipment Type	Equipment Quantity	Acres Graded per 8-hour day	Operating Hours per day	Acre Disturbed per 8-hour day
	Concrete/Industrial Saws	1	0	8	0
Demolition	Excavator	3	0	8	0
Rubber Tired Dozer		2	0.5	8	1.0
Site	Rubber Tired Dozers	3	0.5	8	1.5
Preparation	Preparation Crawler Tractor	4	0.5	8	2.0
					Total: 3.5 acres
	Excavators	1	0.0	8	0.0
	Graders	1	0.5	8	0.5
Grading	Rubber Tired Dozers	1	0.5	8	0.5
Crawler Trac	Crawler Tractor	3	0.5	8	1.5
					Total: 2.5 acres

Source: The construction inventory was taken from the inventory of construction equipment shown in Table 6 below. below.

LST specifications also depend on the distance to the nearest sensitive receptor. The nearest sensitive receptor location depends on the physical distance from the Project and where the receptor may be exposed to extended periods of air pollution. The SCAQMD considers a sensitive receptor as a location such as a residence, hospital, or convalescent facility where an individual could remain for 24 hours or longer. Commercial and industrial facilities are not included in the definition of a sensitive receptor

because workers do not typically remain onsite for a full 24 hours but are present for shorter periods, such as up to eight hours<sup>8</sup>.

The closest sensitive receptor where such a receptor could reside for 24 hours or longer is located at an existing residence approximately 35 meters north of the Project across Barton Road. Therefore, the distance for sensitive receptors in the LST assessment was set to 35 meters to estimate  $PM_{10}$  and  $PM_{2.5}$  impacts for exposures over 24 hours. The closest worker receptors where such a receptor could be exposed for up to 8 hours are located at the industrial buildings surrounding the Project site. Therefore, the receptor distance for a worker receptor was set at 25 meters, the shortest distance contained in the SCAQMD's LST emission lookup tables for estimating  $NO_2$  and CO impacts, defined as an average over a one-hour exposure duration. Table 3 provides the construction LSTs applied in this assessment.

**Table 3: Construction Localized Significance Thresholds** 

NOx	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)
220	1,360	20	7

LSTs were defined for a Project area of 3.5 acres and a receptor distance of 35 meters for sensitive receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{2.5}$ ) and 25 meters for worker receptors ( $PM_{2.5}$ ) a

# 2.1.3 Localized Significance Thresholds - Operation

As noted earlier, the SCAQMD has defined LSTs for Project-disturbed areas up to 5 acres in size. The Project is approximately 9.20 acres in size. For projects that exceed 5 acres, the 5-acre LST lookup tables can be used as a screening tool to determine which pollutants require additional detailed air dispersion model analysis to quantify any potentially significant impacts. This approach is conservative as it assumes that all onsite emissions associated with the Project would occur within a concentrated 5-acre area. Therefore, this screening method would over-predict potential localized impacts because the value of the LSTs increases with increases in the disturbed area's size. As a result, if the LSTs were available for a 9.20-acre size, the LSTs would be greater than the LSTs for a 5-acre site. So, meeting the LSTs for a 5-acre area would imply compliance with a 9.20-acre site area. Table 4 provides the operational LSTs for this Project.

**Table 4: Operational Localized Significance Thresholds** 

NOx	CO	PM <sub>10</sub>	PM <sub>2.5</sub>
(lbs/day)	(lbs/day)	(lbs/day)	(lbs/day)
270	1,748	7	2

LSTs were defined for a Project area of 5.0 acres, a receptor distance of 35 meters for sensitive receptors ( $PM_{10}$  and  $PM_{2.5}$ ), and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ), and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ), and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ), and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ), and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ), and 25 meters for worker receptors ( $PM_{10}$  and  $PM_{2.5}$ ), and 25 meters for worker receptor ( $PM_{10}$  and  $PM_{2.5}$ ).

<sup>&</sup>lt;sup>8</sup> SCAQMD 2003. Final Localized Significance Threshold Methodology. Website: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf?sfvrsn=2

# 2.1.4 Cumulative Significance Thresholds

The SCAQMD published a report on addressing cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution (SCAQMD 2003)<sup>9</sup>. The SCAQMD considers projects exceeding the project-specific significance thresholds as cumulatively considerable. Therefore, the project-specific and cumulative significance thresholds are the same. As a result, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant.

The US Environmental Protection Agency currently designates the South Coast Air Basin, where the Project is located, as nonattainment for ozone, PM<sub>10</sub>, and PM<sub>2.5</sub>. Air pollution is largely a cumulative impact resulting from emissions generated over a large geographic region. The nonattainment status of regional pollutants results from past and present development within the air basin, and this regional impact is a cumulative impact. In other words, new development projects (such as the proposed Project) within the air basin would contribute to this impact only on a cumulative basis. No single project would be sufficient in size to result in the nonattainment of regional air quality standards. Instead, a project's emissions may be individually limited but cumulatively considerable when combined with past, present, and future development projects.

Determining cumulative air quality impacts for construction emissions is based on whether the Project would result in regional emissions exceeding SCAQMD regional thresholds of significance for construction on a project level. Projects that generate emissions below the SCAQMD regional significance thresholds would be considered consistent with regional air quality planning efforts and would not generate cumulatively considerable emissions.

# 2.2 - Criteria Pollutant Emission and Impact Estimates

## 2.2.1 Construction Emissions

# **Project Construction Emissions**

# **Project Assumptions**

- Construction Schedule: commencing January 2024 with a duration of approximately 14 months
- Grading activity involves the import of 7,000 cubic yards of soil
- Demolition and hauling of approximately 10,000 tons of existing structures and asphalt hardscape
- Fugitive dust mitigation applied as per SCAQMD Rule 403 Fugitive Dust (2-times watering per day), limiting vehicle speed on unpaved surfaces to 15 miles per hour, and soil moisture maintained at 12 percent)

<sup>&</sup>lt;sup>9</sup> South Coast Air Quality Management District (SCAQMD) 2003. White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution

• Construction equipment inventory derived from the CalEEMod model equipment inventory

Table 5 and Table 6 provide the Project's construction schedule and equipment inventory, respectively, while Table 7 summarizes the Project's construction vehicle trips.

**Table 5: Project Construction Schedule** 

Activity	Start Date	End Date	Total Days <sup>(1)</sup>
Demolition	01/02/2024	01/15/2024	10
SitePreparation	01/16/2024	01/29/2024	10
Grading	01/30/2024	03/11/2024	30
Building Construction	03/12/2024	01/27/2025	230
Paving	01/28/2025	02/24/2025	20
Architectural Coating	02/25/2025	03/24/2025	20

Note:

 $^{(1)}$  Assumes a typical 5-day a week, 8 hours per day construction schedule.

Source: see Data Attachment

**Table 6: Construction Equipment Inventory** 

Activity	Equipment	Project Number	Project Hours per day	Default Horse- power	Default Load Factor
	Concrete/Industrial Saws	1	8	33	0.73
Demolition	Excavator	3	8	36	0.38
	Rubber Tired Dozer	2	8	367	0.40
Cit - Danie anti-	Rubber Tired Dozers	3	8	367	0.40
Site Preparation	Crawler Tractor	4	8	84	0.37
	Excavators	1	8	158	0.38
Con dia a	Graders	1	8	148	0.41
Grading	Rubber Tired Dozers	1	8	367	0.40
	Crawler Tractor	3	8	84	0.37
	Crane	1	7	367	0.29
	Forklifts	3	8	82	0.20
Building Construction	Tractors/Loaders/Backhoes	3	7	84	0.37
23.350 43000	Welders	1	8	46	0.45
	Generator Set	1	8	14	0.74

Activity	Equipment	Project Number	Project Hours per day	Default Horse- power	Default Load Factor
	Pavers	2	8	81	0.42
Paving	Paving Equipment	2	8	89	0.36
	Rollers	2	8	36	0.38
Architectural Coating	Air Compressor	1	6	37	0.48
Source: see Data Atta	chment				

**Table 7: Construction Vehicle Trips** 

	Construction Trips per Day				
Activity	Worker	Vendor	Haul		
Demolition	15	0	50		
Site Preparation	18	0	0		
Grading	15	0	29		
Building Construction	72	28	0		
Paving	15	0	0		
Architectural Coating	14	0	0		
Source: see Data Attachment					

Table 8 presents the Project's estimated maximum daily regional construction emissions for any pollutant. As noted in Table 8, the Project's construction emissions would not exceed any SCAQMD's regional emission significance thresholds. Therefore, the Project construction would not significantly impact regional air quality on a project-level or cumulative basis.

Table 9 presents the results of the Project's localized construction impact assessment. Table 9 indicates that the Project's construction would not exceed the SCAQMD's construction localized emission significance thresholds for any pollutant. Therefore, the Project construction would not significantly impact local air quality.

**Table 8: Estimated Maximum Daily Regional Construction Emissions - Project** 

Construction Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
2024						
Demolition	2.7	29.5	18.0	0.0	16.0	3.4
Site Preparation	3.8	36.1	34.0	0.1	10.1	5.5
Grading	2.0	20.9	21.2	0.0	4.9	2.4
Building Construction	1.6	12.7	19.7	0.0	1.7	0.8
2024 Max Daily Emissions	3.8	36.1	34.0	0.1	16.0	5.6
2025						
Building Construction	1.4	11.9	18.0	0.0	1.6	0.7
Paving	1.5	7.6	10.9	0.0	0.6	0.4
Architectural Coating	68.2	1.0	2.0	0.0	0.2	0.0
2025 Max Daily Emissions	68.2	11.9	18.0	0.0	1.6	0.7
2024-2025 Max Daily Emissions	68.2	36.1	34.0	0.1	16.0	5.6
SCAQMD Significance Thresholds	75	100	550	150	150	55
Emissions Exceed Thresholds?	No	No	No	No	No	No

Notes:

 $NO_x$  = oxides of nitrogen  $PM_{10}$  = particulate matter 10 microns or less in diameter ROG = reactive organic gases PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter CO = carbon monoxide

 $SO_x = sulfur oxides$ 

Source: see Data Attachment

Table 9: Estimated Maximum Daily Localized Construction Emissions - Project

Construction Activity	Maximum Daily Localized Emissions (pounds/day)					
, _	NOx	со	PM <sub>10</sub>	PM <sub>2.5</sub>		
2024						
Demolition	24.9	21.7	14.8	3.1		
Site Perparation	36.0	32.9	10.3	5.6		
Grading	18.2	18.8	4.2	2.2		
Building Construction	11.2	18.8	0.5	0.5		
2024 Max Daily Emissions	36.0	32.9	14.8	5.6		
2025						
Building Construction	10.4	13.0	0.4	0.4		
Paving	7.5	10.0	0.4	0.3		
Architectural Coating	0.9	1.1	0.0	0.0		
2025 Max Daily Emissions	10.4	13.0	0.4	0.4		
2024-2025 Max Daily Emissions	36.0	32.9	14.8	5.6		
SCAQMD Significance Thresholds	220	1,360	20	7		
Emissions Exceed Thresholds?	No	No	No	No		

Notes:

 $NO_x$  = oxides of nitrogen  $PM_{10}$  = particulate matter 10 microns or less in diameter  $PM_{2.5}$  = particulate matter 2.5 microns or less in diameter CO = carbon monoxide

Source: see Data Attachment

# 2.2.2 Operational Emissions

The Project and the existing site operational emissions were estimated using the CalEEMod land-use emission model.

# **Project Operational Emissions**

Day-to-day operations generate long-term operational emissions. Operational emissions for land-use development projects are typically distinguished as mobile, area, and energy-source emissions. Mobile-source emissions are associated with motor vehicles that travel to and from the Project site. Area-source emissions are associated with landscape maintenance activities and periodic architectural coating applications, while energy-source emissions are associated with natural gas and electricity consumption.

#### **Mobile Source Emissions**

Mobile sources constitute the largest source of operational emissions. The emissions from mobile sources are estimated based on the number of daily vehicle trips, vehicle trip distance, the types of vehicles, and

emission factors that relate the emissions per vehicle mile traveled, time idling, and the number of vehicle starts. The operational vehicles of an industrial project typically consist of passenger, light-duty, medium-duty trucks, and heavy-duty trucks (2, 3, and 4+axle trucks).

The operational mobile emission analysis quantified the emissions from two classes of mobile source vehicles: 1)"local" Project vehicles consisting of passenger vehicles and light heavy-duty trucks (2-axle trucks); and 2) and "haul" trucks consisting of medium-heavy (3-axle trucks) and heavy-heavy duty trucks (4+axle trucks). This classification was done to allow a more accurate accounting of differences in the trip distances (the distance each vehicle travels to and from the Project site) from the various Project vehicle types. The trip distance for the local Project vehicles assumed the default trip distances prescribed in the CalEEMod model. The trip distance for the haul trucks assumed an average trip distance of 40 miles per the guidance from the SCAQMD<sup>10</sup>. The passenger vehicles, in turn, were subdivided into Light-Duty-Auto vehicles (LDA), Light-Duty-Trucks (LDT1 and LDT2), and Medium-Duty-Vehicles (MDV) vehicle types based on the relative percentages of these vehicles contained within the CalEEMod model. The number of daily vehicle trips and vehicle fleet mix for the Project and the Existing Land Use were derived from the trip generation study results prepared by EPD Solutions<sup>11</sup>.

#### **Project Mobile Source Emissions**

The number of daily trips is estimated by applying a trip generation rate specific to the type and size of land use analyzed. The Project is estimated to generate 457 daily vehicle trips based on the information provided in Table 10 to Table 12.

Table 10: Daily Trip Generation – Project

Barton Road Development Project					
Land Use	Trip Rate				
Manufacturing: 53,623 TSF Warehouse: 117,877 TSF	4.75 Trips/TSF 1.71 Trips/TSF				
Fleet Mix	Percentage of Fleet	Manufacturing (trips/day)	Warehouse (trips/day)	Total (trips/day)	
Passenger Cars (LDA,LDT1,LDT2, MDV) 2-axle trucks (LDTT1, LHDT2) 3-axle trucks (MHDT) 4+axle trucks (HHDT) Total	72.50 4.60 5.70 17.20 100.0	185 11 15 44 255	146 9 11 35 202	331 17 26 78 457	

LDA = light duty automobile, LDT1 and LDT2 = light duty trucks, MDV = medium duty vehicle,

LHDT1 and LHDT2 = light heavy-duty trucks, MHDT = medium heavy-duty truck,

HHDT = heavy-heavy duty truck

TSF = thousand square feet

Source: EPDS Trip Generation and Vehicle Miles Traveled (VMT) Screening Analysis, June 2023

<sup>10</sup> 

<sup>&</sup>lt;sup>11</sup> EPDS Trip Generation and Vehicle Miles Traveled (VMT) Screening Analysis, June 2023

Table 11: Vehicle Mix for Passenger Cars and Local Delivery Trucks – Project

	Manı	Manufacturing		Warehouse		
Vehicle Class	Percent of Total	Number of Trips	Percent of Total	Number of Trips	Number of Trips	
Light Duty Automobile (LDA)	55.6	109	55.6	86	196	
Light Duty Truck 1 (LDT1)	6.3	12	6.3	10	22	
Light Duty Truck 2 (LDT2)	19.0	37	19.0	29	67	
Medium Duty Truck (MDT)	13.2	26	13.2	21	47	
Light Heavy Duty Trucks (LHDT1)	4.8	9	4.8	7	17	
Light Heavy Duty Truck (LHDT2)	1.2	2	1.2	2	4	
Total	100.0	196	100	155	351	

The percentages are based on the default vehicle type relative VMT percentages presented in the EMFAC2021 model for SCAQMD in 2025

Source: see Data Attachment

Table 12: Fleet Mix for Haul Trucks - Project

Vehicle Type	Percentage of Total	Manufacturing Trips	Warehouse Trips	Total Trips
Medium Heavy Duty Truck (MHDT)	24.9	15	11	26
Heavy-Heavy Duty Truck (HHDT)	75.1	44	35	79
Total	100.0	59	46	105
Source: see Data Attachment				

Note that the CalEEMod model does not separate operational emissions into onsite and offsite subtotals required to perform the operational LST analysis since the LST analysis only considers emissions generated from onsite emission sources. Therefore, to estimate the onsite emissions from the mobile sources, the LST analysis assumed an onsite vehicle trip distance of 127 meters (0.08 miles) to represent the distance all motor vehicles would travel while onsite for the Existing Land Use and 245 meters (0.15 miles) for onsite vehicle travel distance for the Project vehicles.

## Area, Energy, Waster Water, and Solid Waste Emissions

The area source and energy source operational emissions for the Project and the Existing Land Use were derived from the default estimates produced by the CalEEMod model. Table 13 provides the Project's maximum daily regional operational emission estimates, while Table 14 summarizes the Project's localized operational emissions. The analysis also assumed the operation of 4 GNG-fueled forklifts operating 4 hours

per day, five days per week to service the Project's operation and 1 CNG-fueled forklift servicing the Existing Land Use, 4 hours per day, five days per week.

Table 13: Maximum Daily Regional Operational Emissions - Project

Operational Activity	Maximum Daily Regional Emissions <sup>(1)</sup> (pounds/day)					
	ROG	PM <sub>10</sub>	PM <sub>2.5</sub>			
Area	5.4	0.1	7.5	<0.1	<0.1	
Energy	0.1	1.2	1.0	0.1	0.1	
Mobile	1.2	15.5	20.6	7.4	2.1	
Off-road Equipment	0.0	1.8	17.6	0.0	0.0	
Total Project Operational Emissions	6.7	18.6	46.7	7.5	2.2	

#### Notes:

(1) Indicated emissions are the greater of the winter and summer seasons

NOx = oxides of nitrogen PM<sub>10</sub> = particulate matter 10 microns or less in diameter ROG = reactive organic gases

PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter CO = carbon monoxide

Source: see Data Attachment

Table 14: Maximum Daily Localized Operational Emissions - Project

Operational Activity	Maximum Daily Localized Emissions (pounds/day)					
	NOx	со	PM <sub>10</sub>	PM <sub>2.5</sub>		
Area	0.1	7.5	<0.1	<0.1		
Energy	1.2	1.0	0.1	0.1		
Mobile	1.6	3.5	0.1	<0.1		
Offroad Equipment	3.5	35.2	0.0	0.0		
Total Project Operational Emissions	6.4	47.2	0.2	0.1		

Notes:

NOx = oxides of nitrogen  $PM_{10}$  = particulate matter 10 microns or less in diameter

PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter CO = carbon monoxide

Source: see Data Attachment

# **Existing Land Use Operational Emissions**

The Existing Land Use is estimated to generate 127 daily trips. Table 15 to Table 17 summarize the Existing Land Use daily trip generation and fleet vehicle mix, respectively.

**Table 15: Daily Trip Generation – Existing Land Use** 

Barton Road Development Project – Existing Land Use					
Area	Trip Rate				
Specialty Trade Contractor: 12.950 TSF	9.82 Trips/TSF				
Fleet Mix	Percentage of Fleet	Existing Land Use (trips/day)			
Passenger Cars (LDA,LDT1,LDT2, MDV)	72.50	92			
2-axle trucks (LDTT1, LHDT2)	4.60	6			
3-axle trucks (MHDT)	5.70	7			
4+axle trucks (HHDT)	17.20	22			
Total	100.0	127			
LDA = light duty automobile, LDT1 and LDT2 = light duty trucks, MDV = medium duty vehicle, LHDT1 and LHDT2 = light heavy-duty trucks, MHDT = medium heavy-duty truck, HHDT = heavy-heavy-duty truck TSF = thousand square feet Source: EPDS Trip Generation and Vehicle Miles Traveled (VMT) Screening Analysis, June 2023					

Table 16: Vehicle Mix for Passenger Cars and Local Delivery Trucks – Existing Land Use

	Spo	ecialty				
Vehicle Type	Percent of Total <sup>(1)</sup>	Number of Trips				
Light Duty Automobile (LDA)	55.6	54				
Light Duty Truck 1 (LDT1)	6.3	6				
Light Duty Truck 2 (LDT2)	19.0	19				
Medium Duty Truck (MDT)	13.2	13				
Light Heavy Duty Trucks (LHDT1)	4.8	5				
Light Heavy Duty Truck (LHDT2)	1.2	1				
Total	100.0	98				
Note:  (1) The percentages are based on the default vehicle type relative VMT percentages presented in the EMFAC2021 model for SCAQMD in 2025 Source: see Data Attachment						

Table 17: Vehicle Mix for Heavy-Duty Haul Trucks – Existing Land Use

Vehicle Type	Percentage of Total	Specialty Trips
Medium Heavy Duty Truck (MHDT)	24.9	7
Heavy-Heavy Duty Truck (HHDT)	75.1	22
Total	100.0	29
Source: see Data Attachment		

Table 18 compares the vehicle trips between the Project and the Existing Land Use.

Table 18: Comparison of Vehicle Trips – Project and Existing Land Use

			Daily Tr	rips				
Trip Study VehicleClass	Vehicle Type	Project	Existing Land Use	Difference (Project-Existing Land Use)				
Passenger Vehicles	Light Duty Automobile (LDA)	196	54	142				
Passenger Vehicles	Light Duty Truck 1 (LDT1)	22	6	16				
Passenger Vehicles	Light Duty Truck 2 (LDT2)	67	19	48				
Passenger Vehicles	Medium Duty Truck (MDT)	47	13	34				
2-Axle trucks	Light Heavy Duty Truck (LHDT1)	17	5	12				
2-Axle trucks	Light Heavy Duty Truck (LHDT2)	4	1	3				
3-Axle trucks	Medium Heavy-Duty Trucks (MHDT)	26	7	19				
4-Axle trucks	Heavy-Heavy Duty Trucks (HHDT)	78	22	56				
	Total	457	127	330				
Source: see Data Attachn	Source: see Data Attachment							

As noted in Table 18, the operation of the Project use would generate 330 more daily vehicle trips than the Existing Land Use daily trips. In addition, the Project land use would generate 75 more haul truck trips (MHDT + HHDT) than the Existing Land Use. The haul truck vehicles constitute a major contributor to the overall mobile source emissions. Table 19 summarizes the regional operational emissions for the Existing Land Use, while Table 20 presents the local operational emissions for the Existing Land Use.

Table 19: Maximum Daily Regional Operational Emissions – Existing Land Use

Operational Activity	Maximum Daily Regional Emissions <sup>(1)</sup> (pounds/day)				
	ROG	NOx	со	PM <sub>10</sub>	PM <sub>2.5</sub>

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Area	0.4	<0.1	0.6	<0.1	<0.1
Energy	<0.1	0.2	0.1	<0.1	<0.1
Mobile	0.3	4.2	5.6	2.0	0.6
Offroad Equipment	0.0	0.5	4.4	<0.1	<0.1
Total Project Operational Emissions	0.7	4.9	6.8	2.0	0.6

#### Notes:

(1) Indicated emissions are the greater of the winter and summer seasons

NOx = oxides of nitrogen PM<sub>10</sub> = particulate matter 10 microns or less in diameter ROG = reactive organic gases

PM<sub>2.5</sub> = particulate matter 2.5 microns or less in diameter CO = carbon monoxide

Source: see Data Attachment

Table 20: Maximum Daily Localized Operational Emissions – Existing Land Use

Operational Activity	Maximum Daily Localized Emissions (pounds/day)					
	NOx	PM <sub>2.5</sub>				
Area	<0.1	0.6	<0.1	<0.1		
Energy	0.2	0.1	<0.1	<0.1		
Mobile	0.4	0.9	<0.1	<0.1		
Offroad Equipment)	0.4	0.5	<0.1	<0.1		
Total Existing Land Use Operational Emissions	1.0	2.1	0.1	0.1		

Notes

 $NO_x$  = oxides of nitrogen  $PM_{10}$  = particulate matter 10 microns or less in diameter  $PM_{2.5}$  = particulate matter 2.5 microns or less in diameter CO = carbon monoxide

Source: see Data Attachment

Table 21 compares the Project and Existing Land Use regional operational emissions. As noted in Table 21, the Project's emissions are greater than the Existing Land Use emissions for all pollutants; however, the net emission differences are less than the SCAQMD regional emission significance thresholds. In addition, the total Project-specific emissions are also less than the SCAQMD operational significance thresholds.

Table 21: Comparison of the Project and Existing Land Use Regional Operational Emissions

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	PM <sub>10</sub>	PM <sub>2.5</sub>			
Project	6.7	18.6	46.7	7.5	2.2	
Existing Land Use	0.7	4.9	6.8	2.0	0.6	
Net (Project – Existing Land Use)	6.0	13.7	39.9	5.5	1.6	
SCAQMD Regional Emissions Significance Threshold	55	55	550	150	55	
Net Difference Exceeds Threshold?	No	No	No	No	No	
Project Exceeds Threshold?	No	No	No	No	No	

Notes:

 $NO_x$  = oxides of nitrogen  $PM_{10}$  = particulate matter 10 microns or less in diameter ROG = reactive organic gases

 $PM_{2.5}$  = particulate matter 2.5 microns or less in diameter CO = carbon monoxide

Indicated emissions are the higher of the summer and winter seasons

Source: see Data Attachment

Table 22 compares the localized operational emissions from the Project and the Existing Land Use. As noted in Table 22, the Project's localized emissions are greater than the local emissions from the Existing Land Use. However, the net difference in local and Project-specific emissions is less than the SCAQMD localized operational significance thresholds.

Table 22: Comparison of the Project and Existing Land Use Local Operational Emissions

Operational Activity	Maximum Daily Localized Emissions (pounds/day)					
	NO <sub>x</sub>	со	PM <sub>10</sub>	PM <sub>2.5</sub>		
Project	13.8	47.2	0.2	0.1		
Exiting Land Use	1.8	2.1	0.1	0.1		
Net (Project – Existing Land Use)	12.8	45.1	0.1	0.0		
SCAQMD Local Emissions Significance Threshold	187	1,748	7	2		
Net Difference Exceeds Threshold?	No	No	No	No		
Project Exceeds Threshold?	No	No	No	No		

Operational Activity	Maximum Daily Localized Emissions (pounds/day)			
	NO <sub>x</sub> CO PM <sub>10</sub> PM <sub>2.5</sub>			
Notes: $NO_x$ = oxides of nitrogen $PM_{10}$ = particulate matter 10 microns or less in diameter $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter $CO$ = carbon monoxide Source: see Data Attachment				

# 2.3 - Cumulative Impacts

#### 2.3.1 Construction

As shown above, in Table 8 and 9, the Project's maximum daily regional and local construction emissions would not exceed SCAQMD's regional construction thresholds of significance. The Project's construction emissions would not result in a cumulatively considerable incremental contribution to the existing significant cumulative air quality impacts. Therefore, the Project's construction cumulative impacts are less than significant.

## 2.3.2 Operations

As shown above in Table 21 and Table 22, the Project's regional and local operational emissions would generate greater amounts of air pollutant emissions than the Existing Land Use. However, the net differences in operational emissions between the Project and the Existing Land Use, and the Project-specific pollutant emission levels are all less than the SCAQMD operational significance thresholds. As a result, the Project's operational emissions associated would not significantly contribute to cumulative air quality impacts.

# 2.4 - Health Consequences from Criteria Pollutants

In December 2018, in the case of *Sierra Club v. County of Fresno* (2018) 6 Cal.5th 502 ("*Friant Ranch*"), the California Supreme Court held that an EIR's air quality analysis must meaningfully connect the identified significant air quality impacts to the human health consequences of those impacts, or meaningfully explain why that analysis cannot be provided. As noted in the Brief of Amicus Curiae by the SCAQMD in the Friant Ranch case (Brief), SCAQMD has among the most sophisticated air quality modeling and health impact evaluation capabilities of any of the air districts in the State. Thus, it is uniquely situated to express an opinion on how lead agencies should correlate air quality impacts with specific health outcomes.

The SCAQMD noted that it may be "difficult to quantify health impacts for criteria pollutants." SCAQMD used  $O_3$  as an example of why it is impracticable to determine specific health outcomes from criteria pollutants for all but very large, regional-scale projects. First, forming  $O_3$  "takes time and the influence of meteorological conditions for these reactions to occur, so ozone may be formed at a distance downwind from the sources." Second, "it takes a large amount of additional precursor emissions (NO<sub>X</sub> and VOCs) to cause a modeled increase in ambient ozone levels over an entire region," with a 2012 study showing that

"reducing  $NO_X$  by 432 tons per day (157,680 tons/year) and reducing VOC by 187 tons per day (68,255 tons/year) would reduce ozone levels at the SCAQMD's monitor site with the highest levels by only 9 parts per billion."

SCAQMD concluded that it "does not currently know of a way to accurately quantify ozone-related health impacts caused by NO<sub>X</sub> or VOC emissions from relatively small projects." The San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD) Brief ties the difficulty of correlating the emission of criteria pollutants to health impacts to how ozone and particulate matter are formed, stating that "[b]ecause of the complexity of ozone formation, a specific tonnage amount of NO<sub>X</sub> or VOCs emitted in a particular area does not equate to a particular concentration of ozone in that area." Similarly, the tonnage of PM "emitted does not always equate to the local PM concentration because it can be transported long distances by wind," and "[s]econdary PM, like ozone, is formed via complex chemical reactions in the atmosphere between precursor chemicals such as sulfur dioxides (SO<sub>X</sub>) and NO<sub>X</sub>," meaning that "the tonnage of PM-forming precursor emissions in an area does not necessarily result in an equivalent concentration of secondary PM in that area." The disconnect between the amount of precursor pollutants and the concentration of ozone or PM formed makes it difficult to determine potential health impacts related to the concentration of ozone and PM experienced by the receptor rather than levels of NO<sub>X</sub>, SO<sub>X</sub>, and VOCs produced by a source.

Most local agencies, including the City, lack the data to assess potential health impacts from criteria air pollutant emissions, as would be required to establish customized, locally-specific thresholds of significance based on potential health impacts from an individual development project. Using national or "generic" data to fill the missing local data gap would not yield accurate results because such data does not capture local air patterns, local background conditions, or local population characteristics, all of which play a role in how a population experiences air pollution. Because it is impracticable to accurately isolate the exact cause of human disease (for example, the role a particular air pollutant plays compared to the role of other allergens and genetics in causes of asthma), the County has determined that existing scientific tools cannot accurately estimate health impacts of the Project's air emissions without undue speculation. Instead, readers are directed to Section 2.2 which provides extensive information concerning the regional and local impact analyses related to the Project's construction and long-term operation. The regional and local analyses determined that the Project would not result in emissions exceeding SCAQMD's regional or LSTs during either construction or long-term operation. In addition, and unlike the Project at issue in the Friant Ranch case, Project would not result in any significant and unavoidable air quality impacts. Therefore, the proposed Project would not be expected to exceed the most stringent applicable federal or State ambient air quality standards for CO, NO<sub>X</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions.

As the Project's emissions would comply with federal, State, and local air quality standards, the Project's emissions are not sufficiently high enough to result in a significant health impact. Moreover, they are also not high enough to use a regional modeling program to correlate health effects on a basin-wide level and would not provide a reliable indicator of health effects if modeled.

# SECTION 3: CALEEMOD EMISSION ESTIMATES - GREENHOUSE GAS EMISSIONS

This section analyzes the potential impacts on climate change from the Project's emissions of various greenhouses (GHG). This analysis evaluates construction and operational impacts of the Project relative to the Existing Land Use and the relevant GHG emission significance thresholds.

# 3.1 - Significance Threshold

The City of Grand Terrace has not developed a numeric GHG significance threshold. The Project is located within San Bernardino County. The County adopted the GHG Plan in September 2011<sup>12</sup>, which guides analyzing greenhouse gas (GHG) emissions and determining significance during the CEQA review of proposed development projects within the County. The County GHG Plan includes a GHG Development Review Process (DRP) that specifies a two-step approach to quantifying GHG emissions. First, a screening threshold of 3,000 MT CO<sub>2</sub>e per year is used to determine if additional analysis is required. Projects with GHG emissions less than the 3,000 MTCO<sub>2</sub>e per year threshold are considered consistent with the County's GHG Reduction Plan and determined to have a less than significant individual and cumulative GHG emissions impact.

Projects with GHG emissions that exceed 3,000 MTCO<sub>2</sub>e are required to employ mitigation to reduce the project's GHG emissions. As part of its GHG Emission Reduction Plan, the County has devised a set of Screening Tables that can be used to mitigate project emissions. Projects exceeding 3,000 MTCO<sub>2</sub>e are required to achieve a minimum 100 points per the Screening Tables or a 31% reduction over 2007 emissions levels. Consistent with CEQA guidelines, such projects would be determined to have a less than significant individual and cumulative impact on GHG emissions.

The purpose of the Screening Tables is to guide measuring the reduction of greenhouse gas emissions attributable to certain design and construction measures incorporated into development projects. The Screening Tables assign points for each option incorporated into a project as mitigation or a project design feature (collectively referred to as "feature"). The point values correspond to the minimum emissions reduction expected from each feature. The menu of features allows maximum flexibility and options for how development projects can implement GHG reduction measures. Projects that garner at least 100 points would be consistent with the reduction quantities anticipated in the County's GHG Plan. As such, those projects that garner at least 100 points would not require quantifying project-specific GHG emissions reductions.

<sup>&</sup>lt;sup>12</sup> San Bernardino County 2011. Greenhouse Gas Emissions Reduction Plan. Website: http://www.sbcounty.gov/Uploads/lus/GreenhouseGas/FinalGHGFull.pdf

# 3.2 - Project GHG Emissions

#### 3.2.1 Construction

Construction would entail demolition of existing structures and asphalt, site preparation, grading, offsite hauling of demolition debris and earthwork material, construction of the proposed structures and buildings, architectural coating, and asphalt paving on the approximately 9.20-acre Project Site. The Project is anticipated to be constructed over about fourteen months, commencing in January 2024. Construction GHG emissions are based on the preliminary information provided by the applicant and the application of the CalEEMod land use emission model.

Table 23 summarizes the GHG emissions from the Project construction. Following guidance from the SCAQMD, construction emissions are amortized over a 30-year project lifetime and added to the Project's operational GHG emissions to convey the Project's total GHG emissions.

**Table 23: Project Construction GHG Emissions** 

Activity	Annual GHG Emissions <sup>(1)</sup> (MTCO <sub>2</sub> e)
2024	543
2025	56
Total	599
Total Emissions Amortized Over 30 years	20

#### Note:

 $^{(1)}$ The CalEEMod model provides GHG emission estimates in units of CO<sub>2</sub>e; which is comprised of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). CO<sub>2</sub> contributes more than 99 percent of the total MTCO<sub>2</sub>e emissions. Source: see Data Attachment

# 3.2.2 Operations

The Project would generate GHG from a variety of sources as discussed below.

**Transportation:** These emissions refer to GHG emissions contained in the exhaust of the cars and trucks traveling to and from the Project site. Transportation GHG emissions were estimated using the CalEEMod model.

**Natural Gas:** These emissions refer to the GHG emissions when natural gas is burned on the Project site. Natural gas uses could include heating water, space heating, dryers, stoves, or other uses. Natural gas GHG emissions were estimated using the CalEEMod model.

**Indirect Electricity:** These emissions are generated by offsite power plants to supply the Project's electricity. Indirect electricity GHG emissions were estimated using the CalEEMod model.

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**Area Sources:** These emissions are produced during consumer products, cleaning supplies, and landscape maintenance activities. Area source GHG emissions were estimated using the CalEEMod model.

**Water Transport:** These emissions are those generated by the electricity required to transport and treat the water used on the Project site. Water transport GHG emissions were estimated using the CalEEMod model.

**Waste:** These emissions refer to the GHG emissions produced by decomposing the Project's waste. Waste GHG emissions were estimated using the CalEEMod model.

**Refrigeration**: These emissions include fugitive GHG emissions from refrigerants used in air conditioning and refrigeration equipment.

**Offroad equipment**: These emissions include exhaust emissions from the operation of offroad equipment (e.g., forklifts)

Table 24 summarizes the Project's total construction and operational GHG emission, while Table 25 summarizes the Existing Land Use operational GHG emissions. Table 26 compares the total GHG emissions for the Project and the Existing Land Use.

**Table 24: Project Construction and Operational GHG Emissions** 

Activity	Annual GHG Emissions <sup>(1)</sup> (MTCO <sub>2</sub> e)	
Area	3	
Energy	469	
Mobile	2,910	
Waste	110	
Water	55	
Refrigeration	2	
Offroad Operations	46	
Total Operational Emissions	3,596	
Project Construction Emissions	20	
Project Construction and Operation 3,616		
Note $^{(1)}$ The CalEEMod model provides GHG emission estimates in units of $CO_2e$ ; which is comprised of carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ), and nitrous oxide ( $N_2O$ ). $CO_2$ contributes more than 99 percent of the total		

MTCO<sub>2</sub>e emissions.

Source: see Data Attachment

**Table 25: Existing Land Use GHG Emissions** 

Activity	Annual GHG Emissions <sup>(1)</sup> (MTCO <sub>2</sub> e)
Area	<1
Energy	55
Mobile	792
Waste	5
Water	8
Refrigeration	1
Offroad Operations	12
Total Operational Emissions	873
	·

Note

 $^{(1)}$  The CalEEMod model provides GHG emission estimates in units of CO<sub>2</sub>e; which is comprised of carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). CO<sub>2</sub> contributes more than 99 percent of the total MTCO<sub>2</sub>e emissions.

Source: see Data Attachment

Table 26: Comparison of GHG Emissions - Project and Existing Land Use

Activity	Annual GHG Emissions (MTCO <sub>2</sub> e)
Project	3,616
Existing Land Use	873
Net Difference (Project – Existing Land Use)	2,743
SCAQMD GHG Threshold	3,000
Net Difference Exceeds Threshold?	No
Source: see Data Attachment	

# 3.3 - Conclusion

As noted in Table 26, the Project would generate 2,789 MTCO<sub>2</sub>e more GHG emissions than the Existing Land Use. However, this net difference in GHG emissions does not exceed the 3,000 MTCO<sub>2</sub>e GHG significance threshold adopted for this assessment. Therefore, the Project's GHG emissions will result in a less than significant project-level and cumulative GHG impact.

# **SECTION 4: PROJECT FUEL AND ENERGY CONSUMPTION**

# 4.1 - Assumptions

- Construction equipment fuel consumption derived from ARB Offroad2021 emission model
- Fuel Consumption from vehicle travel derived from ARB EMFAC2021 emission model
- Annual VMT estimated from the CalEEMod model
- Electrical and natural gas usage derived from the CalEEMod model

# 4.2 - Significance Thresholds

Neither Appendix F of the State CEQA Guidelines nor PRC Section 21100(b)(3)) provides a numerical threshold of significance that might be used to evaluate the potential significance of the energy consumption of a proposed project. Instead, the emphasis is on reducing "the wasteful, inefficient, and unnecessary energy consumption." Based on this focus of the guidelines, for purposes of this report, the Project would have a significant impact related to energy consumption if it would:

 Involve the wasteful, inefficient, and unnecessary consumption of energy, especially fossil fuels such as coal, natural gas, and petroleum, associated with project design, project location, the use of electricity and/or natural gas, and/or the use of fuel by vehicles anticipated to travel to and from the Project.

# 4.3 - Energy Usage

#### 4.3.1 Construction

## **Electricity and Natural Gas Usage**

Colton Electric Utility Department would provide temporary electric power for necessary lighting and electronic equipment such as computers inside temporary construction trailers. The electricity used for such activities would be temporary, substantially less than required for Project operation, and would have a negligible contribution to the Project's overall energy consumption.

Natural gas is not anticipated to be required during the Project construction. Fuels used for construction would primarily consist of diesel and gasoline, discussed below under the "Petroleum Fuel Usage" subsection. Any minor amounts of natural gas that may be consumed due to Project construction would be substantially less than required for Project operation and would have a negligible contribution to the Project's overall energy consumption.

## **Petroleum Fuel Usage**

Petroleum would be consumed throughout the construction of the Project. Off-road heavy-duty construction equipment associated with construction activities would rely on diesel fuel as vendors and

haul trucks would deliver building materials and remove the demolition debris from the Project site. Construction workers would travel to and from the Project site throughout construction. This analysis assumed construction workers would travel to and from the site in gasoline-powered passenger vehicles (cars, SUVs, and light-duty trucks), while all vendor and haul trucks were assumed to be diesel-fueled. Project construction is estimated to require 25,423 gallons of diesel fuel and 12,396 gallons of gasoline for offroad construction equipment and construction vehicles, as summarized in Table 27 and Table 28. These estimates are based on the total fuel consumption and horsepower-hour data within the ARB OFFROAD2021 emission model for specific diesel construction equipment employed in the Project construction. Note that the estimated total fuel consumption during construction likely substantially overstates the actual amount of fuel usage. Although construction equipment is listed under a particular construction activity, there is a likelihood that the specific equipment will not operate over the entire duration of the construction activity. For example, a crane is listed during building construction. However, it is not anticipated that the crane will operate over the 230 days assumed during the building construction activity. Project's construction vehicle fuel usage is based on the vehicle type (worker, vendor, and haul truck), vehicle miles traveled, and fuel usage factors in the ARB EMFAC2021 mobile source emission model.

#### **Construction Emissions**

The equipment used for Project construction would be required to conform to California Air Resources Board (CARB) regulations and California emissions standards. For example, California Code of Regulations (CCR) Title 13, Motor Vehicles, Section 2449(d)(3) Idling limits idling times of construction vehicles to no more than five minutes, thereby precluding unnecessary and wasteful consumption of fuel due to unproductive idling of construction equipment. All Project-related construction equipment would be required to conform to current emissions standards (and related fuel efficiencies). As supported by the preceding discussion, the Project's construction-related energy consumption would not be considered inefficient, wasteful, or otherwise unnecessary.

# 4.3.2 Operational Energy Requirements

Table 29 summarizes the Project's operational energy requirements compared to the Existing Land Use. As detailed in Table 30, the Project operation would result in greater fuel use, vehicle miles traveled, natural gas usage, and electrical demand compared to the Existing Land Use. During the Project operation, the Project would be subject to the 2019 California Green Building Standards Code (CALGreen). The Project would provide for and promote energy efficiencies required under other applicable federal and State standards and regulations and in so doing, would meet all CBC Title 24 standards. The Project's building shell and components, such as windows, roof systems: electrical and lighting systems: and heating, ventilating, and air conditioning systems would be required to meet applicable Title 24 Standards. Because the Project is required by State law to be designed, constructed, and operated to meet all applicable energy efficiency standards, the Project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency. Accordingly, impacts would be less than significant. Moreover, energy consumed by the Project's operation is calculated to be comparable to, or less than, energy consumed by other industrial uses of similar scale and intensity constructed and operating in California. On this basis, the Project would not result in inefficient, wasteful, or unnecessary energy consumption.

# 4.4 - Conclusion

Construction of the Project would result in fuel consumption from construction tools and equipment, vendor and haul truck trips, and vehicle trips generated by construction workers traveling to and from the site. Construction activities and corresponding fuel energy consumption would be temporary and localized. The use of diesel fuel and heavy-duty equipment would be a typical condition for similar construction projects. The construction equipment is anticipated to be well maintained and meet the appropriate tier ratings per CALGreen or EPA emissions standards to achieve adequate energy efficiency. Also, the Project must comply with the ARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. No unusual Project characteristics would cause construction equipment that would be less energy efficient than similar construction sites in other parts of the State. Construction trips would not result in unnecessary energy use since the Project site is served by Interstate Route 215, which provides the most direct routes from various areas of the region. Therefore, the Project's construction-related fuel consumption would not result in inefficient, wasteful, or unnecessary energy use compared with other regional construction sites.

The operation of the Project would result in higher vehicle miles traveled, fuel use, natural gas usage, and electrical demand compared to the Existing Land Use. The Project must comply with the ARB's Airborne Toxics Control Measure, which restricts heavy-duty diesel vehicle idling time to 5 minutes. The Project would comply with all energy efficiency requirements under Title 24 and all applicable city and county business and energy codes and ordinances. As a result, the operation of the Project would not result in inefficient, wasteful, or unnecessary energy use compared with other similar industrial projects in the region.

From the above conclusions, the Project would not result in wasteful, inefficient, and unnecessary energy consumption during construction or operation. Therefore, impacts associated with the potential of the Project to conflict with a state or local renewable energy or energy efficiency plan would be less than significant.

**Table 27: Estimated Project Construction Vehicle Fuel Usage** 

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Haul Trucks	4,526	0
Vendor Trucks	8,770	0
Worker Vehicles	0	12,396
Construction Vehicles Total	13,296	12,396
Source: see Data Attachment		

**Table 28: Total Project Construction Fuel Usage** 

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Construction Vehicles	13,296	12,396
Off-road Construction Equipment	12,127	0
Construction Total	25,423	12,396
Source: see Data Attachment		

**Table 29: Annual Operational Energy Requirements** 

Operational Source (value per year)				
	A manual N/A AT	Gallons o	Gallons of Fuel	
	Annual VMT	Gasoline	Diesel	
Transportation – Project Transportation – Existing Land Use Transportation - Net	1,776,426 922,562 853,864	52,285 27,153 25,132	63,581 33,020 30,561	
			İ	
	Thous	ands of Kilowatt-Hour	S	
Electricity – Project Electricity – Existing Land Use Electricity - Net	1,101,640 123,514 978,126			
	Thousand	ds of British Thermal U	nits	
Natural Gas – Project Natural Gas – Existing Land Use	4,540,604 555,375			
Natural Gas - Net	3,985,229			

# Barton Road Development Project July 5, 2023

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Source: see Data Attachment

# **Data Attachment**

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#### **Barton Road Development Project**

## Estimate of Construction and Operation LSTs

#### **Construction Activity**

Construciton ACtivity	Equipment	Number	Area Disturbed per 8 hr Day	Total Area Disturbed per	
Demolition	Concrete/Industrial saws	1	0	0	
	Excavators	3	0	0	
	Rubber Tired Dozers	2	0.5	1	
			Total		1
Site Prep	Rubber Tired Dozers	3	0.5	1.5	
	Crawler Tractors	4	0.5	2	
			Total		3.5
Grading	Excavator	1	0	0	
	Grader	1	0.5	0.5	
	Rubber Tired Dozers	1	0.5	0.5	
	Crawler Tractors	3	0.5	1.5	
			Total		2.5

Size of Maximum Daily Disturbed Construction Area: Size of Maximum Daily Disturbed Operation Area:

3.5 acres

Source Receptor Area:

5 acres (actual project area is approximately 15.3 acres)

Distance to Sensitive Receptor Distance to Worker Receptor:

35 meters for PM10 and PM2.5 (northeast corner of Project site)
25 meters for NO2 and CO (business facility at the southesast end of the Projet site)

Construction LST - NO2 and CO

	Distance (meters)		
	25	25	
Size	NOx	со	
(acres)	(lbs/day)	(lbs/day)	
2	170	972	
5	270	1748	
3.5	220	1360	

Construction LST - PM10

	Distance (meters)		
	25	50	35
Size	PM10	PM10	PM10
(acres)	(lbs/day)	(lbs/day)	(lbs/day)
2	7	22	13.0
5	14	44	26.0

Construction LST - PM2.5

		Distance (m)	
	25	50	35.0
Size	PM2.5	PM2.5	PM2.5
(acres)	(lbs/day)	(lbs/day)	(lbs/day)
2	4	6	4.8
5	8	10	8.8
3.5			

Operational LST = NO2 and CO

Distance (meters)			
Distance	25	25	
Size	NOx	со	
(acres)	(lbs/day)	(lbs/day)	
5	270	1748	

Operational LST - PM10

		Distance (meters)	
Size	25	50	35
(acres)	(lbs/day)	(lbs/day)	(lbs/day)
5	4	11	6.8

Operational LST - PM2.5

Size	25	50	35
(acres)	(lbs/day)	(lbs/day)	(lbs/day)
5	2	3	2.4

### **Barton Road Development Project**

### Demolition Quantities of Remaining Structures on the Northeast Section of the Project Site

<b>Demolition</b>	of	Existing	<b>Buildings</b>
-------------------	----	----------	------------------

Location	Area (ft2)	Height (ft)	Volume (ft3)
Building 1	6600	30	198000
Building 2	5600	30	168000
Building 3	1200	30	36000

Total Building Volume 402000 cubic feet

Total Demolition Volume 4913 cubic yards Note 1

Demolition Weight Conversion Note 2

1 cy = 0.5 tons of debris

Total Weight of Building Volume 2457 tons

### **Hardscape Demolition - Asphalt**

Area to be Demolished: 378000 ft2

Depth of Hardscape 0.5 feet

Total Volume of Hardscape 189000 ft3

7000 cu-yds

Volume/Weight of Asphalt 2025 pounds/cy-yd (broken asphalt) Note 3

Total Weight of 7087.5 tons
Demo'd Hardscape

Total Weight of Demolition 9544 tons

Assume 10,000 tons as a conservative amount

For conservative estimation purposes, assume the total debris material to be 10,000 tons

Note 1: FEMA Debris Estimating Field Guide

Note 2: CalEEMod User Guide, Page C-16

Note 3: Budget Dumpster, Website: https://www.budgetdumpster.com/resources/dumpster-weight-calculator.php

### **Barton Road Development Project**

#### **CalEEMod Construction Emission Summary**

Maximum Daily Emissions (pounds/day)										
2024	ROG	NOx	со	SOx	PM10F	PM10Exh	PM10Total	PM2.5Fug	PM2.5 Exh	PM2.5Total
Demolition										
Onsite	2.6	24.9	21.7	0.0	13.7	1.1	14.8	2.1	1.0	3.1
Offsite	0.1	4.6	3.4	0.0	1.1	0.1	1.2	0.3	0.0	0.3
Total	2.7	29.5	25.1	0.0	14.8	1.2	16.0	2.4	1.0	3.4
Site Prep										
Onsite	3.7	36.0	32.9	0.1	8.7	1.6	10.3	4.1	1.5	5.6
Offsite	0.1	0.1	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	3.8	36.1	34.0	0.1	8.7	1.6	10.3	4.1	1.5	5.6
Grading										
Onsite	1.9	18.2	18.8	0.0	3.4	8.0	4.2	1.4	0.8	2.2
Offsite	0.1	2.7	2.4	0.0	0.7	0.0	0.7	0.2	0.0	0.2
Total	2.0	20.9	21.2	0.0	4.1	8.0	4.9	1.6	0.8	2.4
Builing Construction			42.4			0.5	0.5		0.5	0.5
Onsite	1.2	11.2	13.1	0.0	0.0	0.5	0.5	0.0	0.5	0.5
Offsite	0.4	1.5	6.6	0.0	1.2	0.0	1.2	0.3	0.0	0.3
Total	1.6	12.7	19.7	0.0	1.2	0.5	1.7	0.3	0.5	0.8
2024 Max Onsite	3.7	36.0	32.9	0.1	13.7	1.6	14.8	4.1	1.5	5.6
2024 Max Total	3.8	36.1	34.0	0.1	14.8	1.6	16.0	4.1	1.5	5.6
2025	ROG	NOx	со	SOx	PM10F	PM10Exh	PM10Total	PM2.5Fug	PM2.5 Exh	PM2.5Total
Builing Construction		40.	12.0					0.0	0.	
Onsite	1.1	10.4	13.0	0.0	0.0	0.4	0.4	0.0	0.4	0.4
Offsite	0.3	1.5	5.0	0.0	1.2	0.0	1.2	0.3	0.0	0.3
Total	1.4	11.9	18.0	0.0	1.2	0.4	1.6	0.3	0.4	0.7
Paving										
Onsite	1.4	7.5	10.0	0.0	0.0	0.4	0.4	0.0	0.3	0.3
Offsite	0.1	0.1	0.9	0.0	0.2	0.0	0.2	0.1	0.0	0.1
Total	1.5	7.6	10.9	0.0	0.2	0.4	0.6	0.1	0.3	0.4
Architectural Coating										
Onsite	68.1	0.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Offsite	0.1	0.1	0.9	0.0	0.2	0.0	0.2	0.0	0.0	0.0
Total	68.2	1.0	2.0	0.0	0.2	0.0	0.2	0.0	0.0	0.0
2025 Max Onsite	68.1	10.4	13.0	0.0	0.0	0.4	0.4	0.0	0.4	0.4
2025 Max Total	68.2	11.9	18.0	0.0	1.2	0.4	1.6	0.3	0.4	0.7
2024 2025 May Onsite	60.1	26.0	22.0	0.1	12.7	1.6	14.0	4.1	1.5	F 6
2024 - 2025 Max Onsite 2024-2025 Max Total	68.1 68.2	36.0 36.1	32.9 34.0	0.1 0.1	13.7 14.8	1.6 1.6	14.8	4.1 4.1	1.5 1.5	5.6 5.6
2024-2025 IVIAX TOTAL	00.2	30.1	34.0	0.1	14.0	1.0	16.0	4.1	1.5	5.0
Regional Threshold	75	100	550	150			150			55
Exceeds Threshold	NO	NO	NO	NO			NO			NO
I CT Throshold		220	1260				20			7
LST Threshold		220	1360				20			7
Exceeds LST		NO	NO				NO			NO
Summary-Regional	ROG	NOx	со	SOx	PM10Tota	PM2.5 Total				
2024										
Demolition	2.7	29.5	18.0	0.0	16.0	3.4				
Site Preparation	3.8	36.1	34.0	0.1	10.3	5.6				
Grading	2.0	20.9	21.2	0.0	4.9	2.4				
Building Construction Max Daily Emissions	1.6 3.8	12.7	19.7 34.0	0.0	1.7 16.0	0.8				
2025	3.0	36.1	34.0	0.1	16.0	5.6				
Buidling Construction	1.4	11.9	18.0	0.0	1.6	0.7				
Paving	1.5	7.6	10.9	0.0	0.6	0.4				
Architectural Coating	68.2	1.0	2.0	0.0	0.2	0.0				
Max Daily Emissions	68.2	11.9	18.0	0.0	1.6	0.7				
Max 2024-2025	68.2	36.1	34.0	0.1	16.0	5.6				
Summary Local	NO:		DM10T-4-1	DM2 5 T-+ 1						
Summary-Local 2024	NOx	со	LIAITO I OCAI	PM2.5 Total						
Demolition	24.9	21.7	14.8	3.1						
Site Preparation	36.0	32.9	10.3	5.6						
Grading	18.2	18.8	4.2	2.2						
Building Construction	11.2	18.8	0.5	0.5						
Max Daily Emissions	36.0	32.9	14.8	5.6						
2025										
<b>Building Construction</b>	10.4	13.0	0.4	0.4						
Paving	7.5	10.0	0.4	0.3						
Architectural Coating	0.9	1.1	0.0	0.0						
Max 2025	10.4	13.0	0.4	0.4						
	26.5									
Max 2024-2025	36.0	32.9	14.8	5.6						

# **Barton Road Development Project**

### **Construction Equipment Fuel Usage**

Activity	Equipment	Project Number	Project Hours per day	Default Horse-power	Default Load Factor	Days of Construction	Total Horsepower- hours	Fuel Rate (gal/hp-hr)	Fuel Use (gallons)
	Excavators	3	8	36	0.38	10	3,283	0.019774	65
Demolition	Concrete/Industrial Saws	1	8	33	0.73	10	1,927	0.020814	40
	Rubber Tired Dozer	2	8	367	0.40	10	23,488	0.020482	481
Site Preparation	Crawler Tractor	4	8	84	0.37	10	9,946	0.019087	190
Site Preparation	Rubber Tired Dozer	3	8	367	0.40	10	35,232	0.020482	722
	Excavators	1	8	158	0.38	30	14,410	0.019774	285
Grading	Rubber Tired Dozer	1	8	247	0.40	30	23,712	0.020482	486
	Crawler Tractor	3	8	84	0.37	30	22,378	0.019087	427
	Graders	1	8	187	0.41	30	18,401	0.021157	389
	Crane	1	7	367	0.29	230	171,352	0.014889	2,551
	Forklifts	3	8	82	0.20	230	90,528	0.020814	1,884
<b>Building Construction</b>	Tractors/Loaders/Backhoes	3	7	84	0.37	230	150,116	0.019087	2,865
	Welders	1	8	46	0.45	230	38,088	0.020814	793
	Generator Set	1	8	14	0.74	230	19,062	0.020814	397
	Pavers	2	8	81	0.42	20	10,886	0.021528	234
Paving	Paving Equipment	2	8	89	0.36	20	10,253	0.018324	188
	Rollers	2	8	36	0.38	20	4,378	0.019412	85
Architectural Coating	Air Compressor	1	6	37	0.48	20	2,131	0.020814	44

Fuel Consumption rates derived from the ARB OFFROAD2021

Total 12,127

#### Project Fuel Consumption from Construction Vehicles (Derived from the ARB EMFAC2021 Mobile Source Emission Model)

#### **Emission Factors**

						VMT	: Fuel Consumption	Fuel Rate	
Region (Air Basin)	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	(miles/day)	(1000 gallons/day)	(miles/gallon)	
SCAQMD	2024	MHDT-T6	Aggregated	Aggregated	DSL	5002001	560.4	8.9	
SCAQMD	2024	HHDT-T7	Aggregated	Aggregated	DSL	13368764	2208.3	6.1	
							Average (50%/50%)	7.5	
SCAQMD	2024	LDA	Aggregated	Aggregated	GAS	218661478	7460	29.3	
SCAQMD	2024	LDT1	Aggregated	Aggregated	GAS	18293109	749	24.4	
SCAQMD	2024	LDT2	Aggregated	Aggregated	GAS	105566684	4409	23.9	
						Average	(50%/25%/25%)	27	
SCAQMD	2024	MDV	Aggregated	Aggregated	GAS	62814788	3227	19.5	
SCAQMD	2024	LHDT1	Aggregated	Aggregated	GAS	8100729	594	13.6	
SCAQMD	2024	LHDT1	Aggregated	Aggregated	DSL	4521713	220	20.5	
SCAQMD	2024	LHDT2	Aggregated	Aggregated	GAS	1194342	100	11.9	
SCAQMD	2024	LHDT2	Aggregated	Aggregated	DSL	1985333	115	17.3	

#### Vehicle Assumptions (CalEEMod)

Haul trucks represented by HHDT-T7 (heavy -heavy duty haul truck)

MHDT-T6 (medium heavy duty haul truck)

Vendor trucks assu ed to be 50% HHDT-T7 and MHDT-T6)

LDA (light duty automobile for worker vehicles)

LDT1 (light duty truck 1 for wortker vehicles)

LDT2 (light duty truck 2 for worker vehicles)

Worker vehicles represented as 50% LDT, 25% LHT1, and 25% LDT2

Construction Vehicle Use (Derived from the CalEEMod model output)

#### **Fuel Consumption for Haul Trucks**

Construction Activity	No Haul Truck Trips/day	Duration (days)	Trip Length (miles)	VMT (miles)	Fuel	Fuel Rate (miles/gallon)	DSL Fuel (gallons)
Demolition	50	10	20	10000	DSL	6.1	1652
Site Preparation	0	10	20	0	DSL	6.1	0
Grading	29	30	20	17400	DSL	6.1	2874
<b>Building Construction</b>	0	230	20	0	DSL	6.1	0
Paving	0	20	20	0	DSL	6.1	0
Architectural Coating	0	20	20	0	DSL	6.1	0
Total	79			27400	0	Total	4526

Construction Activity	No Vendor Truck Trips/day	Duration (days)	Trip Length (miles)	VMT (miles)	Fuel	Fuel Rate (miles/gallon)	DSL Fuel (gallons)
Demolition	0	10	10.2	0	DSL	7.5	0
Site Preparation	0	10	10.2	0	DSL	7.5	0
Grading	0	30	10.2	0	DSL	7.5	0
<b>Building Construction</b>	28	230	10.2	65688	DSL	7.5	8770
Paving	0	20	10.2	0	DSL	7.5	0
Architectural Coating	0	20	10.2	0	DSL	7.5	0
						Total	8770

Activity	No Worker Vehicles Trips/day	Duration (days)	Trip Length (miles)	VMT (miles)	Fuel	Fuel Rate (miles/gallon)	Gas Fuel (gallons)
Demolition	15	10	18.5	2775	GAS	27	104
Site Preparation	18	10	18.5	3330	GAS	27	125
Grading	15	30	18.5	8325	GAS	27	311
<b>Building Construction</b>	72	230	18.5	306360	GAS	27	11455
Paving	15	20	18.5	5550	GAS	27	208
Architectural Coating	14	20	18.5	5180	GAS	27	194

Summary	Gallons
Total -DSL	13296
Ttal - GAS	12396
	25692

12396

Total

# Barton Road Development Project - Construction Detailed Report

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# 1. Basic Project Information

# 1.1. Basic Project Information

Data Field	Value
Project Name	Barton Road Development Project - Construction
Construction Start Date	1/02/2024
Lead Agency	City of Grand Terrace
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	14.2
Location	34.03317023813776, -117.32939795864475
County	San Bernardino-South Coast
City	Grand Terrace
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5379
EDFZ	10
Electric Utility	Colton Electric Utility Department
Gas Utility	Southern California Gas
App Version	2022.1.1.14

# 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	53.6	1000sqft	1.23	53,623	0.00	_	_	_

Barton Road Industrial Project Data Attachment

Unrefrigerated Warehouse-No Rail	118	1000sqft	2.71	117,877	26,705	_	_	_
Other Asphalt Surfaces	3.50	Acre	3.50	0.00	0.00	_	_	_
Parking Lot	1.20	Acre	1.20	0.00	0.00	_	_	_

# 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

# 2.1. Construction Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	-
Unmit.	1.94	1.60	12.6	19.8	0.03	0.51	1.18	1.69	0.47	0.29	0.76	_	4,316	4,316	0.21	0.19	6.60	4,383
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	4.43	68.2	36.1	34.0	0.06	1.60	14.8	15.9	1.47	4.08	5.55	_	7,144	7,144	0.54	0.60	0.21	7,337
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	1.54	3.90	10.8	14.1	0.02	0.44	1.66	2.10	0.41	0.47	0.88	_	3,225	3,225	0.17	0.16	1.94	3,278
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.28	0.71	1.98	2.56	< 0.005	0.08	0.30	0.38	0.07	0.09	0.16	_	534	534	0.03	0.03	0.32	543
Exceeds (Daily Max)		_	-	_	-	_	_	_	-	-	_	-	-	-	_	_	_	_
nax)		n Road Indu Attachment	strial Projec	t												Pag	e A - 11	

Threshol	_	75.0	100	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No		_	No	_	_	No	_	_	_	_	_	_	_
Exceeds (Average Daily)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_	_
Threshol d	_	75.0	100	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_

# 2.2. Construction Emissions by Year, Unmitigated

Year	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	1.94	1.60	12.6	19.8	0.03	0.51	1.18	1.69	0.47	0.29	0.76	_	4,316	4,316	0.21	0.19	6.60	4,383
Daily - Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	4.43	3.73	36.1	34.0	0.06	1.60	14.8	15.9	1.47	4.08	5.55	_	7,144	7,144	0.54	0.60	0.21	7,337
2025	1.78	68.2	11.8	17.8	0.03	0.44	1.18	1.63	0.41	0.29	0.70	_	4,196	4,196	0.21	0.19	0.16	4,257
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
2024	1.54	1.25	10.8	14.1	0.02	0.44	1.66	2.10	0.41	0.47	0.88	_	3,225	3,225	0.17	0.16	1.94	3,278
2025	0.16	3.90	1.09	1.66	< 0.005	0.04	0.08	0.13	0.04	0.02	0.06	_	334	334	0.02	0.01	0.18	338
Annual	_	_	_	-	_	_	_	-	_	_	_	_	_	_	-	_	_	_
2024	0.28	0.23	1.98	2.56	< 0.005	0.08	0.30	0.38	0.07	0.09	0.16	_	534	534	0.03	0.03	0.32	543
2025	0.03	0.71	0.20	0.30	< 0.005	0.01	0.02	0.02	0.01	< 0.005	0.01	_	55.2	55.2	< 0.005	< 0.005	0.03	55.9

# 3. Construction Emissions Details

# 3.1. Demolition (2024) - Unmitigated

	TOG	ROG	NOx	CO	SO2	PM10E	<u> </u>	PM10T	PM2.5E		PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	- M2.00		_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	-	-	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		2.62	24.9	21.7	0.03	1.06	_	1.06	0.98	_	0.98	_	3,425	3,425	0.14	0.03	_	3,437
Demolitio n	_	_	_	_	_	_	13.7	13.7	_	2.07	2.07	_	_	_	_	_	_	_
Onsite truck	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	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.07	0.68	0.60	< 0.005	0.03	_	0.03	0.03	_	0.03	_	93.8	93.8	< 0.005	< 0.005	_	94.2
Demolitio n	_	_	_	_	_	_	0.38	0.38	_	0.06	0.06	_	_	_	_	_	_	_
Onsite truck	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.12	0.11	< 0.005	0.01	_	0.01	< 0.005	_	< 0.005	_	15.5	15.5	< 0.005	< 0.005	_	15.6
Demolitio n	_	_	_	_	_	_	0.07	0.07	_	0.01	0.01	_	_	_	_	_	_	_

Onsite truck	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	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.08	0.07	0.09	0.96	0.00	0.00	0.20	0.20	0.00	0.05	0.05	_	198	198	0.01	0.01	0.02	200
Vendor	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	0.00
Hauling	0.46	0.07	4.51	2.43	0.02	0.07	0.93	0.99	0.04	0.25	0.30	_	3,521	3,521	0.39	0.57	0.19	3,700
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	5.50	5.50	< 0.005	< 0.005	0.01	5.58
Vendor	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	0.00
Hauling	0.01	< 0.005	0.12	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	96.5	96.5	0.01	0.02	0.09	101
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	0.91	0.91	< 0.005	< 0.005	< 0.005	0.92
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	16.0	16.0	< 0.005	< 0.005	0.01	16.8

# 3.3. Site Preparation (2024) - Unmitigated

		(,		, ,					<b>J</b> ,									
Location	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily,	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Summer																		
(Max)																		

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		3.65	36.0	32.9	0.05	1.60	_	1.60	1.47	_	1.47	_	5,296	5,296	0.21	0.04	_	5,314
Dust From Material Movemen	·:	_	_	_	_		8.49	8.49	_	4.03	4.03	_						
Onsite truck	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	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.10	0.99	0.90	< 0.005	0.04	_	0.04	0.04	_	0.04	_	145	145	0.01	< 0.005	_	146
Dust From Material Movemen	<u> </u>	_	_	_	_	_	0.23	0.23	_	0.11	0.11	_	_	_	_	_	_	_
Onsite truck	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.02	0.18	0.16	< 0.005	0.01	_	0.01	0.01	_	0.01	_	24.0	24.0	< 0.005	< 0.005	_	24.1
Dust From Material Movemen	<u> </u>	_	_	_	_	_	0.04	0.04	_	0.02	0.02	_	_	_	_	_	_	_
Onsite truck	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	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_		_
Worker	0.10	0.09	0.10	1.12	0.00	0.00	0.23	0.23	0.00	0.05	0.05	_	231	231	0.01	0.01	0.03	234
Vendor	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	0.00
Hauling	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	0.00
Average Daily	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	6.42	6.42	< 0.005	< 0.005	0.01	6.51
Vendor	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	0.00
Hauling	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.06	1.06	< 0.005	< 0.005	< 0.005	1.08
Vendor	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	0.00
Hauling	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	0.00

# 3.5. Grading (2024) - Unmitigated

Location		ROG				PM10E			PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.90	18.2	18.8	0.03	0.84	_	0.84	0.77	_	0.77	_	2,958	2,958	0.12	0.02	_	2,969

_																		
Dust From Material Movemen	<u> </u>		_				3.39	3.39	_	1.40	1.40			_	_		_	_
Onsite truck	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	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.16	1.50	1.55	< 0.005	0.07	_	0.07	0.06	_	0.06	_	243	243	0.01	< 0.005	_	244
Dust From Material Movemen	_	_	_	_	-	_	0.28	0.28	_	0.12	0.12		_	_	_	_	_	_
Onsite truck	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.03	0.27	0.28	< 0.005	0.01	_	0.01	0.01	_	0.01	_	40.3	40.3	< 0.005	< 0.005	_	40.4
Dust From Material Movemen	<u> </u>	_	_	_	_	_	0.05	0.05	_	0.02	0.02	_	_	_	_	_	_	_
Onsite truck	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	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	-	_	_	-	_	_		_	_	_	_	-	_		_	_	_	-
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Worker	0.08	0.07	0.09	0.96	0.00	0.00	0.20	0.20	0.00	0.05	0.05	_	198	198	0.01	0.01	0.02	200
Vendor	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	0.00
Hauling	0.27Bart	on Roog Indus	tr <u>ja</u> 63roject	1.42	0.01	0.04	0.54	0.58	0.03	0.15	0.17	_	2,054	2,054	0.23	0.33 Pag	e 6.11 <sup>7</sup>	2,158

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Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	_	16.5	16.5	< 0.005	< 0.005	0.03	16.7
Vendor	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	0.00
Hauling	0.02	< 0.005	0.22	0.12	< 0.005	< 0.005	0.04	0.05	< 0.005	0.01	0.01	_	169	169	0.02	0.03	0.15	178
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	2.73	2.73	< 0.005	< 0.005	0.01	2.77
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	27.9	27.9	< 0.005	< 0.005	0.03	29.4

# 3.7. Building Construction (2024) - Unmitigated

		110 (1107 010	y ioi dali	. j, j.		,		io, diety i c	G.G.I.J, II	, 9	ai ii raaij							
Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.20	11.2	13.1	0.02	0.50	_	0.50	0.46	_	0.46	_	2,398	2,398	0.10	0.02	_	2,406
Onsite truck	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	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.20	11.2	13.1	0.02	0.50	_	0.50	0.46	_	0.46	_	2,398	2,398	0.10	0.02	_	2,406
Onsite truck	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	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Off-Road Equipmen		0.69	6.48	7.57	0.01	0.29	_	0.29	0.26	_	0.26	_	1,384	1,384	0.06	0.01	_	1,389
Onsite truck	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.13	1.18	1.38	< 0.005	0.05	_	0.05	0.05	_	0.05	_	229	229	0.01	< 0.005	_	230
Onsite truck	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	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.41	0.38	0.35	6.09	0.00	0.00	0.94	0.94	0.00	0.22	0.22	_	1,037	1,037	0.04	0.04	4.15	1,053
Vendor	0.09	0.03	1.01	0.54	0.01	0.01	0.24	0.25	0.01	0.07	0.08	_	881	881	0.07	0.13	2.46	925
Hauling	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	0.00
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.39	0.35	0.41	4.60	0.00	0.00	0.94	0.94	0.00	0.22	0.22	_	950	950	0.05	0.04	0.11	962
Vendor	0.09	0.02	1.05	0.55	0.01	0.01	0.24	0.25	0.01	0.07	0.08	_	882	882	0.07	0.13	0.06	923
Hauling	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	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.22	0.20	0.24	2.79	0.00	0.00	0.54	0.54	0.00	0.13	0.13	_	556	556	0.03	0.02	1.03	564
Vendor	0.05	0.01	0.61	0.32	< 0.005	0.01	0.14	0.15	0.01	0.04	0.05	_	509	509	0.04	0.08	0.61	533
Hauling	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.04	0.04	0.04	0.51	0.00	0.00	0.10	0.10	0.00	0.02	0.02	_	92.1	92.1	< 0.005	< 0.005	0.17	93.4
Vendor	0.01	< 0.005	0.11	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	_	84.2	84.2	0.01	0.01	0.10	88.3
Hauling	0.00 <sub>Barto</sub>	on Road Indu Attachment	stra Peroject	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_	0.00	0.00	0.00	0.00 Pag	<sub>je</sub> Ø.00/9	0.00

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# 3.9. Building Construction (2025) - Unmitigated

		ì			SO2	ual) and			_			DOOG.	NDOOS	COOT	0114	Noo	<u></u>	000-
	TOG	ROG	NOx	СО	502	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		1.13	10.4	13.0	0.02	0.43	_	0.43	0.40	_	0.40	_	2,398	2,398	0.10	0.02	_	2,406
Onsite truck	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	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.06	0.55	0.69	< 0.005	0.02	_	0.02	0.02	_	0.02	_	127	127	0.01	< 0.005	_	127
Onsite truck	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.10	0.13	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	21.0	21.0	< 0.005	< 0.005	_	21.0
Onsite truck	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	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Worker	0.35	0.31	0.35	4.23	0.00	0.00	0.94	0.94	0.00	0.22	0.22	_	931	931	0.04	0.04	0.10	942
Vendor	0.08	0.02	1.01	0.52	0.01	0.01	0.24	0.25	0.01	0.07	0.08	_	868	868	0.07	0.13	0.06	909
Hauling	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	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.02	0.02	0.02	0.24	0.00	0.00	0.05	0.05	0.00	0.01	0.01	_	49.9	49.9	< 0.005	< 0.005	0.09	50.6
Vendor	< 0.005	< 0.005	0.05	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	45.8	45.8	< 0.005	0.01	0.06	48.0
Hauling	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	8.26	8.26	< 0.005	< 0.005	0.01	8.37
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	7.59	7.59	< 0.005	< 0.005	0.01	7.95
Hauling	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	0.00

# 3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.80	7.45	9.98	0.01	0.35	_	0.35	0.32	_	0.32	_	1,511	1,511	0.06	0.01	_	1,517
Paving	_	0.62	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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	0.00
Average Daily	— Barto	— n Road Indu	—	_	_	_	_	_	_	_	_	_	_	_	_	— Pag	— e A - 21	_

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Off-Road	0.05	0.04	0.41	0.55	< 0.005	0.02	_	0.02	0.02	_	0.02	_	82.8	82.8	< 0.005	< 0.005	_	83.1
Equipmen																		
Paving	_	0.03	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.07	0.10	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	-	13.7	13.7	< 0.005	< 0.005	_	13.8
Paving	_	0.01	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.07	0.06	0.07	0.88	0.00	0.00	0.20	0.20	0.00	0.05	0.05	_	194	194	0.01	0.01	0.02	196
Vendor	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	0.00
Hauling	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	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	10.8	10.8	< 0.005	< 0.005	0.02	10.9
Vendor	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	0.00
Hauling	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.78	1.78	< 0.005	< 0.005	< 0.005	1.81
Vendor	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	0.00
Hauling	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	0.00

# 3.13. Architectural Coating (2025) - Unmitigated

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T		PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.13	0.88	1.14	< 0.005	0.03	_	0.03	0.03	_	0.03	_	134	134	0.01	< 0.005	_	134
Architect ural Coatings	_	68.0	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		0.01	0.05	0.06	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	7.32	7.32	< 0.005	< 0.005	_	7.34
Architect ural Coatings	_	3.73	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Onsite truck	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Off-Road Equipmen		< 0.005	0.01	0.01	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.21	1.21	< 0.005	< 0.005	_	1.22
Architect ural Coatings	_	0.68	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_

Onsite truck	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	0.00
Offsite	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	0.07	0.06	0.07	0.85	0.00	0.00	0.19	0.19	0.00	0.04	0.04	_	186	186	0.01	0.01	0.02	188
Vendor	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	0.00
Hauling	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	0.00
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	_	10.3	10.3	< 0.005	< 0.005	0.02	10.5
Vendor	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	0.00
Hauling	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	0.00
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	_	1.71	1.71	< 0.005	< 0.005	< 0.005	1.74
Vendor	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	0.00
Hauling	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	0.00

# 4. Operations Emissions Details

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

. `	Jiitoiia	· Onatan	110 (15) 44	y ioi aan	.y, .o., y.	ioi aiiii	aai, aiia	01.100 (1	Drady 10	adiiy, iv	, y	ailiaaij							
	Vegetatio	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
	n	Barton	Road Indus	trial Project													Page	A - 24	
			Attachment	striai i roject						40 / 00									

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	<u> </u>	_	_	<u> </u>	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

O 1 1 1 0 1 1 0 K		10 (1.07 0.01		iy, tori/yr		<u> </u>												
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

							,												
																		_	
	Shaciae	1003	IROG	LNOV	ICO .	1802	101/1106	101/1101	1 1 1 1 1 1 1 1 1 1	ロロバク ちト	101/12/51)	ロロバク ちょ	IRCO2	INIRCO2	I CO2 I	ICHA	INIZO	I R	CO2e
	Jpecies	100	INOU		100	1002	II IVI IOE			I IVIZ.UL	11 1012.00	1 1412.01	10002	INDUUZ	10021			1 \	0026
- 1	species	100	RUG	INUX		302	PIVITUE	PINITUD	PIVITUT	PIVIZ.DE	PIVIZ.3D	PIVIZ.51	BCO2	INDUUZ	10021	UП <del>4</del>	INZU	17	

Barton Road Industrial Project Data Attachment

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 5. Activity Data

# 5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	1/02/2024	1/15/2024	5.00	10.0	_
Site Preparation	Site Preparation	1/16/2024	1/29/2024	5.00	10.0	_
Grading	Grading	1/30/2024	3/11/2024	5.00	30.0	_
Building Construction	Building Construction	3/12/2024	1/27/2025	5.00	230	_
Paving	Paving	1/28/2025	2/24/2025	5.00	20.0	_
Architectural Coating	Architectural Coating	2/25/2025	3/24/2025	5.00	20.0	_

# 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Demolition	Excavators	Diesel	Average	3.00	8.00	36.0	0.38
Demolition	Rubber Tired Dozers	Diesel	Average	2.00	8.00	367	0.40
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00	8.00	367	0.40
Site Preparation	Crawler Tractors	Diesel	Average	4.00	8.00	84.0	0.37
Grading	Excavators	Diesel	Average	1.00	8.00	36.0	0.38

Barton Road Industrial Project Data Attachment

Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Grading	Crawler Tractors	Diesel	Average	3.00	8.00	84.0	0.37
Building Construction	Cranes	Diesel	Average	1.00	7.00	367	0.29
Building Construction	Forklifts	Diesel	Average	3.00	8.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backh oes	Diesel	Average	3.00	7.00	84.0	0.37
Building Construction	Welders	Diesel	Average	1.00	8.00	46.0	0.45
Paving	Pavers	Diesel	Average	2.00	8.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	2.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	2.00	8.00	36.0	0.38
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

# 5.3. Construction Vehicles

# 5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Grading	_	_	_	_
Grading	Worker	15.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	_	10.2	HHDT,MHDT
Grading	Hauling	29.2	20.0	HHDT
Grading	Onsite truck	_	_	HHDT
Building Construction	_	_	_	_
Building Construction	Worker	72.0	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	28.1	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Const <b>Baction</b> Road Industrial Projection	cOnsite truck	_	_	HHDT Page A - 28

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Paving	_	_	_	_
Paving	Worker	15.0	18.5	LDA,LDT1,LDT2
Paving	Vendor	_	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	_	_	HHDT
Architectural Coating	_	_	_	_
Architectural Coating	Worker	14.4	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	_	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	_	_	HHDT
Demolition	_	_	_	_
Demolition	Worker	15.0	18.5	LDA,LDT1,LDT2
Demolition	Vendor	_	10.2	HHDT,MHDT
Demolition	Hauling	50.0	20.0	HHDT
Demolition	Onsite truck	_	_	HHDT
Site Preparation	_	_	_	_
Site Preparation	Worker	17.5	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	_	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	_	_	HHDT

### 5.4. Vehicles

# 5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%

Barton Road Industrial Project Data Attachment

# 5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	0.00	0.00	246,836	82,279	10,977

# 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)		Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	10,000	_
Site Preparation	_	_	35.0	0.00	_
Grading	7,000	_	45.0	0.00	_
Paving	0.00	0.00	0.00	0.00	4.70

### 5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

# 5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Manufacturing	0.00	0%
Unrefrigerated Warehouse-No Rail	0.00	0%
Other Asphalt Surfaces	3.50	100%
Parking Lot	1.20	100%

Barton Road Industrial Project Data Attachment

### 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	453	0.03	< 0.005
2025	0.00	453	0.03	< 0.005

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type Vegetation Soil Type Initial Acres Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type Initial Acres Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type Number Electricity Saved (kWh/year) Natural Gas Saved (btu/year)

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.3	annual days of extreme heat
Extreme Precipitation	2.45	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	0	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	0	0	0	N/A
Wildfire	0	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

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Data Attachment

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

### 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state

THE MAXIMA	The maximal Cal Environment of the Tee. Things deere (1.0., greater that be) remote a higher pointed to earlier defined to earl		
Indicator		Result for Project Census Tract	
Exposure In	dicators	_	
AQ-Ozone		98.7	
AQ-PM		84.1	
AQ-DPM	Barton Road Industrial Project Data Attachment	96.1 Page A - 33	
	Daia Anacomem		

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Drinking Water	61.3
Lead Risk Housing	49.4
Pesticides	0.00
Toxic Releases	60.4
Traffic	92.4
Effect Indicators	_
CleanUp Sites	69.4
Groundwater	17.5
Haz Waste Facilities/Generators	27.1
Impaired Water Bodies	12.5
Solid Waste	70.4
Sensitive Population	_
Asthma	62.9
Cardio-vascular	69.1
Low Birth Weights	5.03
Socioeconomic Factor Indicators	_
Education	75.4
Housing	90.5
Linguistic	67.2
Poverty	88.3
Unemployment	74.1

# 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	_
Above Poverty	5.697420762

Barton Road Industrial Project
Data Attachment

Employed	17.64403952
Median HI	5.684588733
Education	
Bachelor's or higher	18.85025022
High school enrollment	100
Preschool enrollment	34.98011036
Transportation	_
Auto Access	22.93083537
Active commuting	53.56088798
Social	_
2-parent households	3.977928911
Voting	10.29128705
Neighborhood	_
Alcohol availability	39.09919158
Park access	4.427049917
Retail density	58.68086745
Supermarket access	54.1511613
Tree canopy	11.06120878
Housing	_
Homeownership	23.90606955
Housing habitability	30.07827538
Low-inc homeowner severe housing cost burden	56.83305531
Low-inc renter severe housing cost burden	6.082381625
Uncrowded housing	65.16104196
Health Outcomes	_
Insured adults	44.70678814
Arthritis	0.0

Barton Road Industrial Project Data Attachment

Asthma ER Admissions	23.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	6.0
Cognitively Disabled	33.5
Physically Disabled	63.7
Heart Attack ER Admissions	10.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	65.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	_
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	_
Wildfire Risk	0.6
SLR Inundation Area	0.0
Children	0.5
Elderly	95.7
English Speaking	44.9

Foreign-born	28.3
Outdoor Workers	63.6
Climate Change Adaptive Capacity	_
Impervious Surface Cover	56.4
Traffic Density	90.0
Traffic Access	23.0
Other Indices	_
Hardship	79.0
Other Decision Support	_
2016 Voting	16.4

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	83.0
Healthy Places Index Score for Project Location (b)	8.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

# 8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	Schedule derived from the provided Project construction schedule
Construction: Architectural Coatings	
Construction: Off-Road Equipment	
Construction: Dust From Material Movement	Soil import amount provided by the client

#### Barton Road Development Project

2025

Vehicle Tiip Summary

Building Size Total (sq-ft) 53,623 Building Land Use 1 - Manufacturing Total 53,623

4.75 trips/TSF as per Traffic Trip Generation Memorandum

Building Land Use 1 - Manufacturing trips/day (Non-PCE) 255 Total 255

	Vehicle Distribution	Daily Trip
LDA (Passenger Vehicles)	72.50%	185
LHDT (2 axle truck)	4.60%	12
MHDT(3 axle truck)	5.70%	15
HHDT (4+ axle truck)	17.20%	44
	100.0%	255

#### Passenger Vehicle Fleet Mix

	EMFAC2021	Redistribution of	
	Fleet Mix	% Total	Daily Trips
LDA	54.20%	59.1%	109
LDT1	6.10%	6.7%	12
LDT2	18.50%	20.2%	37
MDV	12.90%	14.1%	26
Total	91.70%	100.0%	185

#### Light Heavy Duty Fleet Mix

	EWIFACZUZI	Redistribution of	
	Fleet Mix	% Total	Daily Trips
LHDT1	2.85%	79.8%	9
LHDT2	0.72%	20.2%	2
Total	3.57%	100.0%	12

## CalEEMod Assumption: Passenger Vehicles + Local Trucks: LDA+LDT+MDT+LHDT w/CalEEMod default trip distances

W/OaiLLinou deladit trip distances			
			Daily Trip Rate
Fleet Mix	Total Trips	%Total	(Trips/TSF)
LDA	109	55.6%	
LDT1	12	6.3%	
LDT2	37	19.0%	
MDV	26	13.2%	
LHDT1	9	4.8%	
LHDT2	2	1.2%	
Total	196	100.0%	3.66

#### CalEEMod Assumption: Haul Trucks: MHDT +HHDT w/ trip distance of 40 miles

Fleet Mix MHDT HHDT	<b>Total Trips</b> 15 44	%Total 24.9% 75.1%	Daily Trip Rate (Trips/TSF)
Total	58	100.0%	1.09
Composite Fleet Mix	Number of Daily Trips	% Total	

Composite Fleet Mix	Number of Daily Trips	% Total
LDA	109	42.9%
LDT1	12	4.8%
LDT2	37	14.6%
MDV	26	10.2%
LHDT1	9	3.7%
LHDT2	2	0.9%
MHDT	15	5.7%
HHDT	44	17.2%
	255	100.0%

#### Hauil Truck Daily Trip Summary

Vehicle	Manufacturing	Warehouse	Total
MHDT	15	11	26
HHDT	44	35	78
Total	58	46	104
Total Size of Project (square feet)			53.623
rotal oizo oi i rojoot (oqualo loot)			33,023

combined Fleet Mix				
	Manufacturing	Warehouse	Total	% Total
DA	109	86	196	42.9%
DT1	12	10	22	4.8%
DT2	37	29	67	14.6%
IDT	26	21	47	10.2%
HDT1	9	7	17	3.7%
HDT2	2	2	4	0.9%
IHDT	15	11	26	5.7%
IHDT	44	35	78	17.2%

4.75

#### **Barton Road Development Project**

2025

Vehicle Tiip Summary

 Building Size

 Total

 Building
 (sq-ft)

 Land Use 2 - Warehouse
 117,877

 Total
 117,877

Trip Generation

Trip Generation Rate - Warehouse

1.71 trips/TSF as per Traffic Trip Generation Memorandum

1.71

Building trips/day (Non-PCE)
Land Use 2 - Warehouse 202

Vehicle Fleet Mix and Dai	y Trips from Trip	Generation Memo - Warehouse
---------------------------	-------------------	-----------------------------

	Vehicle Distribution	Daily Trips
LDA (Passenger Vehicles)	72.50%	146
LHDT (2 axle truck)	4.60%	9
MHDT(3 axle truck)	5.70%	11
HHDT (4+ axle truck)	17.20%	35
	100.0%	202

Passenger Vehicle Fleet Mix

	EMFAC2021	Redistribution of	
	Fleet Mix	% Total	Daily Trips
LDA	54.20%	59.1%	86
LDT1	6.10%	6.7%	10
LDT2	18.50%	20.2%	29
MDV	12.90%	14.1%	21
Total	91.70%	100.0%	146

Light Heavy Duty Fleet Mix

	EWIFAC2021	Redistribution of	
	Fleet Mix	% Total	Daily Trip
LHDT1	2.85%	79.8%	7
LHDT2	0.72%	20.2%	2
Total	3.57%	100.0%	9

CalEEMod Assumption: Passenger Vehicles + Local Trucks: LDA+LDT+MDT+LHDT w/CalEEMod default trip distances

			Daily Trip Rate
Fleet Mix	Total Trips	%Total	(Trips/TSF)
LDA	86	55.6%	
LDT1	10	6.3%	
LDT2	29	19.0%	
MDV	21	13.2%	
LHDT1	7	4.8%	
LHDT2	2	1.2%	
Total	155	100.0%	1.32

CalEEMod Assumption: Haul Trucks: MHDT +HHDT w/ trip distance of 40 miles

Fleet Mix MHDT HHDT	Total Trips 11 35	%Total 24.9% 75.1%	Daily Trip Rate (Trips/TSF)
Total	46	100.0%	0.39

Composite Fleet Mix	Number of Daily Trips	% Total
LDA	86	42.9%
LDT1	10	4.8%
LDT2	29	14.6%
MDV	21	10.2%
LHDT1	7	3.7%
LHDT2	2	0.9%
MHDT	11	5.7%
HHDT	35	17.2%
	202	100.0%

# **Barton Road Development Project**

2025

**Estimation of Operational Vehicle Fuel Use** 

Annual Operational VMT Manufacturing (non haul truck) 991524
Warehouse (non-haul truck) 784902
Project Haul Trucks 1537395

Total 1776426 miles per year

Vehicle Class	Fleet Mix	Annual VMT (miles/year)	Fuel Rate (miles/gallon)	Annual Fuel Use (gallons/year)	Fuel
LDA	42.9%	761,229	29.9	25,435	GAS
LDT1	4.8%	85,673	23.4	3,659	GAS
LDT2	14.6%	259,829	24.6	10,574	GAS
MDV	10.2%	181,178	20.0	9,078	GAS
LHDT1-DSL	1.3%	23,830	20.5	1,161	DSL
LHDT1-GAS	2.3%	41,405	13.6	3,036	GAS
LHDT2-DSL	0.6%	10,472	17.3	607	DSL
LHDT2-GAS	0.3%	6,009	11.9	503	GAS
MHDT	5.7%	101,256	8.9	11,344	DSL
HHDT	17.2%	305,545	6.1	50,470	DSL
	100%	1,776,426		115,866	
Fuel-GAS	52,285	gallons/year			
FuelTotal-DSL	63,581	gallons/year			
	115,866				
VMT - GAS	1,335,322	miles/year			
VMT - DSL	441.104	miles/year			
	•				
	1,770,420	iiiies/yeai			

# Barton Road Development Project - Operation Detailed Report

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- 4.4. Water Emissions by Land Use
  - 4.4.2. Unmitigated
- 4.5. Waste Emissions by Land Use
  - 4.5.2. Unmitigated
- 4.6. Refrigerant Emissions by Land Use
  - 4.6.1. Unmitigated
- 4.7. Offroad Emissions By Equipment Type
  - 4.7.1. Unmitigated
- 4.8. Stationary Emissions By Equipment Type
  - 4.8.1. Unmitigated
- 4.9. User Defined Emissions By Equipment Type
  - 4.9.1. Unmitigated
- 4.10. Soil Carbon Accumulation By Vegetation Type
  - 4.10.1. Soil Carbon Accumulation By Vegetation Type Unmitigated
  - 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type Unmitigated
  - 4.10.3. Avoided and Sequestered Emissions by Species Unmitigated

- 5. Activity Data
  - 5.9. Operational Mobile Sources
    - 5.9.1. Unmitigated
  - 5.10. Operational Area Sources
    - 5.10.1. Hearths
      - 5.10.1.1. Unmitigated
    - 5.10.2. Architectural Coatings
    - 5.10.3. Landscape Equipment
  - 5.11. Operational Energy Consumption
    - 5.11.1. Unmitigated
  - 5.12. Operational Water and Wastewater Consumption
    - 5.12.1. Unmitigated
  - 5.13. Operational Waste Generation
    - 5.13.1. Unmitigated
  - 5.14. Operational Refrigeration and Air Conditioning Equipment
    - 5.14.1. Unmitigated
  - 5.15. Operational Off-Road Equipment

- 5.15.1. Unmitigated
- 5.16. Stationary Sources
  - 5.16.1. Emergency Generators and Fire Pumps
  - 5.16.2. Process Boilers
- 5.17. User Defined
- 5.18. Vegetation
  - 5.18.1. Land Use Change
    - 5.18.1.1. Unmitigated
  - 5.18.1. Biomass Cover Type
    - 5.18.1.1. Unmitigated
  - 5.18.2. Sequestration
    - 5.18.2.1. Unmitigated
- 6. Climate Risk Detailed Report
  - 6.1. Climate Risk Summary
  - 6.2. Initial Climate Risk Scores
  - 6.3. Adjusted Climate Risk Scores
  - 6.4. Climate Risk Reduction Measures

- 7. Health and Equity Details
  - 7.1. CalEnviroScreen 4.0 Scores
  - 7.2. Healthy Places Index Scores
  - 7.3. Overall Health & Equity Scores
  - 7.4. Health & Equity Measures
  - 7.5. Evaluation Scorecard
  - 7.6. Health & Equity Custom Measures
- 8. User Changes to Default Data

# 1. Basic Project Information

# 1.1. Basic Project Information

Data Field	Value
Project Name	Barton Road Development Project - Operation
Operational Year	2025
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	14.2
Location	34.03317023813776, -117.32939795864475
County	San Bernardino-South Coast
City	Grand Terrace
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5379
EDFZ	10
Electric Utility	Colton Electric Utility Department
Gas Utility	Southern California Gas
App Version	2022.1.1.14

# 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	53.6	1000sqft	2.80	53,623	0.00	_	_	_

Barton Road Industrial Project Data Attachment

Unrefrigerated Warehouse-No Rail	118	1000sqft	6.23	117,877	26,705	_	_	_
User Defined Industrial	172	User Defined Unit	0.00	0.00	0.00	_	_	_
Other Asphalt Surfaces	3.00	Acre	3.00	0.00	0.00	_	_	_
Parking Lot	1.20	Acre	1.20	0.00	0.00	<u> </u>	_	_

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	3.86	6.57	17.8	46.7	0.16	0.32	7.19	7.51	0.31	1.88	2.19	172	20,682	20,854	18.8	2.39	61.8	22,098
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	2.47	5.29	18.5	36.2	0.16	0.31	7.19	7.50	0.30	1.88	2.18	172	20,381	20,553	18.8	2.40	15.2	21,753
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	3.36	6.12	18.2	36.8	0.16	0.32	7.19	7.51	0.31	1.88	2.19	172	20,331	20,503	18.8	2.40	34.6	21,722
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.61	1.12	3.32	6.71	0.03	0.06	1.31	1.37	0.06	0.34	0.40	28.4	3,366	3,394	3.11	0.40	5.73	3,596

Barton Road Industrial Project Data Attachment

Exceeds (Daily Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	55.0	55.0	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_
Exceeds (Average Daily)		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	55.0	55.0	550	150	_	_	150		_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_
Exceeds (Annual)	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3,000
Unmit.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	Yes

# 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	2.36	1.15	14.8	20.6	0.16	0.22	7.19	7.41	0.21	1.88	2.08	_	17,100	17,100	1.19	2.19	47.8	17,830
Area	1.33	5.36	0.06	7.46	< 0.005	0.01	_	0.01	0.01	_	0.01	_	30.7	30.7	< 0.005	< 0.005	_	30.8
Energy	0.13	0.07	1.22	1.02	0.01	0.09	_	0.09	0.09	_	0.09	_	2,823	2,823	0.23	0.01	_	2,833
Water	_	_	_	_	_	_	_	_	_	_	_	76.0	338	414	7.82	0.19	_	666
Waste	_	_	_	_	_	_	_	_	_	_	_	95.6	0.00	95.6	9.55	0.00	_	334
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	14.0	14.0
Off-Road	0.04 <sub>Barton</sub>	Road Indus	triai777roject	17.6	0.00	0.00	_	0.00	0.00	_	0.00	_	390	390	0.01	< 0.005 <sub>age</sub>	<del>A</del> - 49	391

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Total	3.86	6.57	17.8	46.7	0.16	0.32	7.19	7.51	0.31	1.88	2.19	172	20,682	20,854	18.8	2.39	61.8	22,098
Daily, Winter (Max)	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	2.30	1.09	15.5	17.6	0.15	0.22	7.19	7.41	0.21	1.88	2.08	_	16,830	16,830	1.19	2.20	1.24	17,515
Area	_	4.13	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	0.13	0.07	1.22	1.02	0.01	0.09	_	0.09	0.09	_	0.09	_	2,823	2,823	0.23	0.01	_	2,833
Water	_	_	_	_	_	_	_	_	_	_	_	76.0	338	414	7.82	0.19	_	666
Waste	_	_	_	_	_	_	_	_	_	_	_	95.6	0.00	95.6	9.55	0.00	_	334
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Off-Road	0.04	0.00	1.77	17.6	0.00	0.00	_	0.00	0.00	_	0.00	_	390	390	0.01	< 0.005	_	391
Total	2.47	5.29	18.5	36.2	0.16	0.31	7.19	7.50	0.30	1.88	2.18	172	20,381	20,553	18.8	2.40	15.2	21,753
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	2.30	1.08	15.7	18.1	0.15	0.22	7.19	7.41	0.21	1.88	2.08	_	16,871	16,871	1.19	2.20	20.7	17,576
Area	0.91	4.97	0.04	5.11	< 0.005	0.01	_	0.01	0.01	_	0.01	_	21.0	21.0	< 0.005	< 0.005	_	21.1
Energy	0.13	0.07	1.22	1.02	0.01	0.09	_	0.09	0.09	_	0.09	_	2,823	2,823	0.23	0.01	_	2,833
Water	_	_	_	_	_	_	_	_	_	_	_	76.0	338	414	7.82	0.19	_	666
Waste	_	_	_	_	_	_	_	_	_	_	_	95.6	0.00	95.6	9.55	0.00	_	334
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Off-Road	0.03	0.00	1.26	12.5	0.00	0.00	_	0.00	0.00	_	0.00	_	278	278	0.01	< 0.005	_	278
Total	3.36	6.12	18.2	36.8	0.16	0.32	7.19	7.51	0.31	1.88	2.19	172	20,331	20,503	18.8	2.40	34.6	21,722
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.42	0.20	2.86	3.30	0.03	0.04	1.31	1.35	0.04	0.34	0.38	_	2,793	2,793	0.20	0.36	3.42	2,910
Area	0.17	0.91	0.01	0.93	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.48	3.48	< 0.005	< 0.005	_	3.49
Energy	0.02	0.01	0.22	0.19	< 0.005	0.02	_	0.02	0.02	_	0.02	_	467	467	0.04	< 0.005	_	469
Water	_	_	_	_	_	_	_	_	_	_	_	12.6	56.0	68.5	1.29	0.03	_	110
Waste	_	_	_	_	_	_	_	_	_	_	_	15.8	0.00	15.8	1.58	0.00	_	55.3
Refrig.		on Road Indus	strial Project	_	_	_	_	_	_	_	_	_	_	_	_	Pag	e⊉.ვ∳0	2.31

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Off-Road	< 0.005	0.00	0.23	2.29	0.00	0.00	_	0.00	0.00	_	0.00	_	46.0	46.0	< 0.005	< 0.005	_	46.1
Total	0.61	1.12	3.32	6.71	0.03	0.06	1.31	1.37	0.06	0.34	0.40	28.4	3,366	3,394	3.11	0.40	5.73	3,596

# 4. Operations Emissions Details

# 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

TOG	ROG	NOx	co	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
_	_	_	-	_	_	_	_	_	_	_	_	_	-	-	_	-	-
0.58	0.53	0.64	7.59	0.02	0.01	1.92	1.93	0.01	0.49	0.50	_	2,068	2,068	0.04	0.06	8.75	2,095
0.46	0.42	0.51	6.00	0.02	0.01	1.52	1.53	0.01	0.39	0.40	_	1,637	1,637	0.04	0.04	6.93	1,658
1.33	0.20	13.6	6.99	0.12	0.19	3.75	3.94	0.19	1.00	1.19	_	13,395	13,395	1.11	2.09	32.2	14,077
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	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	0.00	0.00
2.36	1.15	14.8	20.6	0.16	0.22	7.19	7.41	0.21	1.88	2.08	_	17,100	17,100	1.19	2.19	47.8	17,830
_	— n Road Indu	_	-	_	_	_	_	_	_	_	_	_	_	-			_
		0.46	-       -       -         0.58       0.53       0.64         0.46       0.42       0.51         1.33       0.20       13.6         0.00       0.00       0.00         0.00       0.00       0.00         2.36       1.15       14.8         -       -       -	-       -       -       -       -         0.58       0.53       0.64       7.59         0.46       0.42       0.51       6.00         1.33       0.20       13.6       6.99         0.00       0.00       0.00       0.00         0.00       0.00       0.00       0.00         2.36       1.15       14.8       20.6         -       -       -       -	—       —       —       —       —         0.58       0.53       0.64       7.59       0.02         0.46       0.42       0.51       6.00       0.02         1.33       0.20       13.6       6.99       0.12         0.00       0.00       0.00       0.00       0.00         0.00       0.00       0.00       0.00       0.00         2.36       1.15       14.8       20.6       0.16         —       —       —       —	-       -	-       -	-       -	<td< td=""><td>-       -</td><td> <th< td=""><td></td><td>  &lt;</td><td>                                     </td><td>  No.   No.</td><td>  No.   No.</td><td>  No.   No.</td></th<></td></td<>	-       -	<th< td=""><td></td><td>  &lt;</td><td>                                     </td><td>  No.   No.</td><td>  No.   No.</td><td>  No.   No.</td></th<>		<		No.   No.	No.   No.	No.   No.

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Manufact	0.55	0.50	0.70	5.91	0.02	0.01	1.92	1.93	0.01	0.49	0.50	_	1,916	1,916	0.05	0.06	0.23	1,935
Unrefrige rated Warehou se-No Rail	0.43	0.40	0.55	4.68	0.01	0.01	1.52	1.53	0.01	0.39	0.40	_	1,517	1,517	0.04	0.05	0.18	1,532
User Defined Industrial	1.32	0.19	14.2	7.02	0.12	0.19	3.75	3.94	0.19	1.00	1.19	_	13,397	13,397	1.11	2.09	0.83	14,048
Other Asphalt Surfaces	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	0.00
Parking Lot	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	0.00
Total	2.30	1.09	15.5	17.6	0.15	0.22	7.19	7.41	0.21	1.88	2.08	_	16,830	16,830	1.19	2.20	1.24	17,515
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	0.10	0.09	0.13	1.13	< 0.005	< 0.005	0.35	0.35	< 0.005	0.09	0.09	_	321	321	0.01	0.01	0.63	325
Unrefrige rated Warehou se-No Rail	0.08	0.07	0.10	0.90	< 0.005	< 0.005	0.28	0.28	< 0.005	0.07	0.07	_	254	254	0.01	0.01	0.50	257
User Defined Industrial	0.24	0.04	2.63	1.28	0.02	0.04	0.68	0.72	0.03	0.18	0.22	_	2,218	2,218	0.18	0.35	2.30	2,328
Other Asphalt Surfaces	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	0.00
Parking Lot	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	0.00
Total	0.42	0.20	2.86	3.30	0.03	0.04	1.31	1.35	0.04	0.34	0.38	_	2,793	2,793	0.20	0.36	3.42	2,910

# 4.2. Energy

Barton Road Industrial Project Data Attachment

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Criteria	Pollutan	ts (Ib/day	y for daii	y, ton/yr	tor annu	ıaı) and (	GHGS (II	o/day tor	daliy, iv	11/yr for	annuaı)							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	635	635	0.05	0.01	_	638
Unrefrige rated Warehou se-No Rail	_	_	_	_	_	_	_	_	_	_	_	_	676	676	0.05	0.01	_	679
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	_	56.9	56.9	< 0.005	< 0.005	_	57.1
Total	_	_	_	_	_	_	_	_	_	_	_	_	1,368	1,368	0.10	0.01	_	1,374
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	635	635	0.05	0.01	_	638
Unrefrige rated Warehou se-No Rail		_				_				_		_	676	676	0.05	0.01	_	679

User Defined Industrial	_	_	_	_	_	_	_	_		_	_	_	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	_	56.9	56.9	< 0.005	< 0.005	_	57.1
Total	_	_	_	_			_	_	_	_	_	_	1,368	1,368	0.10	0.01	_	1,374
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	105	105	0.01	< 0.005	_	106
Unrefrige rated Warehou se-No Rail	_	_	_	_	_	_	_	_	_	_	_	_	112	112	0.01	< 0.005	_	112
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_		_	_		_	_	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_		_	9.41	9.41	< 0.005	< 0.005	_	9.46
Total	_	_	_	_	_	_	_	_	_	_	_	_	226	226	0.02	< 0.005	_	227

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	— Barton	— Road Indus	— trial Project	_	_	_	_	_	_	_	_	_	_	_	_	— Page	— e A - 54	_
		ttachment							40 / 05									

Manufact	0.07	0.03	0.62	0.52	< 0.005	0.05	_	0.05	0.05	_	0.05	_	737	737	0.07	< 0.005	_	739
Unrefrige rated Warehou se-No Rail	0.07	0.03	0.60	0.51	< 0.005	0.05	_	0.05	0.05	_	0.05	_	718	718	0.06	< 0.005	_	720
User Defined Industrial	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
Other Asphalt Surfaces	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
Parking Lot	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
Total	0.13	0.07	1.22	1.02	0.01	0.09	_	0.09	0.09	_	0.09	_	1,455	1,455	0.13	< 0.005	_	1,459
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	0.07	0.03	0.62	0.52	< 0.005	0.05	_	0.05	0.05	_	0.05	_	737	737	0.07	< 0.005	-	739
Unrefrige rated Warehou se-No Rail	0.07	0.03	0.60	0.51	< 0.005	0.05	_	0.05	0.05	_	0.05	_	718	718	0.06	< 0.005	_	720
User Defined Industrial	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
Other Asphalt Surfaces	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
Parking Lot	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
Total	0.13	0.07	1.22	1.02	0.01	0.09	_	0.09	0.09	_	0.09	_	1,455	1,455	0.13	< 0.005	_	1,459
Annual	_				_	_			_		_							

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Manufact	0.01	0.01	0.11	0.09	< 0.005	0.01	_	0.01	0.01	_	0.01	_	122	122	0.01	< 0.005	_	122
Unrefrige rated Warehou se-No Rail	0.01	0.01	0.11	0.09	< 0.005	0.01	_	0.01	0.01	_	0.01	_	119	119	0.01	< 0.005	_	119
User Defined Industrial	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
Other Asphalt Surfaces	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
Parking Lot	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
Total	0.02	0.01	0.22	0.19	< 0.005	0.02	_	0.02	0.02	_	0.02	<u> </u>	241	241	0.02	< 0.005	_	242

# 4.3. Area Emissions by Source

### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG		со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	3.68	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings		0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt		1.22	0.06	7.46	< 0.005	0.01	_	0.01	0.01	_	0.01	_	30.7	30.7	< 0.005	< 0.005		30.8

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Total	1.33	5.36	0.06	7.46	< 0.005	0.01	_	0.01	0.01	_	0.01	_	30.7	30.7	< 0.005	< 0.005	_	30.8
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	3.68	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	4.13	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.67	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	
Architect ural Coatings	_	0.08	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	0.17	0.15	0.01	0.93	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.48	3.48	< 0.005	< 0.005	_	3.49
Total	0.17	0.91	0.01	0.93	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.48	3.48	< 0.005	< 0.005	_	3.49

# 4.4. Water Emissions by Land Use

#### 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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Manufact	_	_	_	_	_	_	_	_	_	_	_	23.8	105	129	2.44	0.06	_	207
Unrefrige rated Warehou se-No Rail		_	_	_	_		_	_	_	_	_	52.2	233	285	5.37	0.13	_	458
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	76.0	338	414	7.82	0.19	_	666
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	23.8	105	129	2.44	0.06	_	207
Unrefrige rated Warehou se-No Rail	_	_	_	_	_	_	_	_	_	_	_	52.2	233	285	5.37	0.13	_	458
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_			0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	76.0	338	414	7.82	0.19	_	666
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
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Manufact	_	_	_	_	_	_	_	_	_	_	_	3.93	17.4	21.3	0.40	0.01	_	34.3
Unrefrige rated Warehou se-No Rail		_	_	_	_						_	8.65	38.6	47.3	0.89	0.02		75.9
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	12.6	56.0	68.5	1.29	0.03	_	110

# 4.5. Waste Emissions by Land Use

### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use		ROG		СО					PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	35.8	0.00	35.8	3.58	0.00	_	125
Unrefrige rated Warehou se-No Rail	_	_	_	_	_	_	_	_	_	_	_	59.7	0.00	59.7	5.97	0.00	_	209
User Defined	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
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						I												
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	-	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	95.6	0.00	95.6	9.55	0.00	_	334
Daily, Winter (Max)	_	_	_	_	-	_	-	-	_	_	-	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	35.8	0.00	35.8	3.58	0.00	_	125
Unrefrige rated Warehou se-No Rail	_	-	_	_	_	_	_	_	_	-	_	59.7	0.00	59.7	5.97	0.00	_	209
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	95.6	0.00	95.6	9.55	0.00	_	334
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	5.93	0.00	5.93	0.59	0.00	_	20.8
Unrefrige rated Warehou se-No Rail	_	_	_	_	_	_	_	_	_	_	_	9.89	0.00	9.89	0.99	0.00	_	34.6
User Defined			_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	— —	0.00
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Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	15.8	0.00	15.8	1.58	0.00	_	55.3

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Total	_	_	_	_	_	_	_	_		_	_	_		_	_	_	14.0	14.0
Annual	_	_	_	_	_	_	_	_		_	_	_		_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	2.31	2.31
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	2.31	2.31

## 4.7. Offroad Emissions By Equipment Type

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### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

				<i>y</i> , <i>y</i>			\		,									
Equipme nt Type	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Forklifts	0.04	0.00	1.77	17.6	0.00	0.00	_	0.00	0.00	_	0.00	_	390	390	0.01	< 0.005	_	391
Total	0.04	0.00	1.77	17.6	0.00	0.00	_	0.00	0.00	_	0.00	_	390	390	0.01	< 0.005	_	391
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Forklifts	0.04	0.00	1.77	17.6	0.00	0.00	_	0.00	0.00	_	0.00	_	390	390	0.01	< 0.005	_	391
Total	0.04	0.00	1.77	17.6	0.00	0.00	_	0.00	0.00	_	0.00	_	390	390	0.01	< 0.005	_	391
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Forklifts	< 0.005	0.00	0.23	2.29	0.00	0.00	_	0.00	0.00	_	0.00	_	46.0	46.0	< 0.005	< 0.005	_	46.1
Total	< 0.005	0.00	0.23	2.29	0.00	0.00	_	0.00	0.00	_	0.00	_	46.0	46.0	< 0.005	< 0.005	_	46.1

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
nt Type																		
Daily,	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Summer (Max)																		
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.9. User Defined Emissions By Equipment Type

#### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type		ROG		со	SO2	PM10E			PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.10. Soil Carbon Accumulation By Vegetation Type

#### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

			-	, ,														
Vegetatio	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	всо2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	<u> </u>	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Spe	ecies	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

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Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	<u> </u>	<u> </u>	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 5. Activity Data

# 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	196	196	196	71,635	2,717	2,717	2,717	991,524
Unrefrigerated Warehouse-No Rail	155	155	155	56,707	2,150	2,150	2,150	784,902
User Defined Industrial	105	105	105	38,435	4,212	4,212	4,212	1,537,395
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

# 5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

### 5.10.2. Architectural Coatings

Reside	ential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	Barton Road Industrial Projec	c0.00	257,250	85,750	10,977 Page A - 66
	Data Attachment		05.405		

### 5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	511,441	453	0.0330	0.0040	2,299,682
Unrefrigerated Warehouse-No Rail	544,439	453	0.0330	0.0040	2,240,922
User Defined Industrial	0.00	453	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	453	0.0330	0.0040	0.00
Parking Lot	45,790	453	0.0330	0.0040	0.00

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	12,400,319	0.00
Unrefrigerated Warehouse-No Rail	27,259,056	428,859
User Defined Industrial	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	0.00

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	66.5	_
Unrefrigerated Warehouse-No Rail	111	_
User Defined Industrial	0.00	_
Other Asphalt Surfaces	0.00	_
Parking Lot	0.00	_

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	CNG	Average	4.00	4.00	82.0	0.20

### 5.16. Stationary Sources

#### 5.16.1. Emergency Generators and Fire Pumps

Equipment Type Fuel Type Rarton Road Industrial Project	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor Page A - 68
Data Attachment		07/05			

#### 5.16.2. Process Boilers

Equipment Type Fue	uel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
--------------------	----------	--------	--------------------------	------------------------------	------------------------------

#### 5.17. User Defined

Е	quipment Type	Fuel Type
-	_	_

### 5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

 Vegetation Land Use Type
 Vegetation Soil Type
 Initial Acres
 Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type Initial Acres Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type Number Electricity Saved (kWh/year) Natural Gas Saved (btu/year)

# 6. Climate Risk Detailed Report

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### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.3	annual days of extreme heat
Extreme Precipitation	2.45	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

#### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

Barton Road Industrial Project Data Attachment The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

#### 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

#### 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

#### 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	_
AQ-Ozone	98.7

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AQ-PM	84.1
AQ-DPM	96.1
Drinking Water	61.3
Lead Risk Housing	49.4
Pesticides	0.00
Toxic Releases	60.4
Traffic	92.4
Effect Indicators	_
CleanUp Sites	69.4
Groundwater	17.5
Haz Waste Facilities/Generators	27.1
Impaired Water Bodies	12.5
Solid Waste	70.4
Sensitive Population	_
Asthma	62.9
Cardio-vascular	69.1
Low Birth Weights	5.03
Socioeconomic Factor Indicators	_
Education	75.4
Housing	90.5
Linguistic	67.2
Poverty	88.3
Unemployment	74.1

# 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract	
Barton Road Industrial Project		Page A - 72
Data Attachment	04.105	

Economic	_
Above Poverty	5.697420762
Employed	17.64403952
Median HI	5.684588733
Education	
Bachelor's or higher	18.85025022
High school enrollment	100
Preschool enrollment	34.98011036
Transportation	_
Auto Access	22.93083537
Active commuting	53.56088798
Social	_
2-parent households	3.977928911
Voting	10.29128705
Neighborhood	_
Alcohol availability	39.09919158
Park access	4.427049917
Retail density	58.68086745
Supermarket access	54.1511613
Tree canopy	11.06120878
Housing	_
Homeownership	23.90606955
Housing habitability	30.07827538
Low-inc homeowner severe housing cost burden	56.83305531
Low-inc renter severe housing cost burden	6.082381625
Uncrowded housing	65.16104196
Health Outcomes	_

Insured adults	44.70678814
Arthritis	0.0
Asthma ER Admissions	23.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	6.0
Cognitively Disabled	33.5
Physically Disabled	63.7
Heart Attack ER Admissions	10.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	65.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	_
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	_
Wildfire Risk	0.6
SLR Inundation Area	0.0
Children	0.5

Elderly	95.7
English Speaking	44.9
Foreign-born	28.3
Outdoor Workers	63.6
Climate Change Adaptive Capacity	_
Impervious Surface Cover	56.4
Traffic Density	90.0
Traffic Access	23.0
Other Indices	_
Hardship	79.0
Other Decision Support	_
2016 Voting	16.4

### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	83.0
Healthy Places Index Score for Project Location (b)	8.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

#### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

#### 7.5. Evaluation Scorecard

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	
Construction: Architectural Coatings	
Characteristics: Project Details	
Operations: Vehicle Data	Fleet Mix based on trip generation study User Defined land use is used to estimate emissions from the Haul trucks (MHDT and HHDT) Trip Distances (LDA+LDT+MDT+LHDT = default distance Trip Distance (MHDT+HHDT = 40 miles)
Operations: Fleet Mix	Fleet mix derived from the Trip Generation Study and the EMFAC2021 vehicle class distributions Used Defined Land Use is used to estimate emissions from haul trucks (MHDT and HHDT)
Operations: Refrigerants	AC added to Warehouse land use
Operations: Off-Road Equipment	Estimated number and usage of forklifts and
Land Use	Project Description

Barton Road Industrial Project
Data Attachment
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# Barton Road Development Project - Operation (LST) Detailed Report

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  - 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type Unmitigated
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J. / WHITE DAK	5.	Activity	Data
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5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

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5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

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5.13.1. Unmitigated

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# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Barton Road Development Project - Operation (LST)
Operational Year	2025
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	14.2
Location	34.03317023813776, -117.32939795864475
County	San Bernardino-South Coast
City	Grand Terrace
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5379
EDFZ	10
Electric Utility	Colton Electric Utility Department
Gas Utility	Southern California Gas
App Version	2022.1.1.14

# 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Manufacturing	53.6	1000sqft	2.80	53,623	0.00	_	_	_

Barton Road Industrial Project Data Attachment

Unrefrigerated Warehouse-No Rail	118	1000sqft	6.23	117,877	26,705	_	_	_
User Defined Industrial	172	User Defined Unit	0.00	0.00	0.00	_	_	_
Other Asphalt Surfaces	3.00	Acre	3.00	0.00	0.00	_	_	_
Parking Lot	1.20	Acre	1.20	0.00	0.00	_	_	_

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

## 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	2.51	6.28	6.30	46.8	0.01	0.11	0.05	0.16	0.11	0.01	0.12	172	4,267	4,439	17.8	0.26	14.2	4,975
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	1.13	5.00	6.30	39.7	0.01	0.10	0.05	0.15	0.10	0.01	0.11	172	4,237	4,408	17.8	0.26	14.0	4,945
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	2.01	5.83	5.30	34.7	0.01	0.10	0.05	0.15	0.10	0.01	0.12	172	4,032	4,204	17.8	0.26	14.1	4,740
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.37	1.06	0.97	6.33	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	28.4	668	696	2.94	0.04	2.33	785

Barton Road Industrial Project Data Attachment

Exceeds (Daily Max)	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	55.0	55.0	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_
Exceeds (Average Daily)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	55.0	55.0	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_
Exceeds (Annual)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3,000
Unmit.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	No

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.97	0.85	1.48	3.13	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	_	295	295	0.14	0.06	0.29	316
Area	1.33	5.36	0.06	7.46	< 0.005	0.01	_	0.01	0.01	_	0.01	_	30.7	30.7	< 0.005	< 0.005	_	30.8
Energy	0.13	0.07	1.22	1.02	0.01	0.09	_	0.09	0.09	_	0.09	_	2,823	2,823	0.23	0.01	_	2,833
Water	_	_	_	_	_	_	_	_	_	_	_	76.0	338	414	7.82	0.19	_	666
Waste	_	_	_	_	_	_	_	_	_	_	_	95.6	0.00	95.6	9.55	0.00	_	334
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Off-Road	0.07 <sub>Barton</sub>	Road Indust	ria 53 roject	35.2	0.00	0.00	_	0.00	0.00	_	0.00	_	781	781	0.01	< 0.005 <sub>ag</sub>	e <del>A</del> - 84	781

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Total	2.51	6.28	6.30	46.8	0.01	0.11	0.05	0.16	0.11	0.01	0.12	172	4,267	4,439	17.8	0.26	14.2	4,975
Daily, Winter (Max)	_	_	_	-	_	_	_	_	_	_	-	_	_	_	_	_	_	_
Mobile	0.92	0.80	1.55	3.50	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	_	295	295	0.15	0.06	0.01	316
Area	_	4.13	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Energy	0.13	0.07	1.22	1.02	0.01	0.09	_	0.09	0.09	_	0.09	_	2,823	2,823	0.23	0.01	_	2,833
Water	_	_	_	_	_	_	_	_	_	_	_	76.0	338	414	7.82	0.19	_	666
Waste	_	_	_	_	_	_	_	_	_	_	_	95.6	0.00	95.6	9.55	0.00	_	334
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Off-Road	0.07	0.00	3.53	35.2	0.00	0.00	_	0.00	0.00	_	0.00	_	781	781	0.01	< 0.005	_	781
Total	1.13	5.00	6.30	39.7	0.01	0.10	0.05	0.15	0.10	0.01	0.11	172	4,237	4,408	17.8	0.26	14.0	4,945
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.92	0.79	1.53	3.48	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	_	294	294	0.15	0.06	0.13	316
Area	0.91	4.97	0.04	5.11	< 0.005	0.01	_	0.01	0.01	_	0.01	_	21.0	21.0	< 0.005	< 0.005	_	21.1
Energy	0.13	0.07	1.22	1.02	0.01	0.09	_	0.09	0.09	_	0.09	_	2,823	2,823	0.23	0.01	_	2,833
Water	_	_	_	_	_	_	_	_	_	_	_	76.0	338	414	7.82	0.19	_	666
Waste	_	_	_	_	_	_	_	_	_	_	_	95.6	0.00	95.6	9.55	0.00	_	334
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Off-Road	0.05	0.00	2.52	25.1	0.00	0.00	_	0.00	0.00	_	0.00	_	556	556	0.01	< 0.005	_	557
Total	2.01	5.83	5.30	34.7	0.01	0.10	0.05	0.15	0.10	0.01	0.12	172	4,032	4,204	17.8	0.26	14.1	4,740
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.17	0.15	0.28	0.64	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	48.7	48.7	0.02	0.01	0.02	52.3
Area	0.17	0.91	0.01	0.93	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.48	3.48	< 0.005	< 0.005	_	3.49
Energy	0.02	0.01	0.22	0.19	< 0.005	0.02	_	0.02	0.02	_	0.02	_	467	467	0.04	< 0.005	_	469
Water	_	_	_	_	_	_	_	_	_	_	_	12.6	56.0	68.5	1.29	0.03	_	110
Waste	_	_	_	_	_	_	_	_	_	_	_	15.8	0.00	15.8	1.58	0.00	_	55.3
Refrig.		on Road Indu Attachment	strial Project	_	_	_	_	_	9 / 35	_	_	_	_	_	_	Pag	e <u>\$</u> .385	2.31

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Off-Road	0.01	0.00	0.46	4.58	0.00	0.00	_	0.00	0.00	_	0.00	_	92.1	92.1	< 0.005	< 0.005	_	92.2
Total	0.37	1.06	0.97	6.33	< 0.005	0.02	0.01	0.03	0.02	< 0.005	0.02	28.4	668	696	2.94	0.04	2.33	785

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_
Manufact uring	0.46	0.45	0.12	1.18	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	_	53.3	53.3	0.03	0.01	0.09	58.3
Unrefrige rated Warehou se-No Rail	0.36	0.35	0.10	0.93	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	_	42.2	42.2	0.02	0.01	0.08	46.1
User Defined Industrial	0.15	0.05	1.27	1.02	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	< 0.005	_	200	200	0.09	0.03	0.12	212
Other Asphalt Surfaces	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	0.00
Parking Lot	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	0.00
Total	0.97	0.85	1.48	3.13	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	_	295	295	0.14	0.06	0.29	316
Daily, Winter (Max)	_	_	— ustrial Project	_	_	_	_	_	_	_	_	_	_	_	-	_	— e A - 86	-

Manufact	0.43	0.42	0.13	1.36	< 0.005	< 0.005	0.02	0.02	< 0.005	0.01	0.01	_	52.0	52.0	0.03	0.01	< 0.005	57.2
Unrefrige rated Warehou se-No Rail	0.34	0.33	0.10	1.08	< 0.005	< 0.005	0.02	0.02	< 0.005	< 0.005	< 0.005	_	41.2	41.2	0.02	0.01	< 0.005	45.3
User Defined Industrial	0.15	0.05	1.32	1.05	< 0.005	< 0.005	0.01	0.02	< 0.005	< 0.005	0.01	_	202	202	0.09	0.03	< 0.005	214
Other Asphalt Surfaces	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	0.00
Parking Lot	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	0.00
Total	0.92	0.80	1.55	3.50	< 0.005	< 0.005	0.05	0.05	< 0.005	0.01	0.02	_	295	295	0.15	0.06	0.01	316
Annual	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	80.0	0.08	0.02	0.25	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	8.65	8.65	0.01	< 0.005	0.01	9.51
Unrefrige rated Warehou se-No Rail	0.06	0.06	0.02	0.20	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005		6.85	6.85	< 0.005	< 0.005	0.01	7.53
User Defined Industrial	0.03	0.01	0.24	0.19	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	33.2	33.2	0.02	0.01	0.01	35.2
Other Asphalt Surfaces	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	0.00
Parking Lot	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	0.00
Total	0.17	0.15	0.28	0.64	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	48.7	48.7	0.02	0.01	0.02	52.3

## 4.2. Energy

#### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Criteria	Pollutan	ts (Ib/day	y for daii	y, ton/yr	tor annu	ıaı) and (	GHGS (II	o/day tor	daliy, iv	11/yr for	annuaı)							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	635	635	0.05	0.01	_	638
Unrefrige rated Warehou se-No Rail	_	_	_	_	_	_	_	_	_	_	_	_	676	676	0.05	0.01	_	679
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	_	56.9	56.9	< 0.005	< 0.005	_	57.1
Total	_	_	_	_	_	_	_	_	_	_	_	_	1,368	1,368	0.10	0.01	_	1,374
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	635	635	0.05	0.01	_	638
Unrefrige rated Warehou se-No Rail		_				_				_		_	676	676	0.05	0.01	_	679

User Defined Industrial	_	_	_	_	_	_	_	_		_	_	_	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	_	56.9	56.9	< 0.005	< 0.005	_	57.1
Total	_	_	_	_			_	_	_	_	_	_	1,368	1,368	0.10	0.01	_	1,374
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	105	105	0.01	< 0.005	_	106
Unrefrige rated Warehou se-No Rail	_	_	_	_	_	_	_	_	_	_	_	_	112	112	0.01	< 0.005	_	112
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_		_	_		_	_	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_		_	9.41	9.41	< 0.005	< 0.005	_	9.46
Total	_	_	_	_	_	_	_	_	_	_	_	_	226	226	0.02	< 0.005	_	227

#### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	СО	SO2		,		PM2.5E	PM2.5D	r en	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
(Max)		Road Indus	trial Project						10 / 05							Page	e A - 89	

0.07	0.03	0.62	0.52	< 0.005	0.05	_	0.05	0.05	_	0.05	_	737	737	0.07	< 0.005	_	739
0.07	0.03	0.60	0.51	< 0.005	0.05	_	0.05	0.05	_	0.05	_	718	718	0.06	< 0.005	_	720
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	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	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
0.13	0.07	1.22	1.02	0.01	0.09	_	0.09	0.09	_	0.09	_	1,455	1,455	0.13	< 0.005	_	1,459
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_
0.07	0.03	0.62	0.52	< 0.005	0.05	_	0.05	0.05	_	0.05	_	737	737	0.07	< 0.005	_	739
0.07	0.03	0.60	0.51	< 0.005	0.05	_	0.05	0.05	_	0.05	_	718	718	0.06	< 0.005	_	720
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	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	0.00	0.00	_	0.00	0.00	_	0.00	_	0.00	0.00	0.00	0.00	_	0.00
0.13	0.07	1.22	1.02	0.01	0.09	_	0.09	0.09	_	0.09	_	1,455	1,455	0.13	< 0.005	_	1,459
	0.07  0.00  0.00  0.00  0.07  0.07  0.00  0.00  0.00	0.07       0.03         0.00       0.00         0.00       0.00         0.00       0.00         0.13       0.07         —       —         0.07       0.03         0.07       0.03         0.00       0.00         0.00       0.00         0.00       0.00	0.07       0.03       0.60         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00         0.13       0.07       1.22              0.07       0.03       0.62         0.07       0.03       0.60         0.00       0.00       0.00         0.00       0.00       0.00         0.00       0.00       0.00	0.07       0.03       0.60       0.51         0.00       0.00       0.00       0.00         0.00       0.00       0.00       0.00         0.00       0.00       0.00       0.00         0.13       0.07       1.22       1.02               0.07       0.03       0.62       0.52         0.07       0.03       0.60       0.51         0.00       0.00       0.00       0.00         0.00       0.00       0.00       0.00         0.00       0.00       0.00       0.00	0.07       0.03       0.60       0.51       < 0.005	0.07       0.03       0.60       0.51       < 0.005	0.07       0.03       0.60       0.51       < 0.005	0.07       0.03       0.60       0.51       < 0.005	0.07       0.03       0.60       0.51       < 0.005	0.07       0.03       0.60       0.51       < 0.005	0.07       0.03       0.60       0.51       < 0.005	0.07       0.03       0.60       0.51       < 0.005	0.07       0.03       0.60       0.51       < 0.05	0.07         0.03         0.60         0.51         < 0.005	0.07         0.03         0.60         0.51         < 0.065	0.07         0.03         0.60         0.51         < 0.05	0.07         0.03         0.60         0.51         < 0.05

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Manufact	0.01	0.01	0.11	0.09	< 0.005	0.01	_	0.01	0.01	_	0.01	_	122	122	0.01	< 0.005	_	122
Unrefrige rated Warehou se-No Rail	0.01	0.01	0.11	0.09	< 0.005	0.01	_	0.01	0.01	_	0.01	_	119	119	0.01	< 0.005	_	119
User Defined Industrial	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
Other Asphalt Surfaces	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
Parking Lot	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
Total	0.02	0.01	0.22	0.19	< 0.005	0.02	_	0.02	0.02	_	0.02	<u> </u>	241	241	0.02	< 0.005	_	242

## 4.3. Area Emissions by Source

#### 4.3.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	3.68	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings		0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt		1.22	0.06	7.46	< 0.005	0.01	_	0.01	0.01	_	0.01	_	30.7	30.7	< 0.005	< 0.005		30.8

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Total	1.33	5.36	0.06	7.46	< 0.005	0.01	_	0.01	0.01	_	0.01	_	30.7	30.7	< 0.005	< 0.005	_	30.8
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	3.68	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	0.45	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	4.13	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.67	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	0.08	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	0.17	0.15	0.01	0.93	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.48	3.48	< 0.005	< 0.005	_	3.49
Total	0.17	0.91	0.01	0.93	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	3.48	3.48	< 0.005	< 0.005	_	3.49

## 4.4. Water Emissions by Land Use

#### 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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Manufact	_	_	_	_	_	_	_	_	_	_	_	23.8	105	129	2.44	0.06	_	207
Unrefrige rated Warehou se-No Rail			_	_	_			_		_	_	52.2	233	285	5.37	0.13	_	458
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	76.0	338	414	7.82	0.19	_	666
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	23.8	105	129	2.44	0.06	_	207
Unrefrige rated Warehou se-No Rail	_	_	_	_	_	_	_	_		_	_	52.2	233	285	5.37	0.13	_	458
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_			0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	76.0	338	414	7.82	0.19	_	666
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
	_															Dan	o V 03	

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Manufact	_	_	_	_	_	_	_	_	_	_	_	3.93	17.4	21.3	0.40	0.01	_	34.3
Unrefrige rated Warehou se-No Rail		_	_	_	_						_	8.65	38.6	47.3	0.89	0.02		75.9
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	12.6	56.0	68.5	1.29	0.03	_	110

## 4.5. Waste Emissions by Land Use

#### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use										PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring		_	_	_	_	_	_	_	_	_		35.8	0.00	35.8	3.58	0.00		125
Unrefrige rated Warehou se-No Rail	_	_	_	_	_	_	_	_	_	_	_	59.7	0.00	59.7	5.97	0.00	_	209
User Defined	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
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Other Asphalt Surfaces	_	_		_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	-	-	-	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	95.6	0.00	95.6	9.55	0.00	_	334
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	-	-	_	_	_	_	-
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	35.8	0.00	35.8	3.58	0.00	_	125
Unrefrige rated Warehou se-No Rail	_	_	_	_	_	_	_	_	_	_	_	59.7	0.00	59.7	5.97	0.00	_	209
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	95.6	0.00	95.6	9.55	0.00	_	334
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	5.93	0.00	5.93	0.59	0.00	_	20.8
Unrefrige rated Warehou se-No Rail	_	_	_	_	_	_	_	_	_	_	_	9.89	0.00	9.89	0.99	0.00	_	34.6
User Defined Industrial	— Barte	— on Road Indu Attachment	— istrial Project	<u> </u>	_	_	_	_	-	_	_	0.00	0.00	0.00	0.00	0.00 Pag	— je A - 95	0.00

Other Asphalt Surfaces	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Parking Lot	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	15.8	0.00	15.8	1.58	0.00	_	55.3

### 4.6. Refrigerant Emissions by Land Use

#### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	14.0	14.0
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Manufact uring	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	2.31	2.31
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	2.31	2.31

## 4.7. Offroad Emissions By Equipment Type

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#### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

		· · ·	,	J, J		,	(		3,	,								
Equipme nt Type	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_
Forklifts	0.07	0.00	3.53	35.2	0.00	0.00	_	0.00	0.00	_	0.00	_	781	781	0.01	< 0.005	_	781
Total	0.07	0.00	3.53	35.2	0.00	0.00	_	0.00	0.00	_	0.00	_	781	781	0.01	< 0.005	_	781
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Forklifts	0.07	0.00	3.53	35.2	0.00	0.00	_	0.00	0.00	_	0.00	_	781	781	0.01	< 0.005	_	781
Total	0.07	0.00	3.53	35.2	0.00	0.00	_	0.00	0.00	_	0.00	_	781	781	0.01	< 0.005	_	781
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Forklifts	0.01	0.00	0.46	4.58	0.00	0.00	_	0.00	0.00	_	0.00	_	92.1	92.1	< 0.005	< 0.005	_	92.2
Total	0.01	0.00	0.46	4.58	0.00	0.00	_	0.00	0.00	_	0.00	_	92.1	92.1	< 0.005	< 0.005	_	92.2

### 4.8. Stationary Emissions By Equipment Type

#### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
nt Type																		
Daily,	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Summer (Max)																		
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

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Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.9. User Defined Emissions By Equipment Type

#### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type		ROG				PM10E				PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.10. Soil Carbon Accumulation By Vegetation Type

#### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

				(															
Ve	getatio	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
n		Barton	Road Indus	trial Project													Page	A - 98	
		Doto A	ttaahmant																

Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_		_	_	_		_	_	_		_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

O 1 1 1 0 1 1 0 K		10 (1.07 0.01		iy, tori/yr		<u> </u>												
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

			,	, ,		,				,	,							
	TOG		Luc			DIALOF	DIALOR	DIALOT	D140 FF	D140 ED	DATE ST	15000	LIBOOO	LOCAT	0.14	NOO		000
Species	1106	IROG	INOY	TCO	1802	IPM10E	IPM10D	IPM101	1 PM2 5E	1PM2 5D	1PM2 51	IRCO2	INRCO2	ICO21	ICH4	INIZO	IR	CO2e
Opcoics	1100	11100	INOX	100	1002	II MILOT	II IVII OD	I IVII O I	I IVIZ.OF	I IVIZ.0D	11 1412.01	10002	INDOOZ	10021	I OI I <del>T</del>	11420	118	10020

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Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	<u> </u>	_	_	_
Remove -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
_  -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	<u> </u>	_	_	_		_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	<u> </u>	_	_	_		_	<u> </u>	_	_	_
Remove -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
Subtotal -	_	_	_	_	_	_	_	_	<u> </u>	_	_	_		_	_	_	_	_
_  -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest -	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal -																		

Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 5. Activity Data

## 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Manufacturing	196	196	196	71,635	29.4	29.4	29.4	10,745
Unrefrigerated Warehouse-No Rail	155	155	155	56,707	23.3	23.3	23.3	8,506
User Defined Industrial	105	105	105	38,435	15.8	15.8	15.8	5,765
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

## 5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

#### 5.10.2. Architectural Coatings

Reside	ential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	Barton Road Industrial Proje	<sub>c</sub> ρ.00	257,250	85,750	10,977 Page A - 101
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#### 5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

### 5.11. Operational Energy Consumption

#### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Manufacturing	511,441	453	0.0330	0.0040	2,299,682
Unrefrigerated Warehouse-No Rail	544,439	453	0.0330	0.0040	2,240,922
User Defined Industrial	0.00	453	0.0330	0.0040	0.00
Other Asphalt Surfaces	0.00	453	0.0330	0.0040	0.00
Parking Lot	45,790	453	0.0330	0.0040	0.00

### 5.12. Operational Water and Wastewater Consumption

#### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Manufacturing	12,400,319	0.00
Unrefrigerated Warehouse-No Rail	27,259,056	428,859
User Defined Industrial	0.00	0.00
Other Asphalt Surfaces	0.00	0.00
Parking Lot	0.00	0.00

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### 5.13. Operational Waste Generation

#### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Manufacturing	66.5	_
Unrefrigerated Warehouse-No Rail	111	_
User Defined Industrial	0.00	_
Other Asphalt Surfaces	0.00	_
Parking Lot	0.00	_

### 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Manufacturing	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

### 5.15. Operational Off-Road Equipment

#### 5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	CNG	Average	4.00	8.00	82.0	0.20

#### 5.16. Stationary Sources

#### 5.16.1. Emergency Generators and Fire Pumps

Equipment Type Barton Road Industrial Project	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor Page A - 103
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#### 5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
----------------	-----------	--------	--------------------------	------------------------------	------------------------------

#### 5.17. User Defined

Е	quipment Type	Fuel Type
-	_	_

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

 Vegetation Land Use Type
 Vegetation Soil Type
 Initial Acres
 Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type Initial Acres Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type Number Electricity Saved (kWh/year) Natural Gas Saved (btu/year)

# 6. Climate Risk Detailed Report

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#### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.3	annual days of extreme heat
Extreme Precipitation	2.45	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

#### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	0	0	N/A
Wildfire	1	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

Barton Road Industrial Project Data Attachment The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

#### 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	3	1	1	3
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

#### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

#### 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	_
AQ-Ozone	98.7

Barton Road Industrial Project
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Data Attachment

AQ-PM	84.1
AQ-DPM	96.1
Drinking Water	61.3
Lead Risk Housing	49.4
Pesticides	0.00
Toxic Releases	60.4
Traffic	92.4
Effect Indicators	_
CleanUp Sites	69.4
Groundwater	17.5
Haz Waste Facilities/Generators	27.1
Impaired Water Bodies	12.5
Solid Waste	70.4
Sensitive Population	_
Asthma	62.9
Cardio-vascular	69.1
Low Birth Weights	5.03
Socioeconomic Factor Indicators	_
Education	75.4
Housing	90.5
Linguistic	67.2
Poverty	88.3
Unemployment	74.1

## 7.2. Healthy Places Index Scores

Data Attachment

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract

Barton Road Industrial Project
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Economic	_
Above Poverty	5.697420762
Employed	17.64403952
Median HI	5.684588733
Education	_
Bachelor's or higher	18.85025022
High school enrollment	100
Preschool enrollment	34.98011036
Transportation	_
Auto Access	22.93083537
Active commuting	53.56088798
Social	_
2-parent households	3.977928911
Voting	10.29128705
Neighborhood	_
Alcohol availability	39.09919158
Park access	4.427049917
Retail density	58.68086745
Supermarket access	54.1511613
Tree canopy	11.06120878
Housing	_
Homeownership	23.90606955
Housing habitability	30.07827538
Low-inc homeowner severe housing cost burden	56.83305531
Low-inc renter severe housing cost burden	6.082381625
Uncrowded housing	65.16104196
Health Outcomes	_

	44 =00=0044
Insured adults	44.70678814
Arthritis	0.0
Asthma ER Admissions	23.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	6.0
Cognitively Disabled	33.5
Physically Disabled	63.7
Heart Attack ER Admissions	10.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	65.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	_
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	_
Wildfire Risk	0.6
SLR Inundation Area	0.0
Children	0.5

Elderly	95.7
English Speaking	44.9
Foreign-born	28.3
Outdoor Workers	63.6
Climate Change Adaptive Capacity	_
Impervious Surface Cover	56.4
Traffic Density	90.0
Traffic Access	23.0
Other Indices	_
Hardship	79.0
Other Decision Support	_
2016 Voting	16.4

#### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	83.0
Healthy Places Index Score for Project Location (b)	8.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

#### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

#### 7.5. Evaluation Scorecard

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

Screen	Justification
Construction: Construction Phases	
Construction: Architectural Coatings	
Characteristics: Project Details	
Operations: Vehicle Data	Fleet Mix based on trip generation study User Defined land use is used to estimate emissions from the Haul trucks (MHDT and HHDT) Trip Distances (LDA+LDT+MDT+LHDT = default distance Trip Distance (MHDT+HHDT = 40 miles)
Operations: Fleet Mix	Fleet mix derived from the Trip Generation Study and the EMFAC2021 vehicle class distributions Used Defined Land Use is used to estimate emissions from haul trucks (MHDT and HHDT)
Operations: Refrigerants	AC added to Warehouse land use
Operations: Off-Road Equipment	Estimated number and usage of forklifts and
Land Use	Project Description

Barton Road Development Project Existing Land Use 2025

Vehicle Tiip Summary

Building Size Total Building Land Use 1 - Specialty Trade Contractor (sq-ft) 12,950

Trip Generation

Trip Generation Rate - Specialty 9.82 trips/TSF as per Traffic Trip Generation Memorandum

trips/day (Non-PCE) 127 Building

Land Use 1 - Specialty Trade Contractor

	Vehicle Distribution	Daily Trips
LDA (Passenger Vehicles)	72.50%	92
LHDT (2 axle truck)	4.60%	6
MHDT(3 axle truck)	5.70%	7
HHDT (4+ axle truck)	17.20%	22
	100.0%	127

#### Passenger Vehicle Fleet Mix

	EMFAC2021	Redistribution of		
	Fleet Mix	% Total	Daily Trips	
LDA	54.20%	59.1%	54	
LDT1	6.10%	6.7%	6	
LDT2	18.50%	20.2%	19	
MDV	12.90%	14.1%	13	
Total	91.70%	100.0%	92	

#### Light Heavy Duty Fleet Mix

	EMFAC2021	Redistribution of		
	Fleet Mix	% Total	Daily Trips	
LHDT1	2.85%	79.8%	5	
LHDT2	0.72%	20.2%	1	
Total	3.57%	100.0%	6	

## CalEEMod Assumption: Passenger Vehicles + Local Trucks: LDA+LDT+MDT+LHDT w/CalEEMod default trip distances

			Daily Trip Rate
Fleet Mix	Total Trips	%Total	(Trips/TSF)
LDA	54	55.6%	
LDT1	6	6.3%	
LDT2	19	19.0%	
MDV	13	13.2%	
LHDT1	5	4.8%	
LHDT2	1	1.2%	
Total	98	100.0%	7.57

#### CalEEMod Assumption: Haul Trucks: MHDT +HHDT w/ trip distance of 40 miles

Fleet Mix	Total Trips	%Total	(Trips/TSF)
	•		(IIIpa/IOI)
MHDT	7	24.9%	
HHDT	22	75.1%	
Total	29	100.0%	2.25
Composite Fleet Mix	Number of Daily Trips	% Total	
LDA	54	42.9%	
LDT1	6	4.8%	
LDT2	19	14.6%	
MDV	13	10.2%	
LHDT1	5	3.7%	
LHDT2	1	0.9%	
MHDT	7	5.7%	
HHDT	22	17.2%	
	127	100.0%	9.82

Daily Trip Rate

#### Hauil Truck Daily Trip Summary

Vehicle	Specialty Trade Contractor
MHDT	7
HHDT	22
Total	29

Total Size of Project (square feet)

Trip Rate (trips per TSF)

Combined Fleet Mix		
	Specialty Trade Contracto	% Total
LDA	54	42.9%
LDT1	6	4.8%
LDT2	19	14.6%
MDT	13	10.2%
LHDT1	5	3.7%
LHDT2	1	0.9%
MHDT	7	5.7%
HHDT	22	17.2%
	127	100.0%

## **Barton Road Development Project**

**Existing Land** 

2025

#### **Estimation of Operational Vehicle Fuel Use**

Specialty Use (non-haul trucks) 495264 Haul Trucks 427298

#### **Annual Operational VMT**

#### 922562 miles per year

		Annual VMT	Fuel Rate	Annual Fuel Use	
Vehicle Class	Fleet Mix	(miles/year)	(miles/gallon)	(gallons/year)	Fuel
LDA	42.9%	395,333	29.9	13,209	GAS
LDT1	4.8%	44,493	23.4	1,900	GAS
LDT2	14.6%	134,939	24.6	5,491	GAS
MDV	10.2%	94,092	20.0	4,714	GAS
LHDT1-DSL	1.3%	12,376	20.5	603	DSL
LHDT1-GAS	2.3%	21,503	13.6	1,577	GAS
LHDT2-DSL	0.6%	5,438	17.3	315	DSL
LHDT2-GAS	0.3%	3,120	11.9	261	GAS
MHDT	5.7%	52,586	8.9	5,891	DSL
HHDT	17.2%	158,681	6.1	26,211	DSL
	100%	922,562		60,174	
Fuel-GAS	27,153	gallons/year			
FuelTotal-DSL	33,020	gallons/year			
	60,174				
VMT - GAS	693,481	miles/year			
VMT - DSL	229,081	miles/year			
	922,562	miles/year			

# Grand Terrace - Barton Road Project - Existing Land Use Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Grand Terrace - Barton Road Project - Existing Land Use
Operational Year	2025
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	14.2
Location	34.03294982327935, -117.32881786705703
County	San Bernardino-South Coast
City	Grand Terrace
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5379
EDFZ	10
Electric Utility	Colton Electric Utility Department
Gas Utility	Southern California Gas
App Version	2022.1.1.14

# 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Light Industry	12.9	1000sqft	9.20	12,950	1.00	_	— Page	— A - 119
, Darton i	Road Industrial Project tachment			0.400			Fage	FA-119

User Defined	12.9	User Defined Unit	0.00	0.00	0.00	_	_	_
Industrial								

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

## 2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.76	0.72	4.13	6.27	0.04	0.07	1.93	2.00	0.07	0.50	0.57	14.4	5,013	5,028	1.81	0.62	15.7	5,273
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.64	0.61	4.32	4.88	0.04	0.07	1.93	2.00	0.07	0.50	0.57	14.4	4,936	4,950	1.81	0.62	3.69	5,183
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.71	0.67	4.37	5.41	0.04	0.07	1.93	2.00	0.07	0.50	0.57	14.4	4,949	4,963	1.81	0.62	8.69	5,201
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.13	0.12	0.80	0.99	0.01	0.01	0.35	0.37	0.01	0.09	0.10	2.38	819	822	0.30	0.10	1.44	861
Exceeds (Daily Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	55.0	55.0	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	— Barto	n Road Indus Attachment	triaPProject	No	No	_	_	No	_	_	No	_	_	_	_	— Page	A <del>-</del> 120	_

Exceeds (Average Daily)		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	55.0	55.0	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_
Exceeds (Annual)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3,000
Unmit.	_	_	_	_	_	_	_	_	_	_	_	_	_	Yes	_	_	_	No

# 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

			ay ioi dai									2000	N.D.O.O.O.	000=	2111			000
Sector	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.64	0.30	3.98	5.59	0.04	0.06	1.93	1.99	0.06	0.50	0.56	_	4,654	4,654	0.33	0.60	12.3	4,854
Area	0.10	0.40	< 0.005	0.56	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.32	2.32	< 0.005	< 0.005	_	2.32
Energy	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	331	331	0.03	< 0.005	_	333
Water	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0
Waste	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Total	0.76	0.72	4.13	6.27	0.04	0.07	1.93	2.00	0.07	0.50	0.57	14.4	5,013	5,028	1.81	0.62	15.7	5,273
Daily, Winter (Max)	_	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.62	0.29	4.17	4.76	0.04	0.06	1.93	1.99	0.06	0.50	0.56	_	4,579	4,579	0.33	0.60	0.32	4,767
Area	_	0.31	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_

Barton Road Industrial Project Data Attachment

Energy	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	331	331	0.03	< 0.005	_	333
Water	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0
Waste	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Total	0.64	0.61	4.32	4.88	0.04	0.07	1.93	2.00	0.07	0.50	0.57	14.4	4,936	4,950	1.81	0.62	3.69	5,183
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.62	0.29	4.22	4.90	0.04	0.06	1.93	1.99	0.06	0.50	0.56	_	4,590	4,590	0.33	0.60	5.32	4,784
Area	0.07	0.37	< 0.005	0.39	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.59	1.59	< 0.005	< 0.005	_	1.59
Energy	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	331	331	0.03	< 0.005	_	333
Water	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0
Waste	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Total	0.71	0.67	4.37	5.41	0.04	0.07	1.93	2.00	0.07	0.50	0.57	14.4	4,949	4,963	1.81	0.62	8.69	5,201
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.11	0.05	0.77	0.89	0.01	0.01	0.35	0.36	0.01	0.09	0.10	_	760	760	0.05	0.10	0.88	792
Area	0.01	0.07	< 0.005	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.26	0.26	< 0.005	< 0.005	_	0.26
Energy	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	54.9	54.9	< 0.005	< 0.005	_	55.1
Water	_	_	_	_	_	_	_	_	_	_	_	0.95	4.19	5.14	0.10	< 0.005	_	8.28
Waste	_	_	_	_	_	_	_	_	_	_	_	1.43	0.00	1.43	0.14	0.00	_	5.01
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.56	0.56
Total	0.13	0.12	0.80	0.99	0.01	0.01	0.35	0.37	0.01	0.09	0.10	2.38	819	822	0.30	0.10	1.44	861

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

## Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	0.27	0.25	0.19	3.64	0.01	< 0.005	0.89	0.89	< 0.005	0.22	0.23	_	931	931	0.02	0.02	3.39	941
User Defined Industrial	0.37	0.05	3.79	1.94	0.03	0.05	1.04	1.10	0.05	0.28	0.33	-	3,723	3,723	0.31	0.58	8.94	3,913
Total	0.64	0.30	3.98	5.59	0.04	0.06	1.93	1.99	0.06	0.50	0.56	_	4,654	4,654	0.33	0.60	12.3	4,854
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_
General Light Industry	0.26	0.23	0.21	2.81	0.01	< 0.005	0.89	0.89	< 0.005	0.22	0.23	_	855	855	0.02	0.02	0.09	863
User Defined Industrial	0.37	0.05	3.96	1.95	0.03	0.05	1.04	1.10	0.05	0.28	0.33	-	3,724	3,724	0.31	0.58	0.23	3,905
Total	0.62	0.29	4.17	4.76	0.04	0.06	1.93	1.99	0.06	0.50	0.56	_	4,579	4,579	0.33	0.60	0.32	4,767
Annual	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	0.05	0.04	0.04	0.54	< 0.005	< 0.005	0.16	0.16	< 0.005	0.04	0.04	_	144	144	< 0.005	< 0.005	0.24	145
User Defined Industrial	0.07	0.01	0.73	0.36	0.01	0.01	0.19	0.20	0.01	0.05	0.06	_	616	616	0.05	0.10	0.64	647
Total	0.11	0.05	0.77	0.89	0.01	0.01	0.35	0.36	0.01	0.09	0.10	_	760	760	0.05	0.10	0.88	792

## 4.2. Energy

## 4.2.1. Electricity Emissions By Land Use - Unmitigated

						ual) and												
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	153	153	0.01	< 0.005	_	154
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	153	153	0.01	< 0.005	_	154
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	153	153	0.01	< 0.005	_	154
User Defined Industrial	_	_	_	_	-	-	_	_	_	_	_	_	0.00	0.00	0.00	0.00	-	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	153	153	0.01	< 0.005	_	154
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	25.4	25.4	< 0.005	< 0.005	_	25.5
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_		_	_	_	_				_	_	_	25.4	25.4	< 0.005	< 0.005	_	25.5

## 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Land	TOG	ROG	NOx	СО	SO2	PM10E		PM10T		PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use	100	ROG	INOX		302	PINITUE	PINITUD	PIVITOT	PIVIZ.SE	FIVIZ.5D	PIVIZ.31	BCO2	INBCOZ	0021	СП4	INZU	K	COZE
Daily, Summer (Max)	_	-	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	178	178	0.02	< 0.005	_	178
User Defined Industrial	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
Total	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	178	178	0.02	< 0.005	_	178
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	178	178	0.02	< 0.005	_	178
User Defined Industrial	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
Total	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	178	178	0.02	< 0.005	_	178
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	29.5	29.5	< 0.005	< 0.005	_	29.5
User Defined Industrial	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
Total	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	29.5	29.5	< 0.005	< 0.005	_	29.5

## 4.3. Area Emissions by Source

#### 4.3.2. Unmitigated

Source	TOG	ROG	NOx	СО		PM10E			PM2.5E		PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.28	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	0.03	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	0.10	0.09	< 0.005	0.56	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.32	2.32	< 0.005	< 0.005	_	2.32
Total	0.10	0.40	< 0.005	0.56	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.32	2.32	< 0.005	< 0.005	_	2.32
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.28	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings		0.03	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	0.31	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.05	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Architect ural	_	0.01	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	0.01	0.01	< 0.005	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.26	0.26	< 0.005	< 0.005	_	0.26
Total	0.01	0.07	< 0.005	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.26	0.26	< 0.005	< 0.005	_	0.26

## 4.4. Water Emissions by Land Use

## 4.4.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E		PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use	100	ROG	NOX		302	PINITUE	PINITUD	FINITUT	FIVIZ.SE	FINIZ.5D	FIVIZ.51	BCO2	NBCO2	6021	СП4	INZU	K	COZE
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	— Bartor	Road Indus	trīaī Project	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01 <sub>Page</sub>	<del>A -</del> 127	50.0

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Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	0.95	4.19	5.14	0.10	< 0.005	_	8.28
User Defined Industrial	_		_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.95	4.19	5.14	0.10	< 0.005	_	8.28

## 4.5. Waste Emissions by Land Use

## 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

		,		<i>y</i> ,					<u> </u>									
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
User Defined Industrial	— Dorto	— Dood Indica		_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	— A - 128	0.00
	Dato	n Road Indus Attachment	surar Project													ı aye	A - 120	
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Total	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
Annual	_	_	_	_		_	_	_	_	_	_	_		_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	1.43	0.00	1.43	0.14	0.00	_	5.01
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	1.43	0.00	1.43	0.14	0.00	_	5.01

# 4.6. Refrigerant Emissions by Land Use

## 4.6.1. Unmitigated

Land	TOG	ROG					PM10D			PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Use																		
Daily, Summer (Max)		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_		_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.56	0.56
Total	_	_	_	_			_	_		_	_	_	_	_	_	_	0.56	0.56

## 4.7. Offroad Emissions By Equipment Type

#### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type	TOG	ROG	NOx	со	SO2	PM10E			PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.8. Stationary Emissions By Equipment Type

#### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

				<i>,</i> ,														
Equipme	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
nt																		
Туре																		

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Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 4.9. User Defined Emissions By Equipment Type

#### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 4.10. Soil Carbon Accumulation By Vegetation Type

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## 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetatio n						PM10E	PM10D			PM2.5D		BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)		_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Land Use	TOG	ROG		СО	SO2	PM10E			PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	<u> </u>	_		_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

## 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	
Avoided	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_		_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_		_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_
Subtotal	_	_	_	_	_	_	-	-	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	-	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	— Barto	n Road Indu Attachment	strial Projec		_	_	_	_	_	_	_	_	_	_	_	— Page	A - 133	_

Sequest	_	_	_	-	_	_	_	_	_	_	-	_	_	_	_	_	_	_
Subtotal	_	_	<u> </u>	_	_	_	_	_		_	_	_		_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 5. Activity Data

## 5.9. Operational Mobile Sources

## 5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Light Industry	98.0	98.0	98.0	35,781	1,357	1,357	1,357	495,264
User Defined Industrial	29.3	29.3	29.3	10,682	1,171	1,171	1,171	427,298

## 5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

#### 5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	19,425	6,475	_

#### 5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

## 5.11. Operational Energy Consumption

#### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	123,514	453	0.0330	0.0040	555,375
User Defined Industrial	0.00	453	0.0330	0.0040	0.00

#### 5.12. Operational Water and Wastewater Consumption

## 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Light Industry	2,994,688	16.1
User Defined Industrial	0.00	0.00

## 5.13. Operational Waste Generation

#### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Light Industry	16.1	_
User Defined Industrial	0.00	_

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# 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
,	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

#### 5.15. Operational Off-Road Equipment

#### 5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	CNG	Average	1.00	4.00	82.0	0.20

## 5.16. Stationary Sources

#### 5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
Equipinionic Typo	i doi typo	rtarribor por Bay	riodro por Day	riodio por rodi	1 loloopowol	Loud I doloi

#### 5.16.2. Process Boilers

		Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
--	--	----------------	-----------	--------	--------------------------	------------------------------	------------------------------

#### 5.17. User Defined

Equipment Type	Fuel Type
_	_

#### 5.18. Vegetation

#### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

 Vegetation Land Use Type
 Vegetation Soil Type
 Initial Acres
 Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type Initial Acres Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type Number Electricity Saved (kWh/year) Natural Gas Saved (btu/year)

# 6. Climate Risk Detailed Report

#### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard	Result for Project Location	Unit
Temperature and Extreme Heat	27.3	annual days of extreme heat
Extreme Precipitation	2.45	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

#### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	0	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	0	0	0	N/A
Wildfire	0	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire Barton Road Industrial Pro	ectl	1	1	2 Page A - 138
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Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

#### 6.4. Climate Risk Reduction Measures

## 7. Health and Equity Details

#### 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	_
AQ-Ozone	98.7
AQ-PM	84.1
AQ-DPM	96.1
Drinking Water	61.3
Lead Risk Housing	49.4
Pesticides	0.00
Toxic Releases	60.4
Traffic	92.4
Effect Indicators	_
CleanUp Sites	69.4
Groundwater	17.5

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Haz Waste Facilities/Generators	27.1
Impaired Water Bodies	12.5
Solid Waste	70.4
Sensitive Population	_
Asthma	62.9
Cardio-vascular	69.1
Low Birth Weights	5.03
Socioeconomic Factor Indicators	_
Education	75.4
Housing	90.5
Linguistic	67.2
Poverty	88.3
Unemployment	74.1

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Economic	_
Above Poverty	5.697420762
Employed	17.64403952
Median HI	5.684588733
Education	_
Bachelor's or higher	18.85025022
High school enrollment	100
Preschool enrollment	34.98011036
Transportation	
Auto Access  Barton Road Industrial Project	22.93083537 Page A - 140

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Active commuting	53.56088798
Social	_
2-parent households	3.977928911
Voting	10.29128705
Neighborhood	_
Alcohol availability	39.09919158
Park access	4.427049917
Retail density	58.68086745
Supermarket access	54.1511613
Tree canopy	11.06120878
Housing	_
Homeownership	23.90606955
Housing habitability	30.07827538
Low-inc homeowner severe housing cost burden	56.83305531
Low-inc renter severe housing cost burden	6.082381625
Uncrowded housing	65.16104196
Health Outcomes	_
Insured adults	44.70678814
Arthritis	0.0
Asthma ER Admissions	23.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	6.0

Cognitively Disabled	33.5
Physically Disabled	63.7
Heart Attack ER Admissions	10.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	65.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	_
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	_
Wildfire Risk	0.6
SLR Inundation Area	0.0
Children	0.5
Elderly	95.7
English Speaking	44.9
Foreign-born	28.3
Outdoor Workers	63.6
Climate Change Adaptive Capacity	_
Impervious Surface Cover	56.4
Traffic Density	90.0
Traffic Access	23.0
Other Indices	_
Hardship	79.0

Other Decision Support	_
2016 Voting	16.4

#### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	83.0
Healthy Places Index Score for Project Location (b)	8.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

#### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

#### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

Screen	Justification
Land Use	Project Description
Operations: Vehicle Data	
Operations: Fleet Mix	Project trip generation report
Operations: Off-Road Equipment	Project estimation

Barton Road Industrial Project
Data Attachment

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

# Grand Terrace - Barton Road Project - Existing Land Use Operations (LST) Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

Data Field	Value
Project Name	Grand Terrace - Barton Road Project - Existing Land Use Operations (LST)
Operational Year	2025
Lead Agency	_
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.20
Precipitation (days)	14.2
Location	34.03294982327935, -117.32881786705703
County	San Bernardino-South Coast
City	Grand Terrace
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5379
EDFZ	10
Electric Utility	Colton Electric Utility Department
Gas Utility	Southern California Gas
App Version	2022.1.1.14

# 1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
General Light	12.9	1000sqft	9.20	12,950	1.00	_	_	_
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User Defined	12.9	User Defined Unit	0.00	0.00	0.00	_	_	_
Industrial								

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

# 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Un/Mit.	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.43	0.68	0.92	2.04	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	14.4	505	519	1.52	0.03	3.41	570
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.31	0.57	0.94	1.58	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	14.4	503	517	1.53	0.03	3.37	568
Average Daily (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.37	0.63	0.83	1.81	< 0.005	0.03	0.01	0.03	0.03	< 0.005	0.03	14.4	482	497	1.52	0.03	3.39	548
Annual (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Unmit.	0.07	0.11	0.15	0.33	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	2.38	79.9	82.3	0.25	0.01	0.56	90.7
Exceeds (Daily Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	55.0	55.0	550	150	_		150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	- Barto	n Road Indus Attachment	triaPProject	No	No	_	_	No	_	_	No	_	_		_	— Page	<del>A -</del> 150	

Exceeds (Average Daily)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	55.0	55.0	550	150	_	_	150	_	_	55.0	_	_	_	_	_	_	_
Unmit.	_	No	No	No	No	_	_	No	_	_	No	_	_	_	_	_	_	_
Exceeds (Annual)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Threshol d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3,000
Unmit.	_	_	_	_	_	_	_	_	_	_	_	_	_	Yes	_	_	_	No

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-
Mobile	0.27	0.23	0.40	0.83	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	69.8	69.8	0.04	0.01	0.04	75.2
Area	0.10	0.40	< 0.005	0.56	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.32	2.32	< 0.005	< 0.005	_	2.32
Energy	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	331	331	0.03	< 0.005	_	333
Water	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0
Waste	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Off-Road	0.05	0.04	0.37	0.52	< 0.005	0.02	_	0.02	0.02	_	0.02	_	76.2	76.2	< 0.005	< 0.005	_	76.5
Total	0.43	0.68	0.92	2.04	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	14.4	505	519	1.52	0.03	3.41	570
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	-	_	_	_	_	_	-
Mobile	0.25	0.22	0.42	0.93	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	1_	70.2	70.2	0.04	0.02	< 0.005	75.7

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Λ = = =		0.04																
Area	_	0.31	_	_	_	_	_	_	_	_	_	_		_	_	_	_	_
Energy	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	331	331	0.03	< 0.005	_	333
Water	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0
Waste	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Off-Road	0.05	0.04	0.37	0.52	< 0.005	0.02	_	0.02	0.02	_	0.02	_	76.2	76.2	< 0.005	< 0.005	_	76.5
Total	0.31	0.57	0.94	1.58	< 0.005	0.03	0.01	0.04	0.03	< 0.005	0.03	14.4	503	517	1.53	0.03	3.37	568
Average Daily	_	_	_	_	_	_	_	_	_	_	_	_	_	_	-	_	_	-
Mobile	0.25	0.22	0.41	0.93	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	69.9	69.9	0.04	0.02	0.02	75.4
Area	0.07	0.37	< 0.005	0.39	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	1.59	1.59	< 0.005	< 0.005	_	1.59
Energy	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	331	331	0.03	< 0.005	_	333
Water	_	_	_	_	_	_	_	<u> </u>	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0
Waste	_	_	_	_	_	_	_	<u> </u>	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Off-Road	0.03	0.03	0.26	0.37	< 0.005	0.01	_	0.01	0.01	_	0.01	_	54.3	54.3	< 0.005	< 0.005	_	54.5
Total	0.37	0.63	0.83	1.81	< 0.005	0.03	0.01	0.03	0.03	< 0.005	0.03	14.4	482	497	1.52	0.03	3.39	548
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Mobile	0.05	0.04	0.07	0.17	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	11.6	11.6	0.01	< 0.005	< 0.005	12.5
Area	0.01	0.07	< 0.005	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.26	0.26	< 0.005	< 0.005	_	0.26
Energy	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	54.9	54.9	< 0.005	< 0.005	_	55.1
Water	_	_	_	_	_	_	_	_	_	_	_	0.95	4.19	5.14	0.10	< 0.005	_	8.28
Waste	_	_	_	_	_	_	_	_	_	_	_	1.43	0.00	1.43	0.14	0.00	_	5.01
Refrig.	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.56	0.56
Off-Road	0.01	0.01	0.05	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	8.99	8.99	< 0.005	< 0.005	_	9.20
Total	0.07	0.11	0.15	0.33	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	2.38	79.9	82.3	0.25	0.01	0.56	90.7

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

#### 4.1.1. Unmitigated

Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	0.22	0.22	0.05	0.55	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	20.5	20.5	0.01	0.01	0.02	22.9
User Defined Industrial	0.04	0.01	0.35	0.28	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	49.3	49.3	0.03	0.01	0.02	52.4
Total	0.27	0.23	0.40	0.83	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	69.8	69.8	0.04	0.01	0.04	75.2
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	0.21	0.20	0.06	0.64	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	20.3	20.3	0.01	0.01	< 0.005	22.7
User Defined Industrial	0.04	0.01	0.36	0.29	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	49.9	49.9	0.03	0.01	< 0.005	53.0
Total	0.25	0.22	0.42	0.93	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	_	70.2	70.2	0.04	0.02	< 0.005	75.7
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	0.04	0.04	0.01	0.12	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	3.37	3.37	< 0.005	< 0.005	< 0.005	3.77

User Defined Industrial	0.01	< 0.005	0.06	0.05	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	8.20	8.20	< 0.005	< 0.005	< 0.005	8.72
Total	0.05	0.04	0.07	0.17	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	_	11.6	11.6	0.01	< 0.005	< 0.005	12.5

### 4.2. Energy

#### 4.2.1. Electricity Emissions By Land Use - Unmitigated

							· ·	o/day loi										
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	153	153	0.01	< 0.005	_	154
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	153	153	0.01	< 0.005	_	154
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	153	153	0.01	< 0.005	_	154
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	153	153	0.01	< 0.005	_	154
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	25.4	25.4	< 0.005	< 0.005	_	25.5
User Defined Industrial	_	_	_	_		_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	_	25.4	25.4	< 0.005	< 0.005	_	25.5

#### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

							ì		i daily, iv									
Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	СО2Т	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	178	178	0.02	< 0.005	_	178
User Defined Industrial	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
Total	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	178	178	0.02	< 0.005	_	178
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	178	178	0.02	< 0.005	_	178
User Defined Industrial	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
Total	0.02	0.01	0.15	0.13	< 0.005	0.01	_	0.01	0.01	_	0.01	_	178	178	0.02	< 0.005	_	178
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

General Light Industry	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	29.5	29.5	< 0.005	< 0.005	_	29.5
User Defined Industrial	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
Total	< 0.005	< 0.005	0.03	0.02	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	29.5	29.5	< 0.005	< 0.005	_	29.5

### 4.3. Area Emissions by Source

### 4.3.2. Unmitigated

Source	TOG	ROG	NOx	со				PM10T			PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.28	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	0.03	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	0.10	0.09	< 0.005	0.56	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.32	2.32	< 0.005	< 0.005	_	2.32
Total	0.10	0.40	< 0.005	0.56	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	2.32	2.32	< 0.005	< 0.005	_	2.32
Daily, Winter (Max)	_		_	_	_		_	_	_	_	_	_	_	_		_	_	
Consum er Products	_	0.28	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

Architect ural	_	0.03	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	0.31	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_		_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Consum er Products	_	0.05	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Architect ural Coatings	_	0.01	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Landsca pe Equipme nt	0.01	0.01	< 0.005	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.26	0.26	< 0.005	< 0.005	_	0.26
Total	0.01	0.07	< 0.005	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	0.26	0.26	< 0.005	< 0.005	_	0.26

### 4.4. Water Emissions by Land Use

#### 4.4.2. Unmitigated

Land Use	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0
User Defined Industrial	_	_		_		_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0

Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01	_	50.0
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	5.74	25.3	31.1	0.59	0.01		50.0
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	0.95	4.19	5.14	0.10	< 0.005	_	8.28
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	0.95	4.19	5.14	0.10	< 0.005	_	8.28

## 4.5. Waste Emissions by Land Use

#### 4.5.2. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

				<i>y</i> , , ,						.,,	,							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00		0.00
maasman		Road Indus	trial Project													Page	A - 158	
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Total	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	8.65	0.00	8.65	0.86	0.00	_	30.3
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	1.43	0.00	1.43	0.14	0.00	_	5.01
User Defined Industrial	_	_	_	_	_	_	_	_	_	_	_	0.00	0.00	0.00	0.00	0.00	_	0.00
Total	_	_	_	_	_	_	_	_	_	_	_	1.43	0.00	1.43	0.14	0.00	_	5.01

## 4.6. Refrigerant Emissions by Land Use

#### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use		ROG						PM10T	PM2.5E			BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Total	— Barton	— Road Indus	— trial Project	_	_	_	_	_	_	_	_	_	_	_	_	Page	3.37 A - 159	3.37

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Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	3.37	3.37
Total	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	<u> </u>	<u> </u>	_	3.37	3.37
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
General Light Industry	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.56	0.56
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	0.56	0.56

## 4.7. Offroad Emissions By Equipment Type

#### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

				<i>y</i> .					J.									
Equipme nt Type	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Forklifts	0.05	0.04	0.37	0.52	< 0.005	0.02	_	0.02	0.02	_	0.02	_	76.2	76.2	< 0.005	< 0.005	_	76.5
Total	0.05	0.04	0.37	0.52	< 0.005	0.02	_	0.02	0.02	_	0.02	_	76.2	76.2	< 0.005	< 0.005	_	76.5
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Forklifts	0.05	0.04	0.37	0.52	< 0.005	0.02	_	0.02	0.02	_	0.02	_	76.2	76.2	< 0.005	< 0.005	_	76.5
Total	0.05	0.04	0.37	0.52	< 0.005	0.02	_	0.02	0.02	_	0.02	_	76.2	76.2	< 0.005	< 0.005	_	76.5
Annual	_	_	_	_	_	_	_	_	<u> </u>	_	_	_	_	_	_	_	_	_
Forklifts	0.01 <sub>Barton</sub>	0.01 Road Indus	0.05 trial Project	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	8.99	8.99	< 0.005	< 0.005 Page	A - 160	9.20
Forklifts		0.01 Road Indus	0.05 trial Project	0.07	< 0.005	< 0.005	_	< 0.005	< 0.005	_	< 0.005	_	8.99	8.99	< 0.005	< 0.005 Page	A - 160	9.20

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Total	0.01	0.01	0.05	0.07	< 0.005	< 0.005	 < 0.005	< 0.005	 < 0.005	 8.99	8.99	< 0.005	< 0.005	_	9.02
IUlai	0.01	0.01	0.03	0.07	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.99	0.99	< 0.003	< 0.003		9.02

#### 4.8. Stationary Emissions By Equipment Type

#### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt Type	TOG	ROG		CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.9. User Defined Emissions By Equipment Type

#### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipme nt		ROG					PM10D					BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
(Max)																		
Total				_	-	_	_	_	_	_	_	_	_	_	_		— ^ 161	_

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Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

### 4.10. Soil Carbon Accumulation By Vegetation Type

#### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetatio n	TOG	ROG		со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_		_	_	_		_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_		_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_		_	_	_		_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Ontona	· Onatan	بعد رای مدر	y ioi aaii	y, ton, y i	TOT GITTE	adij dila	O1 100 (1	or day 101	aany, n	, y	ariiraaij							
Land Use	TOG	ROG	NOx	со	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	— Barton	— Road Indus	— trial Proiect	_	_	_	_	_	_	_	_	_	_	_	_	— Page	— A - 162	_
		ttachment							40 / 04									

Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Total	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

#### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Species	TOG	ROG	NOx	СО	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Daily, Winter (Max)	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	Barton Data A	Road Indus	trial Project	_	_	_	_	_	_ 20 / 31	_	_	_	_	_	_	Page	A <u>-</u> 163	_

Remove	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Annual	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Avoided	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Sequest ered	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Remove d	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
Subtotal	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_

# 5. Activity Data

## 5.9. Operational Mobile Sources

#### 5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
General Light Industry	98.0	98.0	98.0	35,781	7.84	7.84	7.84	2,863
User Defined Industrial	29.3	29.3	29.3	10,682	2.43	2.43	2.43	885

## 5.10. Operational Area Sources

#### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

#### 5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
0	0.00	19,425	6,475	_

#### 5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

### 5.11. Operational Energy Consumption

#### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
General Light Industry	123,514	453	0.0330	0.0040	555,375
User Defined Industrial	0.00	453	0.0330	0.0040	0.00

### 5.12. Operational Water and Wastewater Consumption

#### 5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
General Light Industry	2,994,688	16.1
User Defined Industrial	0.00	0.00

## 5.13. Operational Waste Generation

#### 5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
General Light Industry	16.1	_
User Defined Industrial	0.00	_

#### 5.14. Operational Refrigeration and Air Conditioning Equipment

#### 5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
General Light Industry	Other commercial A/C and heat pumps	R-410A	2,088	0.30	4.00	4.00	18.0

## 5.15. Operational Off-Road Equipment

#### 5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Forklifts	Diesel	Average	1.00	4.00	82.0	0.20

### 5.16. Stationary Sources

#### 5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
11.1						

#### 5.16.2. Process Boilers

Equipment TypBarton Road IndustriaFRrejetype	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	AnnuaPageAInp66 (MMBtu/yr)
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#### 5.17. User Defined

Equipment Type	Fuel Type
_	_

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type

Vegetation Soil Type

Initial Acres

Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type Initial Acres Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type Number Electricity Saved (kWh/year) Natural Gas Saved (btu/year)

## 6. Climate Risk Detailed Report

#### 6.1. Climate Risk Summary

Data Attachment

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

Climate Hazard

Barton Road Industrial Project

Result for Project Location

Unit

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Temperature and Extreme Heat	27.3	annual days of extreme heat
Extreme Precipitation	2.45	annual days with precipitation above 20 mm
Sea Level Rise	0.00	meters of inundation depth
Wildfire	0.00	annual hectares burned

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

#### 6.2. Initial Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	0	0	0	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	0	0	0	N/A
Wildfire	0	0	0	N/A
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	0	0	0	N/A

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

Barton Road Industrial Project
Data Attachment

#### 6.3. Adjusted Climate Risk Scores

Climate Hazard	Exposure Score	Sensitivity Score	Adaptive Capacity Score	Vulnerability Score
Temperature and Extreme Heat	1	1	1	2
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	1	1	1	2
Wildfire	1	1	1	2
Flooding	N/A	N/A	N/A	N/A
Drought	N/A	N/A	N/A	N/A
Snowpack Reduction	N/A	N/A	N/A	N/A
Air Quality Degradation	1	1	1	2

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.

The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

#### 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

#### 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

Indicator	Result for Project Census Tract
Exposure Indicators	_
AQ-Ozone	98.7
AQ-PM	84.1
AQ-DPM	96.1
Drinking Water	61.3
Lead Risk Houßingon Road Industrial Project Data Attachment	49.4 Page A - 169
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Pesticides	0.00
Toxic Releases	60.4
Traffic	92.4
Effect Indicators	_
CleanUp Sites	69.4
Groundwater	17.5
Haz Waste Facilities/Generators	27.1
Impaired Water Bodies	12.5
Solid Waste	70.4
Sensitive Population	_
Asthma	62.9
Cardio-vascular	69.1
Low Birth Weights	5.03
Socioeconomic Factor Indicators	_
Education	75.4
Housing	90.5
Linguistic	67.2
Poverty	88.3
Unemployment	74.1

### 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Indicator Result for Project Census Tract						
Economic	_					
Above Poverty	5.697420762					
Employed	17.64403952					
Median HI	5.684588733					

Barton Road Industrial Project
Data Attachment

Education	_
Bachelor's or higher	18.85025022
High school enrollment	100
Preschool enrollment	34.98011036
Transportation	
Auto Access	22.93083537
Active commuting	53.56088798
Social	_
2-parent households	3.977928911
Voting	10.29128705
Neighborhood	_
Alcohol availability	39.09919158
Park access	4.427049917
Retail density	58.68086745
Supermarket access	54.1511613
Tree canopy	11.06120878
Housing	_
Homeownership	23.90606955
Housing habitability	30.07827538
Low-inc homeowner severe housing cost burden	56.83305531
Low-inc renter severe housing cost burden	6.082381625
Uncrowded housing	65.16104196
Health Outcomes	_
Insured adults	44.70678814
Arthritis	0.0
Asthma ER Admissions	23.5
High Blood Pressure	0.0

Barton Road Industrial Project Data Attachment

Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	6.0
Cognitively Disabled	33.5
Physically Disabled	63.7
Heart Attack ER Admissions	10.0
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	65.8
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	_
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	_
Wildfire Risk	0.6
SLR Inundation Area	0.0
Children	0.5
Elderly	95.7
English Speaking	44.9
Foreign-born	28.3
Outdoor Workers	63.6

Climate Change Adaptive Capacity	_
Impervious Surface Cover	56.4
Traffic Density	90.0
Traffic Access	23.0
Other Indices	_
Hardship	79.0
Other Decision Support	_
2016 Voting	16.4

#### 7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	83.0
Healthy Places Index Score for Project Location (b)	8.00
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	Yes
Project Located in a Low-Income Community (Assembly Bill 1550)	Yes
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

#### 7.4. Health & Equity Measures

No Health & Equity Measures selected.

#### 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

#### 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

## 8. User Changes to Default Data

Barton Road Industrial Project Data Attachment

b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

Screen	Justification
Land Use	Project Description
Operations: Vehicle Data	
Operations: Fleet Mix	Project trip generation report
Operations: Off-Road Equipment	Project estimation

Source: EMFAC2021 (v1.0.2) Emission Rates

Region Type: Air District Region: South Coast AQMD

Calendar Year: 2024 for Construction

Season: Annual

Vehicle Classification: EMFAC2007 Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	Calendar Y Vehicle Category	Model Yea	Speed	Fuel	Population	Total VMT	CVMT	EVMT		Trips	Miles/gallon
South Coast AQMD	2024 LDA		Aggregate	Diesel			459042.5		0		41.23
South Coast AQMD	2024 LDT1	00 0	Aggregate	Diesel			3503.735		0	531.3271	23.40
South Coast AQMD	2024 LDT2	00 0	Aggregate	Diesel		364804.3			0	40516.13	31.86
South Coast AQMD	2024 LHDT1	00 0	Aggregate	Diesel	107344.1	4521713	4521713		0	1350253	20.53
South Coast AQMD	2024 LHDT2	00 0	Aggregate	Diesel	47493.72	1985333	1985333		0	597411.2	17.26
South Coast AQMD	2024 MDV	00 0	Aggregate	Diesel	20419.83	810698.9	810698.9		0	95859.46	23.71
South Coast AQMD	2024 T6-MHDT	00 0	Aggregate	Diesel	117140.1	5002001	5002001		0	1440534	8.93
South Coast AQMD	2024 T7-HHDT	00 0	Aggregate	Diesel	101734.6	13368764	13368764		0	1602081	6.05
South Coast AQMD	2024 LDA	00 0	Aggregate	Gasoline	5451205	2.19E+08	2.19E+08		0	25370626	29.31
South Coast AQMD	2024 LDT1	00 0	Aggregate	Gasoline	505255.2	18293109	18293109		0	2223063	24.42
South Coast AQMD	2024 LDT2	00 0	Aggregate	Gasoline	2551917	1.06E+08	1.06E+08		0	12002899	23.94
South Coast AQMD	2024 LHDT1		Aggregate	Gasoline	205772	8100729	8100729		0	3065696	13.64
South Coast AQMD	2024 LHDT2	00 0	Aggregate	Gasoline	32210.09	1194342	1194342		0	479882.3	11.94
South Coast AQMD	2024 MDV	Aggregate	Aggregate	Gasoline	1622854	62814788	62814788		0	7507624	19.47
South Coast AQMD	2024 T6-MHDT	Aggregate	Aggregate	Gasoline	25495.89	1374428	1374428		0	510121.8	5.16
South Coast AQMD	2024 T7-HHDT	Aggregate	Aggregate	Gasoline	66.3137	4424.269	4424.269		0	1326.805	4.01
		00 0	00 0								
		VMT-DSL	VMT-GAS	Total	%DSL	%GAS	%Total				
South Coast AQMD	2024 LDA	459042	218661478	219120521	0.2%	99.8%	49.5%				
South Coast AQMD	2024 LDT1	3504	18293109	18296612	0.0%	100.0%	4.1%				
South Coast AQMD	2024 LDT2	364804	105566684	105931489	0.3%	99.7%	23.9%				
South Coast AQMD	2024 LHDT1	4521713	8100729	12622442	35.8%	64.2%	2.9%				
South Coast AQMD	2024 LHDT2	1985333	1194342	3179675	62.4%	37.6%	0.7%				
South Coast AQMD	2024 MDV	810699	62814788	63625486	1.3%	98.7%	14.4%				
South Coast AQMD	2024 T6-MHDT	5002001	1374428	6376429	78.4%	21.6%	1.4%				
South Coast AQMD	2024 T7-HHDT	13368764	4424	13373188	100.0%	0.0%	3.0%				
				442525841							

Calendar Year: 2025

for Operation

Season: Annual

Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

										Fuel Mileage
Region	Calendar Y Vehicle Category	Model Yea	Speed	Fuel	Population	Total VMT	CVMT	EVMT	Trips	miles/gallon)
South Coast AQMD	2025 LDA	Aggregate	Aggregate	Diesel	13906.68	418696.8	418696.8		0 57806.76	41.68
South Coast AQMD	2025 LDT1	Aggregate	Aggregate	Diesel	167.6467	3101.137	3101.137		0 470.6244	23.41
South Coast AQMD	2025 LDT2	Aggregate	Aggregate	Diesel	8796.37	378041	378041		0 42289.81	32.57
South Coast AQMD	2025 LHDT1	Aggregate	Aggregate	Diesel	111060.2	4667620	4667620		0 1396998	20.66
South Coast AQMD	2025 LHDT2	Aggregate	Aggregate	Diesel	49620.94	2062111	2062111		0 624169	17.41
South Coast AQMD	2025 MDV	Aggregate	Aggregate	Diesel	20570.99	807748.5	807748.5		0 96237.03	24.16
South Coast AQMD	2025 T6-MHDT	Aggregate	Aggregate	Diesel	119577.2	5039597	5039597		0 1472048	8.97
South Coast AQMD	2025 T7-HHDT	Aggregate	Aggregate	Diesel	104913.1	13605802	13605802		0 1655018	6.14
South Coast AQMD	2025 LDA	Aggregate	Aggregate	Gasoline	5388809	2.15E+08	2.15E+08		0 25057977	29.93
South Coast AQMD	2025 LDT1	Aggregate	Aggregate	Gasoline	497455.9	17999149	17999149		0 2189371	24.89
South Coast AQMD	2025 LDT2	Aggregate	Aggregate	Gasoline	2603678	1.07E+08	1.07E+08		0 12247310	24.57
South Coast AQMD	2025 LHDT1	Aggregate	Aggregate	Gasoline	205266.9	8110009	8110009		0 3058171	13.97
South Coast AQMD	2025 LHDT2	Aggregate	Aggregate	Gasoline	31970.23	1183187	1183187		0 476308.8	12.18
South Coast AQMD	2025 MDV	Aggregate	Aggregate	Gasoline	1634952	63253755	63253755		0 7567850	19.96
South Coast AQMD	2025 T6-MHDT	Aggregate	Aggregate	Gasoline	24929.99	1334681	1334681		0 498799.2	5.21
South Coast AQMD	2025 T7-HHDT	Aggregate	Aggregate	Gasoline	56.72119	4109.856	4109.856		0 1134.878	4.10
		VMT-DSL	VMT-GAS	Total	%DSL	%GAS	%Total			
South Coast AQMD	2025 LDA	418697		215656481	0.2%	99.8%	48.7%			
South Coast AQMD	2025 LDT1	3101	17999149	18002250		100.0%	4.1%			
South Coast AQMD	2025 LDT2	378041		107867749		99.6%	24.4%			
South Coast AQMD	2025 LHDT1	4667620	8110009	12777629		63.5%	2.9%			
South Coast AQMD	2025 LHDT2	2062111	1183187	3245297			0.7%			
South Coast AQMD	2025 MDV	807749	63253755	64061504		98.7%	14.5%			
South Coast AQMD	2025 T6-MHDT	5039597	1334681	6374278		20.9%	1.4%			
South Coast AQMD	2025 T7-HHDT	13605802	4110	13609912		0.0%	3.1%			

441595099