



## Technical Memorandum

To: Adam Schmid, Duke Realty

From: Eliza Laws, Senior Environmental Analyst  
Monica Tobias, Assistant Environmental Analyst

Date: April 16, 2019

Re: Air Quality/Greenhouse Gas Analysis for the Duke Warehouse at Perry Street and Barrett Avenue Project (DPR No. PLN18-00011), City of Perris

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The following air quality assessment was prepared to evaluate whether the expected criteria air pollutant emissions generated as a result of construction and operation of the proposed Project would cause exceedances of the South Coast Air Quality Management District's (SCAQMD) thresholds for air quality in the Project area. The greenhouse gas (GHG) assessment was prepared to evaluate whether the expected criteria GHG emissions generated as a result of construction and operation of the proposed Project would exceed the SCAQMD draft screening significance thresholds. This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000 *et seq.*). The methodology follows the *CEQA Air Quality Handbook* prepared by the SCAQMD for quantification of emissions and evaluation of potential impacts to air resources. As recommended by SCAQMD staff, the **California Emissions Estimator Model**<sup>®</sup> version 2016.3.2 (CalEEMod) was used to quantify Project-related emissions.

The Project proposes development of an approximate 148,300 square foot (SF) high-cube, non-refrigerated warehouse building on approximately 7.18 net acres south of Perry Street and east of Barrett Avenue, in the City of Perris, California. The Project will include approximately 119,054 SF (2.73 acres) of concrete paving, and approximately 45,573 SF (1.05 acre) of landscaping. The Project is located within the Perris Valley Commerce Center Specific Plan adopted in 2012. The Project's sewer, water, and recycled water lines will connect to existing lines along the frontage of the Project within Perry Street. The Project will also construct off-site water, storm drain, and road improvements consisting of a new water line in Barrett Avenue and partial width improvements to Barrett Avenue (approximately 6,000 SF) and an off-site storm drain that will connect into an existing line in Perris Boulevard (approximately 4,200 SF).

Per the City of Perris' (City) request, this Project will analyze (but not build) a new traffic signal (4-legged traffic intersection improvements) at Perry Street and Indian Avenue. This new signalized intersection will disturb approximately 70,000 SF and will include the removal and repaving of portions of the street and sidewalks.

## ▪ Regional Significance Thresholds

The thresholds contained in the *SCAQMD CEQA Air Quality Handbook*<sup>1</sup> (SCAQMD 1993) are considered regional thresholds and are shown in **Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds**, below. These regional thresholds were developed based on the SCAQMD’s treatment of a major stationary source.

**Table 1 – SCAQMD CEQA Daily Regional Significance Thresholds**

Emission Threshold	Units	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM-10	PM-2.5
Construction	lbs/day	75	100	550	150	150	55
Operation	lbs/day	55	55	550	150	150	55

Air quality impacts can be described in a short- and long-term perspective. Short-term impacts occur during site grading and Project construction and consist of fugitive dust and other particulate matter, as well as exhaust emissions generated by construction-related vehicles. Long-term air quality impacts occur once the Project is in operation.

The Project will be required to comply with existing SCAQMD rules for the reduction of fugitive dust emissions. SCAQMD Rule 403 establishes these procedures. Compliance with this rule is achieved through application of standard best management practices in construction and operation activities, such as application of water or chemical stabilizers to disturbed soils, managing haul road dust by application of water, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 mph, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph and establishing a permanent, stabilizing ground cover on finished sites. In addition, projects that disturb 50 or more acres or more of soil or move 5,000 cubic yards of materials per day are required to submit a Fugitive Dust Control Plan or a Large Operation Notification Form to SCAQMD. Based on the size of this Project’s disturbance area (9.02 acres), a Fugitive Dust Control Plan or a Large Operation Notification Form would not be required.

## Short-Term Analysis

Short-term emissions from Project construction were evaluated using the CalEEMod version 2016.3.2 program. The estimated construction period for the proposed Project is approximately nine months, beginning no sooner than September 2019. The default parameters within CalEEMod were used and these default values reflect a worst-case scenario, which means that Project emissions are expected to be equal to or less than the estimated emissions. In addition to the default values used, assumptions relevant to model inputs for short-term construction emission estimates used are:

- Construction is anticipated to begin in September 2019 with grading and end with architectural coatings (painting):

Construction Activity	Start Date	End Date	Total Working Days
Grading	September 2, 2019	September 27, 2019	20 days
Building Construction	September 28, 2019	June 5, 2020	180 days
Paving	May 11, 2018	June 5, 2020	20 days
Architectural Coatings	May 11, 2019	June 5, 2020	20 days

<sup>1</sup> South Coast Air Quality Management District, *CEQA Air Quality Handbook*, November 1993. (Available at SCAQMD.)

- The equipment to be used for each activity is shown below and is based on CalEEMod defaults. Each piece of equipment is assumed to operate 8 hours per day:

Construction Activity	Off-Road Equipment	Unit Amount
Grading	Excavators	1
	Graders	1
	Rubber Tired Dozers	1
	Tractors/Loaders/Backhoes	3
Building Construction	Cranes	1
	Forklifts	3
	Generator Sets	1
	Tractors/Loaders/Backhoes	3
	Welders	1
Paving	Pavers	2
	Paving Equipment	2
	Rollers	2
Architectural Coatings	Air Compressors	1

- To evaluate Project compliance with SCAQMD Rule 403 for fugitive dust control, the Project utilized the mitigation option of watering the Project site three times daily which achieves a control efficiency of 61 percent for PM-10 and PM-2.5 emissions. Two (2) one-way vendor trips were added to the grading and paving activities to account for water truck trips.
- Approximately 17,900 cubic yards of soil will be imported during grading operations. Truck capacity is assumed to be 16 cubic yards, resulting in approximately 1,119 truckloads of import over a 20 day period, or approximately 56 truckloads per day. The import site is currently unknown. Therefore, the CalEEMod default was utilized which assumes a hauling trip length of 20 miles per trip.
- Off-site infrastructure improvements will also be required for water, storm water, and roadways. Off-site improvements to Barrett Avenue include pavement widening, curb, gutter, and sidewalk on the east side, and installation of a water line disturbing approximately 6,000 SF. Off-site storm drain lines will be constructed between the Project site and Perris Boulevard, disturbing approximately 4,200 SF. The new signalized intersection at Perry Street and Indian Avenue will disturb approximately 70,000 SF.

The results of this analysis are summarized below.

**Table 2 – Unmitigated Estimated Maximum Daily Construction Emissions**

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Construction Thresholds</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Grading-2019	3.33	<b>57.50</b>	20.92	<b>0.12</b>	<b>6.24</b>	<b>3.29</b>
Building Construction-2019	3.64	30.67	27.03	0.06	3.71	1.97
Building Construction-2020	<b>3.28</b>	27.83	<b>25.84</b>	0.06	3.51	1.78
Paving-2020	<b>2.03</b>	14.32	<b>15.29</b>	0.02	0.94	0.74
Architectural Coatings-2020	<b>72.64</b>	2.35	<b>3.77</b>	0.01	0.52	0.25
<b>Maximum<sup>1</sup></b>	<b>77.95</b>	<b>57.50</b>	<b>44.90</b>	<b>0.12</b>	<b>6.24</b>	<b>3.29</b>
<b>Exceeds Threshold?</b>	<b>Yes</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: <sup>1</sup> Maximum emissions are the greater of either grading or building construction alone in 2019, or the sum of building construction, paving and architectural coating in 2020 since these activities overlap. Maximum emission are shown in bold.

As shown in the table above, the emissions from construction of the Project are below the SCAQMD daily construction thresholds for all the criteria pollutants, except VOC resulting during architectural coatings (painting). Please see the subheading “Recommended Mitigation Measures” for mitigation that reduces the Project’s construction emissions.

### Long-Term Analysis

Long-term emissions are evaluated at build-out of a project. The Project is assumed to be operational in 2020. Mobile source emissions refer to on-road motor vehicle emissions generated from the Project’s traffic and based on the Traffic Impact Analysis (TIA) for Warehouse Building Case # PLN 18-00011.<sup>2</sup> An average truck trip length of approximately 60 miles was assumed, which was provided by the City. On-site service equipment (i.e., forklifts) are assumed to be electric and therefore do not have any direct emissions of criteria pollutants. Area source emissions from the Project include stationary combustion emissions of natural gas used for space and water heating (shown in a separate row as energy), yard and landscape maintenance, and an average building square footage to be repainted each year. CalEEMod computes area source emissions based upon default factors and land use assumptions. CalEEMod defaults were used and reflect the 2016 Title 24 standards. Separate emissions were computed for both the summer and winter.

**Table 3 – Unmitigated Estimated Daily Project Operation Emissions (Summer)**

Source	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Thresholds</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Area	3.42	0.00	0.04	0.00	0.00	0.00
Energy	0.01	0.08	0.07	0.00	0.01	0.01
Mobile	0.87	10.75	14.12	0.07	5.22	1.47
<b>Total</b>	<b>4.30</b>	<b>10.83</b>	<b>14.23</b>	<b>0.07</b>	<b>5.23</b>	<b>1.48</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

**Table 4 – Unmitigated Estimated Daily Project Operation Emissions (Winter)**

Source	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Thresholds</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Area	3.42	0.00	0.04	0.00	0.00	0.00
Energy	0.01	0.08	0.07	0.00	0.01	0.01
Mobile	0.79	11.01	11.94	0.07	5.22	1.47
<b>Total</b>	<b>4.22</b>	<b>11.09</b>	<b>12.05</b>	<b>0.07</b>	<b>5.23</b>	<b>1.48</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

Evaluation of the data presented on the above tables indicates that criteria pollutant emissions from operation of this Project will not exceed the SCAQMD regional daily thresholds for any pollutant during summer or winter.

<sup>2</sup> Albert A. Webb Associates, *Traffic Impact Analysis Warehouse Building Case # PLN 18-00011*, March 2019.

## Localized Significance Threshold Analysis

### Background

As part of the SCAQMD's environmental justice program, attention has been focused on localized effects of air quality. Staff at SCAQMD has developed localized significance threshold (LST) methodology<sup>3</sup> that can be used by public agencies to determine whether or not a project may generate significant adverse localized air quality impacts (both short- and long-term). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the state ambient air quality standard, and are developed based on the ambient concentrations of that pollutant for each source receptor area (SRA). The Project is located in SRA 24.

### Short-Term Analysis

According to the LST methodology, only on-site emissions need to be analyzed. Emissions associated with vendor and worker trips are mobile source emissions that occur off site. The emissions analyzed under the LST methodology are NO<sub>2</sub>, CO, PM-10, and PM-2.5. SCAQMD has provided LST lookup tables<sup>4</sup> to allow users to readily determine if the daily emissions for proposed construction or operational activities could result in significant localized air quality impacts for projects five acres or smaller. Although the Project site disturbs approximately 9.02 acres, it is anticipated that an area of approximately 2.5 acres would be disturbed per day during construction.<sup>5</sup> Therefore, the LST for the two-acre site was utilized.

The LST thresholds are estimated using the maximum daily disturbed area (in acres) and the distance of the Project to the nearest sensitive receptors (in meters). The closest sensitive receptors to the Project construction site are the existing adjacent residential properties on Barrett Avenue, south of the Project Site, and on Perry Street, east of the Project Site. The closest receptor distance on the LST look-up tables is 25 meters. According to LST methodology, projects with boundaries closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters. Therefore, a receptor distance of 25 meters (85 feet) was used to ensure a conservative analysis. The results are summarized below.

**Table 5 – Unmitigated LST Results for Daily Construction Emissions**

Pollutant	Peak Daily Emissions (lb/day)			
	NO <sub>x</sub>	CO	PM-10	PM-2.5
<b>LST Threshold for 2-acre at 25 meters</b>	<b>170</b>	<b>883</b>	<b>7</b>	<b>4</b>
Grading	28.35	16.29	<b>4.00</b>	<b>2.61</b>
Building Construction 2019	22.71	18.31	1.38	1.30
Building Construction 2020	<b>20.65</b>	<b>17.97</b>	1.19	1.12
Paving 2020	<b>14.07</b>	<b>14.65</b>	0.75	0.69
Architectural Coating 2020	<b>2.25</b>	<b>2.44</b>	0.15	0.15
<b>Maximum<sup>1</sup></b>	<b>36.97</b>	<b>35.06</b>	<b>4.00</b>	<b>2.61</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: <sup>2</sup> Maximum emissions are the greater of either grading or building construction alone in 2019, or the sum of building construction, paving and architectural coating in 2020 since these activities overlap.

<sup>3</sup> South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology*, Revised July 2008. (Available at <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>, accessed March 2019.)

<sup>4</sup> <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

<sup>5</sup> <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>

Emissions from construction of the Project will be below the LST established by SCAQMD for the Project.

### Long-Term Analysis

According to the LST methodology, LSTs only apply to the operational phase if a project includes stationary sources or attracts mobile sources that may spend long periods of time idling at the site, such as warehouse/transfer facilities. Therefore, because the proposed Project will operate as a warehouse and has the potential to attract mobile sources that can reasonably be assumed to idle at the site, a long-term LST analysis was prepared for this Project. Although the Project exceeds five acres, per SCAQMD, the LST lookup tables can be used as a screening tool to determine if dispersion modeling would be necessary. Therefore, the Project’s on-site emissions from CalEEMod and LST Look-Up Tables for the 5-acre site were utilized as a screening-level analysis.

CalEEMod version 2016.3.2 was utilized to estimate the Project’s emissions from trucks traveling on the Project site. An on-site distance of 0.20 miles was conservatively assumed to be traveled for each one of the Project’s truck trips identified in the Traffic Impact Analysis. The output is attached to this memo and summarized below. Idling emissions from trucks at loading docks is not available in CalEEMod; therefore, PM-10 and PM-2.5 idling emissions were calculated separately to account for 15-minutes of on-site idling per truck per day.<sup>6</sup> The results were added to the total PM-10 and PM-2.5 emissions from CalEEMod and presented in the table below. The closest sensitive receptors to the Project operations are the existing adjacent residential properties on Barrett Avenue, south of the Project Site, and on Perry Street, east of the Project Site. Therefore, a receptor distance of 25 meters (85 feet) was used to ensure a conservative analysis. The results are summarized below.

**Table 6 – Unmitigated LST Results for Daily Operational Emissions**

Pollutant	Peak Daily Emissions (lb/day)			
	NO <sub>x</sub>	CO	PM-10 <sup>1</sup>	PM-2.5 <sup>1</sup>
<b>LST Threshold for 5-acre at 25 meters</b>	<b>270</b>	<b>1,577</b>	<b>4</b>	<b>2</b>
On-Site Truck Travel	3.27	1.42	0.04	0.01
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Note: The greater of summer or winter emissions from CalEEMod is shown. Output attached herewith.

<sup>1</sup> CalEEMod output emissions added to idling emissions

Therefore, as indicated in the table above, Project-related long-term operational emissions will not exceed any SCAQMD operational LST.

### CO Hot Spots Analysis

A carbon monoxide (CO) “hot spot” is a localized concentration of CO that is above the state or federal 1-hour or 8-hour ambient air quality standards (AAQS). Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles.

Based on the information presented below, a CO “hot spot” analysis is not needed to determine whether the addition of Project related traffic will contribute to an exceedance of either the state or federal AAQS for CO emissions in the Project area.

The analysis prepared for CO attainment in the South Coast Air Basin by the SCAQMD can be used to assist in evaluating the potential for CO exceedances in the South Coast Air Basin. CO attainment was

<sup>6</sup> Idling emission factors obtained from EMFAC2014; idling calculations attached herewith

thoroughly analyzed as part of the SCAQMD's 2003 Air Quality Management Plan (2003 AQMP)<sup>7</sup> and the Revised 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).<sup>8</sup> As discussed in the 1992 CO Plan, peak carbon monoxide concentrations in the South Coast Air Basin are due to unusual meteorological and topographical conditions, and not due to the impact of particular intersections (2003 AQMP Appendix V, p. V-4-32). Considering the region's unique meteorological conditions and the increasingly stringent CO emissions standards, CO modeling was performed as part of the 1992 CO Plan and subsequent plan updates and air quality management plans.

In the 1992 CO Plan, a CO hot spot analysis was conducted for four busy intersections in Los Angeles at the peak morning and afternoon time periods. The intersections evaluated included: Long Beach Blvd. and Imperial Highway (Lynwood); Wilshire Blvd. and Veteran Ave. (Westwood); Sunset Blvd. and Highland Ave. (Hollywood); and La Cienega Blvd. and Century Blvd. (Inglewood). These analyses did not predict a violation of CO standards. The busiest intersection evaluated in the 1992 CO Plan and subsequent 2003 AQMP was that at Wilshire Blvd. and Veteran Ave., which has a daily traffic volume of approximately 100,000 vehicles per day (2003 AQMP Appendix V, Table 4-7). The Los Angeles County Metropolitan Transportation Authority (MTA)<sup>9</sup> evaluated the LOS in the vicinity of the Wilshire Blvd./Veteran Ave. intersection and found it to be level E at peak morning traffic and Level F at peak afternoon traffic (MTA, Exhibit 2-5 and 2-6). This hot spot analysis was conducted at intersections subject to extremes in vehicle volumes and vehicle congestion, and did not predict any violation of CO standards. Considering Project-related traffic as well as existing conditions, ambient growth, and cumulative project traffic, the highest average daily trips would be 20,544 on Perris Boulevard between Perry Street and Ramona Expressway when no new traffic signal is installed at the intersection of Perry Street and Indian Boulevard, which is lower than the values studied by SCAQMD.<sup>10</sup> Therefore, it can reasonably be concluded that Project-related traffic would not have daily traffic volumes exceeding those at the intersections modeled in the 2003 AQMP, nor would there be any reason unique to the meteorology to conclude that intersections affected by the Project would yield higher CO concentrations if modeled in detail. Thus, the Project would not result in CO hot spots.

## ■ Greenhouse Gas Analysis

Greenhouse gases (GHG) are not presented in lbs/day like criteria pollutants; they are typically evaluated on an annual basis using the metric system. Additionally, unlike the criteria pollutants, GHG do not have adopted significance thresholds associated with them at this time. Several agencies, at various levels, have proposed draft GHG significance thresholds for use in CEQA documents. SCAQMD has been working on GHG thresholds for development projects. The most recent draft proposal was in September 2010<sup>11</sup> and included significance thresholds for residential, commercial, and mixed-use projects at 3,500, 1,400, and 3,000 metric tonnes per year of carbon dioxide equivalents (MTCO<sub>2</sub>E/yr), respectively. Alternatively, a lead agency has the option to use 3,000 MTCO<sub>2</sub>E/yr as a threshold for all non-industrial projects. Although both options are recommended by SCAQMD, a lead agency is advised to use only one option and to use it consistently. In December 2008, the SCAQMD adopted a threshold of 10,000 MTCO<sub>2</sub>E/yr for stationary source projects where SCAQMD is the lead agency. This approach is also widely used by the City of Perris and various other cities in the South Coast Air Basin where the SCAQMD is the lead agency. Further, this threshold has been applied by the City of Perris for other industrial developments subject to CEQA (Integra Perris Distribution Center Project, Optimus Logistics Center 2, and Duke Warehouses at Indian Avenue and Markham Street and Perris Boulevard and

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<sup>7</sup> SCAQMD, *2003 Air Quality Management Plan, August 1, 2003*. (Available at <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2003-aqmp>, accessed March 2019.)

<sup>8</sup> SCAQMD, *Revision to the 1992 Carbon Monoxide Attainment Plan*, September 1994. (Available at SCAQMD.)

<sup>9</sup> Metropolitan Transportation Authority, *2004 Congestion Management Plan for Los Angeles County*, Adopted July 22, 2004. (Available at [http://www.metro.net/images/cmp\\_2004.pdf](http://www.metro.net/images/cmp_2004.pdf), accessed March 2019.)

<sup>10</sup> Albert A. Webb Associates, *Traffic Impact Analysis Warehouse Building Case # PLN 18-00011*, March 2019.

<sup>11</sup> [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-15/ghg-meeting-15-main-presentation.pdf?sfvrsn=2)

Markham Street). As such, this threshold is utilized herein to determine if emissions of GHG from this Project will be significant. The SCAQMD significance thresholds also evaluate construction emissions by amortizing them over an expected project life of 30 years.

## Short-Term Analysis

### Construction-Related Emissions

The CalEEMod model calculates GHG emissions from fuel usage by construction equipment and construction-related activities, like construction worker trips, for the Project. The CalEEMod estimate does not analyze emissions from construction-related electricity or natural gas. Construction-related electricity and natural gas emissions vary based on the amount of electric power used during construction and other unknown factors which make them too speculative to quantify. The CalEEMod output results for construction-related GHG emissions present the GHG emissions estimates for the Project for CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and CO<sub>2</sub>E.<sup>12</sup>

**Table 7 – Project Construction Equipment GHG Emissions**

Year	Metric Tons per year (MT/yr)			
	Total CO <sub>2</sub>	Total CH <sub>4</sub>	Total N <sub>2</sub> O	Total CO <sub>2</sub> E
2019	301.38	0.04	0.00	302.40
2020	344.59	0.05	0.00	345.87
Total	645.97	0.09	0.00	648.27
			<b>Amortized</b>	<b>21.61</b>

Evaluation of the table above indicates that an estimated 648.27 MTCO<sub>2</sub>E will occur from Project construction equipment over the course of the estimated construction period. The draft SCAQMD GHG threshold Guidance document released in October 2008<sup>13</sup> recommends that construction emissions be amortized for a project lifetime of 30 years to ensure that GHG reduction measures address construction GHG emissions as part of the operational reduction strategies. Therefore, the total GHG emissions from Project construction were amortized and are included in **Table 9**, below.

## Long-Term Analysis

### Area Source Emissions

CalEEMod estimates the GHG emissions associated with area sources which include landscape equipment emissions, architectural coating, consumer products, and hearths. Landscape equipment servicing the Project site create CO<sub>2</sub> resulting from fuel combustion based on the Project's land uses. Consumer products consist of consumer use of solvents and personal care products and architectural coatings consist of an average building square footage to be repainted each year. **Table 9** summarizes the Project's area source emissions.

### Energy-Related Emissions

CalEEMod estimates the GHG emissions associated with building electricity and natural gas usage (non-hearth) for each land use type. Electricity and natural gas used in buildings is typically generated at an off-site power plant which indirectly generates GHG emissions. The default energy usage values used in CalEEMod are based on the CEC sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies and reflect 2016 Title 24 improvements (CalEEMod User's Guide, Appendix A). The following table summarizes the GHG emissions estimates reported by CalEEMod for the Project.

<sup>12</sup> CO<sub>2</sub>E is the sum of CO<sub>2</sub> emissions estimated plus the sum of CH<sub>4</sub> and N<sub>2</sub>O emissions estimated multiplied by their respective global warming potential (GWP).

<sup>13</sup> [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/year-2008-2009/ghg-meeting-6/ghg-meeting-6-guidance-document-discussion.pdf?sfvrsn=2)



**Table 8 – Energy-Related GHG Emissions**

Source	Metric Tons per year (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E
Electricity	124.79	0.01	0.00	125.24
Natural Gas	16.07	0.00	0.00	16.16
<b>Total</b>	<b>140.86</b>	<b>0.01</b>	<b>0.00</b>	<b>141.40</b>

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

### Mobile Source Emissions

CalEEMod estimates the annual GHG emissions from Project-related vehicle usage based on trip generation data contained in defaults or in a project-specific traffic analyses. The trip generation rate and fleet mix were adjusted based on the rates and ratios found in the TIA for DPR 18-00011. Trip length data was based on CalEEMod defaults for passenger cars and the distance provided by the City for Project trucks. **Table 9** shows the mobile source emissions from the Project.

### Solid Waste Emissions

CalEEMod also calculates the GHG emissions associated with the disposal of solid waste into landfills based on default data contained within the model for waste disposal rates, composition, and the characteristics of landfills throughout the state. A large percentage of this waste will be diverted from landfills by a variety of means, such as reducing the amount of waste generated, recycling, and/or composting. The remainder of the waste not diverted will be disposed of at a landfill. This analysis assumes a solid waste diversion from the landfills consistent with data provided by the state. Conservatively, this was assumed as 51 percent for the City of Perris<sup>14</sup>, the waste diversion rate reported for the year 2004. **Table 9** shows the solid waste emissions from the Project.

### Water-Related Energy Usage

Electricity is also indirectly used in water supply, treatment, and distribution, as well as wastewater treatment in Southern California and plays a large role in GHG production.

There are three processes necessary to supply potable water to urban users (i.e., residential, commercial, and industrial): (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, the wastewater is treated and either reused as reclaimed/recycled water or returned to the environment. CalEEMod calculates the GHG emissions from these processes based on default emissions factors and water/wastewater generation rates for a project’s location. Default values were used for electricity intensity factor associated with the supply and conveyance of water from its source which assumes that the water is being imported from Northern California. Outdoor water demand was taken from the Conceptual Landscape Plan<sup>15</sup> using the estimated total water usage. The Project’s emissions were adjusted to account for the CalGreen building code which requires a 20 percent reduction in indoor water use. **Table 9** shows the GHG emissions from water-related energy usage for the Project.

### Total Project GHG Emissions

As shown on **Table 9 – Total Project-Related GHG Emissions**, using all the emissions quantified above, the total GHG emissions generated from the Project is approximately 1,525.52 MTCO<sub>2</sub>E/yr which includes construction-related emissions amortized over a typical project life of 30 years.

<sup>14</sup> CalRecycle, *Perris Jurisdiction Diversion / Disposal Rate Detail*, 2004. Available at: <https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionSummary>, accessed March 2019.

<sup>15</sup> BrightView Design Group, *Duke-Perry & Barrett, Conceptual Landscape Plan*. January 23, 2019.

**Table 9 – Total Project-Related GHG Emissions**

Source	Metric Tons per year (MT/yr)			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	Total CO <sub>2</sub> E
Amortized Construction	--	--	--	21.61
Area	0.01	0.00	0.00	0.01
Energy	140.86	0.01	0.00	141.40
Mobile	1,170.17	0.04	0.00	1,171.29
Solid Waste	13.87	0.82	0.00	34.35
Water	127.80	0.90	0.02	156.86
<b>Total</b>	<b>1,452.71</b>	<b>1.77</b>	<b>0.02</b>	<b>1,525.52</b>

Note: Emissions reported as zero are rounded and not necessarily equal to zero.

The total GHG emissions from the Project do not exceed the SCAQMD interim threshold of level of 10,000 MTCO<sub>2</sub>E/yr for industrial projects.

▪ **Recommended Mitigation Measures**

*The following mitigation measure identified in the Perris Valley Commerce Center Specific Plan EIR is recommended to reduce VOC emissions from Project construction:*

**MM AQ 1:** To reduce VOC emissions associated with architectural coating, the project designer and contractor shall reduce the use of paints and solvents by utilizing pre-coated materials (e.g. bathroom stall dividers, metal awnings), materials that do not require painting, and require coatings and solvents with a VOC content lower than required under Rule 1113 to be utilized. The construction contractor shall be required to utilize “Super-Compliant” VOC paints, which are defined in SCAQMD’s Rule 1113. Construction specifications shall be included in building specifications that assure these requirements are implemented. The specifications for each implementing development project shall be reviewed by the City of Perris’ Building Division for compliance with this mitigation measure prior to issuance of a building permit for that project.

▪ **Impacts after Mitigation**

Implementation of mitigation measure **MM AQ 1** will reduce the Project’s short-term construction-related emissions. **MM AQ 1** has quantitative reductions associated with it available in CalEEMod. The mitigated emissions are shown in **Table 10**, below, and indicate that VOC emissions from architectural coatings (painting) activities will be reduced below the SCAQMD thresholds.

**Table 10 – Mitigated Estimated Daily Construction Emissions**

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO <sub>x</sub>	CO	SO <sub>2</sub>	PM-10	PM-2.5
<b>SCAQMD Daily Construction Thresholds</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>150</b>	<b>55</b>
Building Construction-2020 <sup>1</sup>	3.28	27.83	25.84	0.06	3.51	1.78
Paving-2020 <sup>1</sup>	2.03	14.32	15.29	0.02	0.94	0.74
Architectural Coatings-2020	10.77	2.35	3.77	0.01	0.52	0.25
<b>Maximum</b>	<b>16.08</b>	<b>44.50</b>	<b>44.90</b>	<b>0.09</b>	<b>4.97</b>	<b>2.77</b>
<b>Exceeds Threshold?</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Notes: <sup>1</sup>Maximum emissions are from Table 2..

With implementation of **MM AQ 1**, VOC emissions associated with painting activities will be reduced below applicable thresholds.

## ▪ **Conclusion**

The conclusion of this analysis indicates that construction of the proposed Project will not exceed criteria pollutant thresholds established by SCAQMD on a regional level after implementation of mitigation measures. The analysis also concludes that operation of the proposed Project will not exceed criteria pollutant thresholds established by SCAQMD on a regional level. The Project's construction and operation will not exceed criteria pollutant thresholds established by SCAQMD on a localized level. In addition, the Project will not create a CO hot spot. The Project's GHG emissions will not exceed the SCAQMD interim threshold of 10,000 MTCO<sub>2</sub>E/yr.

Should you have any questions, please contact me at (951) 686-1070.

## **CALEEMOD OUTPUT FILES**

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**Perry Street and Barrett Avenue-Warehouse**  
**Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	148.30	1000sqft	3.40	148,300.00	0
Other Non-Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0
Parking Lot	119.05	1000sqft	2.73	119,050.00	0
Other Asphalt Surfaces	76.22	1000sqft	1.75	76,220.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2020
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - Onsite and Offsite =9.03 per site plan and offsite improvements

Construction Phase - Per Applicant

Off-road Equipment - Per Applicant/ 8 hrs a day

Off-road Equipment -

Off-road Equipment - Per Applicant/ 8hrs a day

Grading - Per site plan

Trips and VMT - 2 water truck trips added to grading and paving

Vehicle Trips - Per TIA; 60 truck trip length assumed

Fleet Mix - Per TIA

Water And Wastewater - Outdoor water demand per landscape plan

Construction Off-road Equipment Mitigation - Per Rule 403

Water Mitigation - Per Calgreen Code

Waste Mitigation - Per City of Perris 2004 diversion rate

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	180.00
tblConstructionPhase	PhaseEndDate	11/20/2020	6/5/2020
tblConstructionPhase	PhaseEndDate	9/25/2020	6/5/2020
tblConstructionPhase	PhaseEndDate	11/8/2019	9/27/2019
tblConstructionPhase	PhaseEndDate	10/23/2020	6/5/2020
tblConstructionPhase	PhaseStartDate	10/24/2020	5/11/2020
tblConstructionPhase	PhaseStartDate	11/9/2019	9/28/2019
tblConstructionPhase	PhaseStartDate	10/12/2019	9/2/2019
tblConstructionPhase	PhaseStartDate	9/26/2020	5/11/2020
tblFleetMix	HHD	0.07	0.10
tblFleetMix	LDA	0.54	0.56

## Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.3390e-003	0.05
tblFleetMix	MCY	4.6290e-003	4.8260e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.1200e-003	1.1680e-003
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	1.3650e-003	1.4230e-003
tblFleetMix	SBUS	9.5900e-004	1.0000e-003
tblFleetMix	UBUS	1.2130e-003	1.2650e-003
tblGrading	MaterialImported	0.00	17,900.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleTrips	CNW_TL	6.90	60.00
tblVehicleTrips	CNW_TTP	41.00	19.70
tblVehicleTrips	CW_TTP	59.00	80.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.74
tblVehicleTrips	SU_TR	1.68	1.74
tblVehicleTrips	WD_TR	1.68	1.74
tblWater	OutdoorWaterUseRate	0.00	1,488,884.00

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**2.0 Emissions Summary**

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

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.6365	57.2123	27.0307	0.1180	8.8039	1.5034	10.3073	3.9695	1.3870	5.3565	0.0000	12,293.84 33	12,293.84 33	1.5057	0.0000	12,331.48 55
2020	77.9395	44.4949	44.9114	0.0966	2.8099	2.1491	4.9590	0.7549	2.0131	2.7680	0.0000	9,510.213 0	9,510.213 0	1.6236	0.0000	9,550.801 6
<b>Maximum</b>	<b>77.9395</b>	<b>57.2123</b>	<b>44.9114</b>	<b>0.1180</b>	<b>8.8039</b>	<b>2.1491</b>	<b>10.3073</b>	<b>3.9695</b>	<b>2.0131</b>	<b>5.3565</b>	<b>0.0000</b>	<b>12,293.84 33</b>	<b>12,293.84 33</b>	<b>1.6236</b>	<b>0.0000</b>	<b>12,331.48 55</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.6365	57.2123	27.0307	0.1180	4.7378	1.5034	6.2412	1.9049	1.3870	3.2919	0.0000	12,293.84 33	12,293.84 33	1.5057	0.0000	12,331.48 55
2020	77.9395	44.4949	44.9114	0.0966	2.8099	2.1491	4.9590	0.7549	2.0131	2.7680	0.0000	9,510.213 0	9,510.213 0	1.6236	0.0000	9,550.801 6
<b>Maximum</b>	<b>77.9395</b>	<b>57.2123</b>	<b>44.9114</b>	<b>0.1180</b>	<b>4.7378</b>	<b>2.1491</b>	<b>6.2412</b>	<b>1.9049</b>	<b>2.0131</b>	<b>3.2919</b>	<b>0.0000</b>	<b>12,293.84 33</b>	<b>12,293.84 33</b>	<b>1.6236</b>	<b>0.0000</b>	<b>12,331.48 55</b>



## Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	35.01	0.00	26.63	43.70	0.00	25.41	0.00	0.00	0.00	0.00	0.00	0.00

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.4224	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919
Energy	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110
Mobile	0.8738	10.7485	14.1154	0.0723	5.1283	0.0942	5.2225	1.3840	0.0894	1.4734		7,413.5746	7,413.5746	0.2745		7,420.4368
<b>Total</b>	<b>4.3050</b>	<b>10.8297</b>	<b>14.2237</b>	<b>0.0727</b>	<b>5.1283</b>	<b>0.1005</b>	<b>5.2288</b>	<b>1.3840</b>	<b>0.0957</b>	<b>1.4797</b>		<b>7,510.6951</b>	<b>7,510.6951</b>	<b>0.2766</b>	<b>1.7800e-003</b>	<b>7,518.1397</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.4224	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919
Energy	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110
Mobile	0.8738	10.7485	14.1154	0.0723	5.1283	0.0942	5.2225	1.3840	0.0894	1.4734		7,413.5746	7,413.5746	0.2745		7,420.4368
<b>Total</b>	<b>4.3050</b>	<b>10.8297</b>	<b>14.2237</b>	<b>0.0727</b>	<b>5.1283</b>	<b>0.1005</b>	<b>5.2288</b>	<b>1.3840</b>	<b>0.0957</b>	<b>1.4797</b>		<b>7,510.6951</b>	<b>7,510.6951</b>	<b>0.2766</b>	<b>1.7800e-003</b>	<b>7,518.1397</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

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

### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/2/2019	9/27/2019	5	20	
2	Building Construction	Building Construction	9/28/2019	6/5/2020	5	180	
3	Paving	Paving	5/11/2020	6/5/2020	5	20	
4	Architectural Coating	Architectural Coating	5/11/2020	6/5/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 5.63

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 222,450; Non-Residential Outdoor: 74,150; Striped Parking Area: 14,716 (Architectural Coating – sqft)

#### OffRoad Equipment

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

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

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	6	15.00	2.00	2,238.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	165.00	65.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**3.2 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6657	0.0000	6.6657	3.3846	0.0000	3.3846			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
<b>Total</b>	<b>2.5805</b>	<b>28.3480</b>	<b>16.2934</b>	<b>0.0297</b>	<b>6.6657</b>	<b>1.3974</b>	<b>8.0630</b>	<b>3.3846</b>	<b>1.2856</b>	<b>4.6702</b>		<b>2,936.8068</b>	<b>2,936.8068</b>	<b>0.9292</b>		<b>2,960.0361</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6286	28.5860	3.4376	0.0861	1.9577	0.1033	2.0610	0.5367	0.0988	0.6355		9,130.9476	9,130.9476	0.5673		9,145.1302
Vendor	6.6600e-003	0.2277	0.0427	5.3000e-004	0.0128	1.7300e-003	0.0145	3.6900e-003	1.6500e-003	5.3400e-003		55.4605	55.4605	4.4400e-003		55.5715
Worker	0.0826	0.0507	0.6664	1.7100e-003	0.1677	1.0300e-003	0.1687	0.0445	9.5000e-004	0.0454		170.6284	170.6284	4.7800e-003		170.7478
<b>Total</b>	<b>0.7178</b>	<b>28.8643</b>	<b>4.1466</b>	<b>0.0884</b>	<b>2.1382</b>	<b>0.1061</b>	<b>2.2443</b>	<b>0.5848</b>	<b>0.1014</b>	<b>0.6863</b>		<b>9,357.0365</b>	<b>9,357.0365</b>	<b>0.5765</b>		<b>9,371.4494</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**3.2 Grading - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5996	0.0000	2.5996	1.3200	0.0000	1.3200			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
<b>Total</b>	<b>2.5805</b>	<b>28.3480</b>	<b>16.2934</b>	<b>0.0297</b>	<b>2.5996</b>	<b>1.3974</b>	<b>3.9970</b>	<b>1.3200</b>	<b>1.2856</b>	<b>2.6056</b>	<b>0.0000</b>	<b>2,936.8068</b>	<b>2,936.8068</b>	<b>0.9292</b>		<b>2,960.0361</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6286	28.5860	3.4376	0.0861	1.9577	0.1033	2.0610	0.5367	0.0988	0.6355		9,130.9476	9,130.9476	0.5673		9,145.1302
Vendor	6.6600e-003	0.2277	0.0427	5.3000e-004	0.0128	1.7300e-003	0.0145	3.6900e-003	1.6500e-003	5.3400e-003		55.4605	55.4605	4.4400e-003		55.5715
Worker	0.0826	0.0507	0.6664	1.7100e-003	0.1677	1.0300e-003	0.1687	0.0445	9.5000e-004	0.0454		170.6284	170.6284	4.7800e-003		170.7478
<b>Total</b>	<b>0.7178</b>	<b>28.8643</b>	<b>4.1466</b>	<b>0.0884</b>	<b>2.1382</b>	<b>0.1061</b>	<b>2.2443</b>	<b>0.5848</b>	<b>0.1014</b>	<b>0.6863</b>		<b>9,357.0365</b>	<b>9,357.0365</b>	<b>0.5765</b>		<b>9,371.4494</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**3.3 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958		2,778.3097	2,778.3097	0.6904		2,795.5700
<b>Total</b>	<b>2.5115</b>	<b>22.7062</b>	<b>18.3139</b>	<b>0.0288</b>		<b>1.3802</b>	<b>1.3802</b>		<b>1.2958</b>	<b>1.2958</b>		<b>2,778.3097</b>	<b>2,778.3097</b>	<b>0.6904</b>		<b>2,795.5700</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2165	7.3992	1.3866	0.0171	0.4163	0.0562	0.4725	0.1199	0.0538	0.1736		1,802.4670	1,802.4670	0.1442		1,806.0725
Worker	0.9085	0.5575	7.3302	0.0189	1.8443	0.0114	1.8557	0.4891	0.0105	0.4996		1,876.9118	1,876.9118	0.0526		1,878.2255
<b>Total</b>	<b>1.1250</b>	<b>7.9567</b>	<b>8.7168</b>	<b>0.0360</b>	<b>2.2606</b>	<b>0.0676</b>	<b>2.3282</b>	<b>0.6090</b>	<b>0.0643</b>	<b>0.6732</b>		<b>3,679.3788</b>	<b>3,679.3788</b>	<b>0.1968</b>		<b>3,684.2980</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**3.3 Building Construction - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958	0.0000	2,778.3097	2,778.3097	0.6904		2,795.5700
<b>Total</b>	<b>2.5115</b>	<b>22.7062</b>	<b>18.3139</b>	<b>0.0288</b>		<b>1.3802</b>	<b>1.3802</b>		<b>1.2958</b>	<b>1.2958</b>	<b>0.0000</b>	<b>2,778.3097</b>	<b>2,778.3097</b>	<b>0.6904</b>		<b>2,795.5700</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2165	7.3992	1.3866	0.0171	0.4163	0.0562	0.4725	0.1199	0.0538	0.1736		1,802.4670	1,802.4670	0.1442		1,806.0725
Worker	0.9085	0.5575	7.3302	0.0189	1.8443	0.0114	1.8557	0.4891	0.0105	0.4996		1,876.9118	1,876.9118	0.0526		1,878.2255
<b>Total</b>	<b>1.1250</b>	<b>7.9567</b>	<b>8.7168</b>	<b>0.0360</b>	<b>2.2606</b>	<b>0.0676</b>	<b>2.3282</b>	<b>0.6090</b>	<b>0.0643</b>	<b>0.6732</b>		<b>3,679.3788</b>	<b>3,679.3788</b>	<b>0.1968</b>		<b>3,684.2980</b>



Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**3.3 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218		2,735.6999	2,735.6999	0.6819		2,752.7481
<b>Total</b>	<b>2.2551</b>	<b>20.6494</b>	<b>17.9678</b>	<b>0.0288</b>		<b>1.1948</b>	<b>1.1948</b>		<b>1.1218</b>	<b>1.1218</b>		<b>2,735.6999</b>	<b>2,735.6999</b>	<b>0.6819</b>		<b>2,752.7481</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1812	6.6880	1.2235	0.0170	0.4162	0.0380	0.4543	0.1198	0.0364	0.1562		1,790.0410	1,790.0410	0.1343		1,793.3975
Worker	0.8397	0.4966	6.6531	0.0183	1.8443	0.0112	1.8555	0.4891	0.0103	0.4994		1,817.6310	1,817.6310	0.0466		1,818.7958
<b>Total</b>	<b>1.0208</b>	<b>7.1845</b>	<b>7.8766</b>	<b>0.0352</b>	<b>2.2605</b>	<b>0.0492</b>	<b>2.3098</b>	<b>0.6090</b>	<b>0.0467</b>	<b>0.6556</b>		<b>3,607.6720</b>	<b>3,607.6720</b>	<b>0.1809</b>		<b>3,612.1933</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**3.3 Building Construction - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218	0.0000	2,735.6999	2,735.6999	0.6819		2,752.7481
<b>Total</b>	<b>2.2551</b>	<b>20.6494</b>	<b>17.9678</b>	<b>0.0288</b>		<b>1.1948</b>	<b>1.1948</b>		<b>1.1218</b>	<b>1.1218</b>	<b>0.0000</b>	<b>2,735.6999</b>	<b>2,735.6999</b>	<b>0.6819</b>		<b>2,752.7481</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1812	6.6880	1.2235	0.0170	0.4162	0.0380	0.4543	0.1198	0.0364	0.1562		1,790.0410	1,790.0410	0.1343		1,793.3975
Worker	0.8397	0.4966	6.6531	0.0183	1.8443	0.0112	1.8555	0.4891	0.0103	0.4994		1,817.6310	1,817.6310	0.0466		1,818.7958
<b>Total</b>	<b>1.0208</b>	<b>7.1845</b>	<b>7.8766</b>	<b>0.0352</b>	<b>2.2605</b>	<b>0.0492</b>	<b>2.3098</b>	<b>0.6090</b>	<b>0.0467</b>	<b>0.6556</b>		<b>3,607.6720</b>	<b>3,607.6720</b>	<b>0.1809</b>		<b>3,612.1933</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**3.4 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.5869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9434</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.5700e-003	0.2058	0.0377	5.2000e-004	0.0128	1.1700e-003	0.0140	3.6900e-003	1.1200e-003	4.8100e-003		55.0782	55.0782	4.1300e-003		55.1815
Worker	0.0763	0.0451	0.6048	1.6600e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		165.2392	165.2392	4.2400e-003		165.3451
<b>Total</b>	<b>0.0819</b>	<b>0.2509</b>	<b>0.6425</b>	<b>2.1800e-003</b>	<b>0.1805</b>	<b>2.1900e-003</b>	<b>0.1827</b>	<b>0.0482</b>	<b>2.0500e-003</b>	<b>0.0502</b>		<b>220.3174</b>	<b>220.3174</b>	<b>8.3700e-003</b>		<b>220.5265</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**3.4 Paving - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.5869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9434</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.5700e-003	0.2058	0.0377	5.2000e-004	0.0128	1.1700e-003	0.0140	3.6900e-003	1.1200e-003	4.8100e-003		55.0782	55.0782	4.1300e-003		55.1815
Worker	0.0763	0.0451	0.6048	1.6600e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		165.2392	165.2392	4.2400e-003		165.3451
<b>Total</b>	<b>0.0819</b>	<b>0.2509</b>	<b>0.6425</b>	<b>2.1800e-003</b>	<b>0.1805</b>	<b>2.1900e-003</b>	<b>0.1827</b>	<b>0.0482</b>	<b>2.0500e-003</b>	<b>0.0502</b>		<b>220.3174</b>	<b>220.3174</b>	<b>8.3700e-003</b>		<b>220.5265</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**3.5 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.1475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291		375.9904
<b>Total</b>	<b>72.4704</b>	<b>2.2451</b>	<b>2.4419</b>	<b>3.9600e-003</b>		<b>0.1479</b>	<b>0.1479</b>		<b>0.1479</b>	<b>0.1479</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0291</b>		<b>375.9904</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1679	0.0993	1.3306	3.6500e-003	0.3689	2.2300e-003	0.3711	0.0978	2.0600e-003	0.0999		363.5262	363.5262	9.3200e-003		363.7592
<b>Total</b>	<b>0.1679</b>	<b>0.0993</b>	<b>1.3306</b>	<b>3.6500e-003</b>	<b>0.3689</b>	<b>2.2300e-003</b>	<b>0.3711</b>	<b>0.0978</b>	<b>2.0600e-003</b>	<b>0.0999</b>		<b>363.5262</b>	<b>363.5262</b>	<b>9.3200e-003</b>		<b>363.7592</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**3.5 Architectural Coating - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.1475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479	0.0000	375.2641	375.2641	0.0291		375.9904
<b>Total</b>	<b>72.4704</b>	<b>2.2451</b>	<b>2.4419</b>	<b>3.9600e-003</b>		<b>0.1479</b>	<b>0.1479</b>		<b>0.1479</b>	<b>0.1479</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0291</b>		<b>375.9904</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1679	0.0993	1.3306	3.6500e-003	0.3689	2.2300e-003	0.3711	0.0978	2.0600e-003	0.0999		363.5262	363.5262	9.3200e-003		363.7592
<b>Total</b>	<b>0.1679</b>	<b>0.0993</b>	<b>1.3306</b>	<b>3.6500e-003</b>	<b>0.3689</b>	<b>2.2300e-003</b>	<b>0.3711</b>	<b>0.0978</b>	<b>2.0600e-003</b>	<b>0.0999</b>		<b>363.5262</b>	<b>363.5262</b>	<b>9.3200e-003</b>		<b>363.7592</b>

**4.0 Operational Detail - Mobile**

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Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.8738	10.7485	14.1154	0.0723	5.1283	0.0942	5.2225	1.3840	0.0894	1.4734		7,413.5746	7,413.5746	0.2745		7,420.4368
Unmitigated	0.8738	10.7485	14.1154	0.0723	5.1283	0.0942	5.2225	1.3840	0.0894	1.4734		7,413.5746	7,413.5746	0.2745		7,420.4368

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	258.04	258.04	258.04	2,362,253	2,362,253
Total	258.04	258.04	258.04	2,362,253	2,362,253

**4.3 Trip Type Information**

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	60.00	80.30	0.00	19.70	100	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Other Non-Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Parking Lot	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Unrefrigerated Warehouse-No Rail	0.560986	0.040087	0.192245	0.000000	0.000000	0.052000	0.045000	0.100000	0.001423	0.001265	0.004826	0.001000	0.001168

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**



Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110
NaturalGas Unmitigated	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	824.792	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110
<b>Total</b>		<b>8.8900e-003</b>	<b>0.0809</b>	<b>0.0679</b>	<b>4.9000e-004</b>		<b>6.1500e-003</b>	<b>6.1500e-003</b>		<b>6.1500e-003</b>	<b>6.1500e-003</b>		<b>97.0343</b>	<b>97.0343</b>	<b>1.8600e-003</b>	<b>1.7800e-003</b>	<b>97.6110</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.824792	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110
<b>Total</b>		<b>8.8900e-003</b>	<b>0.0809</b>	<b>0.0679</b>	<b>4.9000e-004</b>		<b>6.1500e-003</b>	<b>6.1500e-003</b>		<b>6.1500e-003</b>	<b>6.1500e-003</b>		<b>97.0343</b>	<b>97.0343</b>	<b>1.8600e-003</b>	<b>1.7800e-003</b>	<b>97.6110</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.4224	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919
Unmitigated	3.4224	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3953					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.0232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8000e-003	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919
<b>Total</b>	<b>3.4223</b>	<b>3.7000e-004</b>	<b>0.0404</b>	<b>0.0000</b>		<b>1.5000e-004</b>	<b>1.5000e-004</b>		<b>1.5000e-004</b>	<b>1.5000e-004</b>		<b>0.0861</b>	<b>0.0861</b>	<b>2.3000e-004</b>		<b>0.0919</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3953					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.0232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8000e-003	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919
<b>Total</b>	<b>3.4223</b>	<b>3.7000e-004</b>	<b>0.0404</b>	<b>0.0000</b>		<b>1.5000e-004</b>	<b>1.5000e-004</b>		<b>1.5000e-004</b>	<b>1.5000e-004</b>		<b>0.0861</b>	<b>0.0861</b>	<b>2.3000e-004</b>		<b>0.0919</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Summer

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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## 11.0 Vegetation

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Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**Perry Street and Barrett Avenue-Warehouse**  
**Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	148.30	1000sqft	3.40	148,300.00	0
Other Non-Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0
Parking Lot	119.05	1000sqft	2.73	119,050.00	0
Other Asphalt Surfaces	76.22	1000sqft	1.75	76,220.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2020
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - Onsite and Offsite =9.03 per site plan and offsite improvements

Construction Phase - Per Applicant

Off-road Equipment - Per Applicant/ 8 hrs a day

Off-road Equipment -

Off-road Equipment - Per Applicant/ 8hrs a day

Grading - Per site plan

Trips and VMT - 2 water truck trips added to grading and paving

Vehicle Trips - Per TIA; 60 truck trip length assumed

Fleet Mix - Per TIA

Water And Wastewater - Outdoor water demand per landscape plan

Construction Off-road Equipment Mitigation - Per Rule 403

Water Mitigation - Per Calgreen Code

Waste Mitigation - Per City of Perris 2004 diversion rate

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	180.00
tblConstructionPhase	PhaseEndDate	11/20/2020	6/5/2020
tblConstructionPhase	PhaseEndDate	9/25/2020	6/5/2020
tblConstructionPhase	PhaseEndDate	11/8/2019	9/27/2019
tblConstructionPhase	PhaseEndDate	10/23/2020	6/5/2020
tblConstructionPhase	PhaseStartDate	10/24/2020	5/11/2020
tblConstructionPhase	PhaseStartDate	11/9/2019	9/28/2019
tblConstructionPhase	PhaseStartDate	10/12/2019	9/2/2019
tblConstructionPhase	PhaseStartDate	9/26/2020	5/11/2020
tblFleetMix	HHD	0.07	0.10
tblFleetMix	LDA	0.54	0.56

## Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.3390e-003	0.05
tblFleetMix	MCY	4.6290e-003	4.8260e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.1200e-003	1.1680e-003
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	1.3650e-003	1.4230e-003
tblFleetMix	SBUS	9.5900e-004	1.0000e-003
tblFleetMix	UBUS	1.2130e-003	1.2650e-003
tblGrading	MaterialImported	0.00	17,900.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleTrips	CNW_TL	6.90	60.00
tblVehicleTrips	CNW_TTP	41.00	19.70
tblVehicleTrips	CW_TTP	59.00	80.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.74
tblVehicleTrips	SU_TR	1.68	1.74
tblVehicleTrips	WD_TR	1.68	1.74
tblWater	OutdoorWaterUseRate	0.00	1,488,884.00



Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

## 2.0 Emissions Summary

### 2.1 Overall Construction (Maximum Daily Emission)

#### Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.6264	57.5016	25.8670	0.1157	8.8039	1.5053	10.3092	3.9695	1.3888	5.3583	0.0000	12,047.78 40	12,047.78 40	1.5594	0.0000	12,086.76 93
2020	77.9274	44.4809	43.4860	0.0935	2.8099	2.1496	4.9594	0.7549	2.0135	2.7685	0.0000	9,199.426 2	9,199.426 2	1.6313	0.0000	9,240.208 4
<b>Maximum</b>	<b>77.9274</b>	<b>57.5016</b>	<b>43.4860</b>	<b>0.1157</b>	<b>8.8039</b>	<b>2.1496</b>	<b>10.3092</b>	<b>3.9695</b>	<b>2.0135</b>	<b>5.3583</b>	<b>0.0000</b>	<b>12,047.78 40</b>	<b>12,047.78 40</b>	<b>1.6313</b>	<b>0.0000</b>	<b>12,086.76 93</b>

#### Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2019	3.6264	57.5016	25.8670	0.1157	4.7378	1.5053	6.2431	1.9049	1.3888	3.2936	0.0000	12,047.78 40	12,047.78 40	1.5594	0.0000	12,086.76 93
2020	77.9274	44.4809	43.4860	0.0935	2.8099	2.1496	4.9594	0.7549	2.0135	2.7685	0.0000	9,199.426 2	9,199.426 2	1.6313	0.0000	9,240.208 4
<b>Maximum</b>	<b>77.9274</b>	<b>57.5016</b>	<b>43.4860</b>	<b>0.1157</b>	<b>4.7378</b>	<b>2.1496</b>	<b>6.2431</b>	<b>1.9049</b>	<b>2.0135</b>	<b>3.2936</b>	<b>0.0000</b>	<b>12,047.78 40</b>	<b>12,047.78 40</b>	<b>1.6313</b>	<b>0.0000</b>	<b>12,086.76 93</b>

## Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	35.01	0.00	26.63	43.70	0.00	25.41	0.00	0.00	0.00	0.00	0.00	0.00

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**2.2 Overall Operational**

**Unmitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.4224	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919
Energy	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110
Mobile	0.7897	11.0121	11.9437	0.0679	5.1283	0.0945	5.2229	1.3840	0.0897	1.4737		6,980.6847	6,980.6847	0.2765		6,987.5959
<b>Total</b>	<b>4.2210</b>	<b>11.0933</b>	<b>12.0520</b>	<b>0.0684</b>	<b>5.1283</b>	<b>0.1008</b>	<b>5.2292</b>	<b>1.3840</b>	<b>0.0960</b>	<b>1.4800</b>		<b>7,077.8051</b>	<b>7,077.8051</b>	<b>0.2785</b>	<b>1.7800e-003</b>	<b>7,085.2987</b>

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	3.4224	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919
Energy	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110
Mobile	0.7897	11.0121	11.9437	0.0679	5.1283	0.0945	5.2229	1.3840	0.0897	1.4737		6,980.6847	6,980.6847	0.2765		6,987.5959
<b>Total</b>	<b>4.2210</b>	<b>11.0933</b>	<b>12.0520</b>	<b>0.0684</b>	<b>5.1283</b>	<b>0.1008</b>	<b>5.2292</b>	<b>1.3840</b>	<b>0.0960</b>	<b>1.4800</b>		<b>7,077.8051</b>	<b>7,077.8051</b>	<b>0.2785</b>	<b>1.7800e-003</b>	<b>7,085.2987</b>

## Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

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

### 3.0 Construction Detail

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#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/2/2019	9/27/2019	5	20	
2	Building Construction	Building Construction	9/28/2019	6/5/2020	5	180	
3	Paving	Paving	5/11/2020	6/5/2020	5	20	
4	Architectural Coating	Architectural Coating	5/11/2020	6/5/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 10**

**Acres of Paving: 5.63**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 222,450; Non-Residential Outdoor: 74,150; Striped Parking Area: 14,716 (Architectural Coating – sqft)**

#### OffRoad Equipment

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

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

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	6	15.00	2.00	2,238.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	165.00	65.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**3.2 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.6657	0.0000	6.6657	3.3846	0.0000	3.3846			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856		2,936.8068	2,936.8068	0.9292		2,960.0361
<b>Total</b>	<b>2.5805</b>	<b>28.3480</b>	<b>16.2934</b>	<b>0.0297</b>	<b>6.6657</b>	<b>1.3974</b>	<b>8.0630</b>	<b>3.3846</b>	<b>1.2856</b>	<b>4.6702</b>		<b>2,936.8068</b>	<b>2,936.8068</b>	<b>0.9292</b>		<b>2,960.0361</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6609	28.8740	4.0413	0.0840	1.9577	0.1052	2.0629	0.5367	0.1006	0.6373		8,904.5119	8,904.5119	0.6212		8,920.0407
Vendor	6.9900e-003	0.2272	0.0496	5.1000e-004	0.0128	1.7500e-003	0.0146	3.6900e-003	1.6700e-003	5.3600e-003		53.3877	53.3877	4.9300e-003		53.5110
Worker	0.0807	0.0525	0.5401	1.5400e-003	0.1677	1.0300e-003	0.1687	0.0445	9.5000e-004	0.0454		153.0776	153.0776	4.1500e-003		153.1814
<b>Total</b>	<b>0.7486</b>	<b>29.1536</b>	<b>4.6310</b>	<b>0.0860</b>	<b>2.1382</b>	<b>0.1079</b>	<b>2.2461</b>	<b>0.5848</b>	<b>0.1032</b>	<b>0.6881</b>		<b>9,110.9772</b>	<b>9,110.9772</b>	<b>0.6302</b>		<b>9,126.7331</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**3.2 Grading - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.5996	0.0000	2.5996	1.3200	0.0000	1.3200			0.0000			0.0000
Off-Road	2.5805	28.3480	16.2934	0.0297		1.3974	1.3974		1.2856	1.2856	0.0000	2,936.8068	2,936.8068	0.9292		2,960.0361
<b>Total</b>	<b>2.5805</b>	<b>28.3480</b>	<b>16.2934</b>	<b>0.0297</b>	<b>2.5996</b>	<b>1.3974</b>	<b>3.9970</b>	<b>1.3200</b>	<b>1.2856</b>	<b>2.6056</b>	<b>0.0000</b>	<b>2,936.8068</b>	<b>2,936.8068</b>	<b>0.9292</b>		<b>2,960.0361</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.6609	28.8740	4.0413	0.0840	1.9577	0.1052	2.0629	0.5367	0.1006	0.6373		8,904.5119	8,904.5119	0.6212		8,920.0407
Vendor	6.9900e-003	0.2272	0.0496	5.1000e-004	0.0128	1.7500e-003	0.0146	3.6900e-003	1.6700e-003	5.3600e-003		53.3877	53.3877	4.9300e-003		53.5110
Worker	0.0807	0.0525	0.5401	1.5400e-003	0.1677	1.0300e-003	0.1687	0.0445	9.5000e-004	0.0454		153.0776	153.0776	4.1500e-003		153.1814
<b>Total</b>	<b>0.7486</b>	<b>29.1536</b>	<b>4.6310</b>	<b>0.0860</b>	<b>2.1382</b>	<b>0.1079</b>	<b>2.2461</b>	<b>0.5848</b>	<b>0.1032</b>	<b>0.6881</b>		<b>9,110.9772</b>	<b>9,110.9772</b>	<b>0.6302</b>		<b>9,126.7331</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**3.3 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958		2,778.3097	2,778.3097	0.6904		2,795.5700
<b>Total</b>	<b>2.5115</b>	<b>22.7062</b>	<b>18.3139</b>	<b>0.0288</b>		<b>1.3802</b>	<b>1.3802</b>		<b>1.2958</b>	<b>1.2958</b>		<b>2,778.3097</b>	<b>2,778.3097</b>	<b>0.6904</b>		<b>2,795.5700</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2273	7.3823	1.6122	0.0165	0.4163	0.0569	0.4732	0.1199	0.0544	0.1743		1,735.1011	1,735.1011	0.1602		1,739.1066
Worker	0.8877	0.5772	5.9409	0.0169	1.8443	0.0114	1.8557	0.4891	0.0105	0.4996		1,683.8533	1,683.8533	0.0457		1,684.9956
<b>Total</b>	<b>1.1149</b>	<b>7.9595</b>	<b>7.5531</b>	<b>0.0334</b>	<b>2.2606</b>	<b>0.0683</b>	<b>2.3289</b>	<b>0.6090</b>	<b>0.0649</b>	<b>0.6739</b>		<b>3,418.9544</b>	<b>3,418.9544</b>	<b>0.2059</b>		<b>3,424.1022</b>



Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**3.3 Building Construction - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.5115	22.7062	18.3139	0.0288		1.3802	1.3802		1.2958	1.2958	0.0000	2,778.3097	2,778.3097	0.6904		2,795.5700
<b>Total</b>	<b>2.5115</b>	<b>22.7062</b>	<b>18.3139</b>	<b>0.0288</b>		<b>1.3802</b>	<b>1.3802</b>		<b>1.2958</b>	<b>1.2958</b>	<b>0.0000</b>	<b>2,778.3097</b>	<b>2,778.3097</b>	<b>0.6904</b>		<b>2,795.5700</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.2273	7.3823	1.6122	0.0165	0.4163	0.0569	0.4732	0.1199	0.0544	0.1743		1,735.1011	1,735.1011	0.1602		1,739.1066
Worker	0.8877	0.5772	5.9409	0.0169	1.8443	0.0114	1.8557	0.4891	0.0105	0.4996		1,683.8533	1,683.8533	0.0457		1,684.9956
<b>Total</b>	<b>1.1149</b>	<b>7.9595</b>	<b>7.5531</b>	<b>0.0334</b>	<b>2.2606</b>	<b>0.0683</b>	<b>2.3289</b>	<b>0.6090</b>	<b>0.0649</b>	<b>0.6739</b>		<b>3,418.9544</b>	<b>3,418.9544</b>	<b>0.2059</b>		<b>3,424.1022</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**3.3 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218		2,735.6999	2,735.6999	0.6819		2,752.7481
<b>Total</b>	<b>2.2551</b>	<b>20.6494</b>	<b>17.9678</b>	<b>0.0288</b>		<b>1.1948</b>	<b>1.1948</b>		<b>1.1218</b>	<b>1.1218</b>		<b>2,735.6999</b>	<b>2,735.6999</b>	<b>0.6819</b>		<b>2,752.7481</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1911	6.6529	1.4326	0.0163	0.4162	0.0385	0.4547	0.1198	0.0368	0.1567		1,722.7780	1,722.7780	0.1494		1,726.5130
Worker	0.8223	0.5137	5.3819	0.0164	1.8443	0.0112	1.8555	0.4891	0.0103	0.4994		1,630.5891	1,630.5891	0.0405		1,631.6016
<b>Total</b>	<b>1.0134</b>	<b>7.1667</b>	<b>6.8145</b>	<b>0.0327</b>	<b>2.2605</b>	<b>0.0497</b>	<b>2.3102</b>	<b>0.6090</b>	<b>0.0471</b>	<b>0.6561</b>		<b>3,353.3670</b>	<b>3,353.3670</b>	<b>0.1899</b>		<b>3,358.1146</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**3.3 Building Construction - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218	0.0000	2,735.6999	2,735.6999	0.6819		2,752.7481
<b>Total</b>	<b>2.2551</b>	<b>20.6494</b>	<b>17.9678</b>	<b>0.0288</b>		<b>1.1948</b>	<b>1.1948</b>		<b>1.1218</b>	<b>1.1218</b>	<b>0.0000</b>	<b>2,735.6999</b>	<b>2,735.6999</b>	<b>0.6819</b>		<b>2,752.7481</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.1911	6.6529	1.4326	0.0163	0.4162	0.0385	0.4547	0.1198	0.0368	0.1567		1,722.7780	1,722.7780	0.1494		1,726.5130
Worker	0.8223	0.5137	5.3819	0.0164	1.8443	0.0112	1.8555	0.4891	0.0103	0.4994		1,630.5891	1,630.5891	0.0405		1,631.6016
<b>Total</b>	<b>1.0134</b>	<b>7.1667</b>	<b>6.8145</b>	<b>0.0327</b>	<b>2.2605</b>	<b>0.0497</b>	<b>2.3102</b>	<b>0.6090</b>	<b>0.0471</b>	<b>0.6561</b>		<b>3,353.3670</b>	<b>3,353.3670</b>	<b>0.1899</b>		<b>3,358.1146</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**3.4 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926		2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.5869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9434</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>		<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.8800e-003	0.2047	0.0441	5.0000e-004	0.0128	1.1800e-003	0.0140	3.6900e-003	1.1300e-003	4.8200e-003		53.0086	53.0086	4.6000e-003		53.1235
Worker	0.0748	0.0467	0.4893	1.4900e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		148.2354	148.2354	3.6800e-003		148.3274
<b>Total</b>	<b>0.0806</b>	<b>0.2514</b>	<b>0.5333</b>	<b>1.9900e-003</b>	<b>0.1805</b>	<b>2.2000e-003</b>	<b>0.1827</b>	<b>0.0482</b>	<b>2.0600e-003</b>	<b>0.0502</b>		<b>201.2439</b>	<b>201.2439</b>	<b>8.2800e-003</b>		<b>201.4509</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**3.4 Paving - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3566	14.0656	14.6521	0.0228		0.7528	0.7528		0.6926	0.6926	0.0000	2,207.7334	2,207.7334	0.7140		2,225.5841
Paving	0.5869					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
<b>Total</b>	<b>1.9434</b>	<b>14.0656</b>	<b>14.6521</b>	<b>0.0228</b>		<b>0.7528</b>	<b>0.7528</b>		<b>0.6926</b>	<b>0.6926</b>	<b>0.0000</b>	<b>2,207.7334</b>	<b>2,207.7334</b>	<b>0.7140</b>		<b>2,225.5841</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	5.8800e-003	0.2047	0.0441	5.0000e-004	0.0128	1.1800e-003	0.0140	3.6900e-003	1.1300e-003	4.8200e-003		53.0086	53.0086	4.6000e-003		53.1235
Worker	0.0748	0.0467	0.4893	1.4900e-003	0.1677	1.0200e-003	0.1687	0.0445	9.3000e-004	0.0454		148.2354	148.2354	3.6800e-003		148.3274
<b>Total</b>	<b>0.0806</b>	<b>0.2514</b>	<b>0.5333</b>	<b>1.9900e-003</b>	<b>0.1805</b>	<b>2.2000e-003</b>	<b>0.1827</b>	<b>0.0482</b>	<b>2.0600e-003</b>	<b>0.0502</b>		<b>201.2439</b>	<b>201.2439</b>	<b>8.2800e-003</b>		<b>201.4509</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**3.5 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.1475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291		375.9904
<b>Total</b>	<b>72.4704</b>	<b>2.2451</b>	<b>2.4419</b>	<b>3.9600e-003</b>		<b>0.1479</b>	<b>0.1479</b>		<b>0.1479</b>	<b>0.1479</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0291</b>		<b>375.9904</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1645	0.1027	1.0764	3.2700e-003	0.3689	2.2300e-003	0.3711	0.0978	2.0600e-003	0.0999		326.1178	326.1178	8.1000e-003		326.3203
<b>Total</b>	<b>0.1645</b>	<b>0.1027</b>	<b>1.0764</b>	<b>3.2700e-003</b>	<b>0.3689</b>	<b>2.2300e-003</b>	<b>0.3711</b>	<b>0.0978</b>	<b>2.0600e-003</b>	<b>0.0999</b>		<b>326.1178</b>	<b>326.1178</b>	<b>8.1000e-003</b>		<b>326.3203</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**3.5 Architectural Coating - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.1475					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479	0.0000	375.2641	375.2641	0.0291		375.9904
<b>Total</b>	<b>72.4704</b>	<b>2.2451</b>	<b>2.4419</b>	<b>3.9600e-003</b>		<b>0.1479</b>	<b>0.1479</b>		<b>0.1479</b>	<b>0.1479</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0291</b>		<b>375.9904</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1645	0.1027	1.0764	3.2700e-003	0.3689	2.2300e-003	0.3711	0.0978	2.0600e-003	0.0999		326.1178	326.1178	8.1000e-003		326.3203
<b>Total</b>	<b>0.1645</b>	<b>0.1027</b>	<b>1.0764</b>	<b>3.2700e-003</b>	<b>0.3689</b>	<b>2.2300e-003</b>	<b>0.3711</b>	<b>0.0978</b>	<b>2.0600e-003</b>	<b>0.0999</b>		<b>326.1178</b>	<b>326.1178</b>	<b>8.1000e-003</b>		<b>326.3203</b>

**4.0 Operational Detail - Mobile**

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Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.7897	11.0121	11.9437	0.0679	5.1283	0.0945	5.2229	1.3840	0.0897	1.4737		6,980.6847	6,980.6847	0.2765		6,987.5959
Unmitigated	0.7897	11.0121	11.9437	0.0679	5.1283	0.0945	5.2229	1.3840	0.0897	1.4737		6,980.6847	6,980.6847	0.2765		6,987.5959

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	258.04	258.04	258.04	2,362,253	2,362,253
Total	258.04	258.04	258.04	2,362,253	2,362,253

**4.3 Trip Type Information**



Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	60.00	80.30	0.00	19.70	100	0	0

**4.4 Fleet Mix**

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Other Non-Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Parking Lot	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Unrefrigerated Warehouse-No Rail	0.560986	0.040087	0.192245	0.000000	0.000000	0.052000	0.045000	0.100000	0.001423	0.001265	0.004826	0.001000	0.001168

**5.0 Energy Detail**

Historical Energy Use: N

**5.1 Mitigation Measures Energy**

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110
NaturalGas Unmitigated	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	824.792	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110
<b>Total</b>		<b>8.8900e-003</b>	<b>0.0809</b>	<b>0.0679</b>	<b>4.9000e-004</b>		<b>6.1500e-003</b>	<b>6.1500e-003</b>		<b>6.1500e-003</b>	<b>6.1500e-003</b>		<b>97.0343</b>	<b>97.0343</b>	<b>1.8600e-003</b>	<b>1.7800e-003</b>	<b>97.6110</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0.824792	8.8900e-003	0.0809	0.0679	4.9000e-004		6.1500e-003	6.1500e-003		6.1500e-003	6.1500e-003		97.0343	97.0343	1.8600e-003	1.7800e-003	97.6110
<b>Total</b>		<b>8.8900e-003</b>	<b>0.0809</b>	<b>0.0679</b>	<b>4.9000e-004</b>		<b>6.1500e-003</b>	<b>6.1500e-003</b>		<b>6.1500e-003</b>	<b>6.1500e-003</b>		<b>97.0343</b>	<b>97.0343</b>	<b>1.8600e-003</b>	<b>1.7800e-003</b>	<b>97.6110</b>

**6.0 Area Detail**

**6.1 Mitigation Measures Area**

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	3.4224	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919
Unmitigated	3.4224	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3953					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.0232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8000e-003	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919
<b>Total</b>	<b>3.4223</b>	<b>3.7000e-004</b>	<b>0.0404</b>	<b>0.0000</b>		<b>1.5000e-004</b>	<b>1.5000e-004</b>		<b>1.5000e-004</b>	<b>1.5000e-004</b>		<b>0.0861</b>	<b>0.0861</b>	<b>2.3000e-004</b>		<b>0.0919</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3953					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.0232					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.8000e-003	3.7000e-004	0.0404	0.0000		1.5000e-004	1.5000e-004		1.5000e-004	1.5000e-004		0.0861	0.0861	2.3000e-004		0.0919
<b>Total</b>	<b>3.4223</b>	<b>3.7000e-004</b>	<b>0.0404</b>	<b>0.0000</b>		<b>1.5000e-004</b>	<b>1.5000e-004</b>		<b>1.5000e-004</b>	<b>1.5000e-004</b>		<b>0.0861</b>	<b>0.0861</b>	<b>2.3000e-004</b>		<b>0.0919</b>

**7.0 Water Detail**

**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy

**8.0 Waste Detail**

**8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

**9.0 Operational Offroad**

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Winter

## 10.0 Stationary Equipment

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### Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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## 11.0 Vegetation

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Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Annual

**Perry Street and Barrett Avenue-Warehouse**  
**Riverside-South Coast County, Annual**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	148.30	1000sqft	3.40	148,300.00	0
Other Non-Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0
Parking Lot	119.05	1000sqft	2.73	119,050.00	0
Other Asphalt Surfaces	76.22	1000sqft	1.75	76,220.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2020
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

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Project Characteristics -

Land Use - Onsite and Offsite =9.03 per site plan and offsite improvements

Construction Phase - Per Applicant

Off-road Equipment - Per Applicant/ 8 hrs a day

Off-road Equipment -

Off-road Equipment - Per Applicant/ 8hrs a day

Grading - Per site plan

Trips and VMT - 2 water truck trips added to grading and paving

Vehicle Trips - Per TIA; 60 truck trip length assumed

Fleet Mix - Per TIA

Water And Wastewater - Outdoor water demand per landscape plan

Construction Off-road Equipment Mitigation - Per Rule 403

Water Mitigation - Per Calgreen Code

Waste Mitigation - Per City of Perris 2004 diversion rate

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	230.00	180.00
tblConstructionPhase	PhaseEndDate	11/20/2020	6/5/2020
tblConstructionPhase	PhaseEndDate	9/25/2020	6/5/2020
tblConstructionPhase	PhaseEndDate	11/8/2019	9/27/2019
tblConstructionPhase	PhaseEndDate	10/23/2020	6/5/2020
tblConstructionPhase	PhaseStartDate	10/24/2020	5/11/2020
tblConstructionPhase	PhaseStartDate	11/9/2019	9/28/2019
tblConstructionPhase	PhaseStartDate	10/12/2019	9/2/2019
tblConstructionPhase	PhaseStartDate	9/26/2020	5/11/2020
tblFleetMix	HHD	0.07	0.10
tblFleetMix	LDA	0.54	0.56



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tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.3390e-003	0.05
tblFleetMix	MCY	4.6290e-003	4.8260e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.1200e-003	1.1680e-003
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	1.3650e-003	1.4230e-003
tblFleetMix	SBUS	9.5900e-004	1.0000e-003
tblFleetMix	UBUS	1.2130e-003	1.2650e-003
tblGrading	MaterialImported	0.00	17,900.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblVehicleTrips	CNW_TL	6.90	60.00
tblVehicleTrips	CNW_TTP	41.00	19.70
tblVehicleTrips	CW_TTP	59.00	80.30
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PR_TP	92.00	100.00
tblVehicleTrips	ST_TR	1.68	1.74
tblVehicleTrips	SU_TR	1.68	1.74
tblVehicleTrips	WD_TR	1.68	1.74
tblWater	OutdoorWaterUseRate	0.00	1,488,884.00

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**2.0 Emissions Summary**

**2.1 Overall Construction**

**Unmitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1520	1.6113	1.0793	3.2800e-003	0.1622	0.0636	0.2258	0.0597	0.0595	0.1192	0.0000	301.3764	301.3764	0.0409	0.0000	302.3984
2020	0.9271	1.7454	1.5983	3.8400e-003	0.1311	0.0794	0.2104	0.0353	0.0745	0.1098	0.0000	344.5905	344.5905	0.0512	0.0000	345.8707
<b>Maximum</b>	<b>0.9271</b>	<b>1.7454</b>	<b>1.5983</b>	<b>3.8400e-003</b>	<b>0.1622</b>	<b>0.0794</b>	<b>0.2258</b>	<b>0.0597</b>	<b>0.0745</b>	<b>0.1192</b>	<b>0.0000</b>	<b>344.5905</b>	<b>344.5905</b>	<b>0.0512</b>	<b>0.0000</b>	<b>345.8707</b>

**Mitigated Construction**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1520	1.6113	1.0793	3.2800e-003	0.1216	0.0636	0.1851	0.0391	0.0595	0.0985	0.0000	301.3763	301.3763	0.0409	0.0000	302.3983
2020	0.9271	1.7454	1.5983	3.8400e-003	0.1311	0.0794	0.2104	0.0353	0.0745	0.1098	0.0000	344.5903	344.5903	0.0512	0.0000	345.8705
<b>Maximum</b>	<b>0.9271</b>	<b>1.7454</b>	<b>1.5983</b>	<b>3.8400e-003</b>	<b>0.1311</b>	<b>0.0794</b>	<b>0.2104</b>	<b>0.0391</b>	<b>0.0745</b>	<b>0.1098</b>	<b>0.0000</b>	<b>344.5903</b>	<b>344.5903</b>	<b>0.0512</b>	<b>0.0000</b>	<b>345.8705</b>

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	13.86	0.00	9.32	21.72	0.00	9.02	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-2-2019	12-1-2019	1.3580	1.3580
2	12-2-2019	3-1-2020	1.0446	1.0446
3	3-2-2020	6-1-2020	1.7395	1.7395
4	6-2-2020	9-1-2020	0.1749	0.1749
		Highest	1.7395	1.7395

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6244	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7700e-003	9.7700e-003	3.0000e-005	0.0000	0.0104
Energy	1.6200e-003	0.0148	0.0124	9.0000e-005		1.1200e-003	1.1200e-003		1.1200e-003	1.1200e-003	0.0000	140.8550	140.8550	5.4600e-003	1.3600e-003	141.3969
Mobile	0.1442	2.0301	2.2533	0.0126	0.9184	0.0172	0.9355	0.2482	0.0163	0.2645	0.0000	1,170.1708	1,170.1708	0.0449	0.0000	1,171.2920
Waste						0.0000	0.0000		0.0000	0.0000	28.2969	0.0000	28.2969	1.6723	0.0000	70.1045
Water						0.0000	0.0000		0.0000	0.0000	10.8800	147.5499	158.4300	1.1236	0.0277	194.7580
<b>Total</b>	<b>0.7701</b>	<b>2.0449</b>	<b>2.2708</b>	<b>0.0126</b>	<b>0.9184</b>	<b>0.0183</b>	<b>0.9367</b>	<b>0.2482</b>	<b>0.0174</b>	<b>0.2656</b>	<b>39.1770</b>	<b>1,458.5854</b>	<b>1,497.7624</b>	<b>2.8462</b>	<b>0.0290</b>	<b>1,577.5617</b>

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**2.2 Overall Operational**

**Mitigated Operational**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.6244	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7700e-003	9.7700e-003	3.0000e-005	0.0000	0.0104
Energy	1.6200e-003	0.0148	0.0124	9.0000e-005		1.1200e-003	1.1200e-003		1.1200e-003	1.1200e-003	0.0000	140.8550	140.8550	5.4600e-003	1.3600e-003	141.3969
Mobile	0.1442	2.0301	2.2533	0.0126	0.9184	0.0172	0.9355	0.2482	0.0163	0.2645	0.0000	1,170.1708	1,170.1708	0.0449	0.0000	1,171.2920
Waste						0.0000	0.0000		0.0000	0.0000	13.8655	0.0000	13.8655	0.8194	0.0000	34.3512
Water						0.0000	0.0000		0.0000	0.0000	8.7040	119.0940	127.7981	0.8989	0.0221	156.8643
<b>Total</b>	<b>0.7701</b>	<b>2.0449</b>	<b>2.2708</b>	<b>0.0126</b>	<b>0.9184</b>	<b>0.0183</b>	<b>0.9367</b>	<b>0.2482</b>	<b>0.0174</b>	<b>0.2656</b>	<b>22.5695</b>	<b>1,430.1295</b>	<b>1,452.6991</b>	<b>1.7687</b>	<b>0.0235</b>	<b>1,503.9147</b>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
<b>Percent Reduction</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>42.39</b>	<b>1.95</b>	<b>3.01</b>	<b>37.86</b>	<b>19.03</b>	<b>4.67</b>

**3.0 Construction Detail**

**Construction Phase**

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Grading	Grading	9/2/2019	9/27/2019	5	20	
2	Building Construction	Building Construction	9/28/2019	6/5/2020	5	180	
3	Paving	Paving	5/11/2020	6/5/2020	5	20	
4	Architectural Coating	Architectural Coating	5/11/2020	6/5/2020	5	20	

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 10**

**Acres of Paving: 5.63**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 222,450; Non-Residential Outdoor: 74,150; Striped Parking Area: 14,716 (Architectural Coating – sqft)**

**OffRoad Equipment**

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

**Trips and VMT**

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Grading	6	15.00	2.00	2,238.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	165.00	65.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

**3.1 Mitigation Measures Construction**

Water Exposed Area

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Annual

**3.2 Grading - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0667	0.0000	0.0667	0.0339	0.0000	0.0339	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6423	26.6423	8.4300e-003	0.0000	26.8530
<b>Total</b>	<b>0.0258</b>	<b>0.2835</b>	<b>0.1629</b>	<b>3.0000e-004</b>	<b>0.0667</b>	<b>0.0140</b>	<b>0.0806</b>	<b>0.0339</b>	<b>0.0129</b>	<b>0.0467</b>	<b>0.0000</b>	<b>26.6423</b>	<b>26.6423</b>	<b>8.4300e-003</b>	<b>0.0000</b>	<b>26.8530</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.4200e-003	0.2931	0.0370	8.5000e-004	0.0193	1.0400e-003	0.0203	5.3000e-003	1.0000e-003	6.2900e-003	0.0000	81.9718	81.9718	5.3600e-003	0.0000	82.1057
Vendor	7.0000e-005	2.3100e-003	4.6000e-004	1.0000e-005	1.3000e-004	2.0000e-005	1.4000e-004	4.0000e-005	2.0000e-005	5.0000e-005	0.0000	0.4952	0.4952	4.0000e-005	0.0000	0.4963
Worker	7.5000e-004	5.4000e-004	5.6900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4244	1.4244	4.0000e-005	0.0000	1.4254
<b>Total</b>	<b>7.2400e-003</b>	<b>0.2959</b>	<b>0.0431</b>	<b>8.8000e-004</b>	<b>0.0211</b>	<b>1.0700e-003</b>	<b>0.0221</b>	<b>5.7800e-003</b>	<b>1.0300e-003</b>	<b>6.7900e-003</b>	<b>0.0000</b>	<b>83.8914</b>	<b>83.8914</b>	<b>5.4400e-003</b>	<b>0.0000</b>	<b>84.0274</b>

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**3.2 Grading - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0260	0.0000	0.0260	0.0132	0.0000	0.0132	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0258	0.2835	0.1629	3.0000e-004		0.0140	0.0140		0.0129	0.0129	0.0000	26.6422	26.6422	8.4300e-003	0.0000	26.8530
<b>Total</b>	<b>0.0258</b>	<b>0.2835</b>	<b>0.1629</b>	<b>3.0000e-004</b>	<b>0.0260</b>	<b>0.0140</b>	<b>0.0400</b>	<b>0.0132</b>	<b>0.0129</b>	<b>0.0261</b>	<b>0.0000</b>	<b>26.6422</b>	<b>26.6422</b>	<b>8.4300e-003</b>	<b>0.0000</b>	<b>26.8530</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.4200e-003	0.2931	0.0370	8.5000e-004	0.0193	1.0400e-003	0.0203	5.3000e-003	1.0000e-003	6.2900e-003	0.0000	81.9718	81.9718	5.3600e-003	0.0000	82.1057
Vendor	7.0000e-005	2.3100e-003	4.6000e-004	1.0000e-005	1.3000e-004	2.0000e-005	1.4000e-004	4.0000e-005	2.0000e-005	5.0000e-005	0.0000	0.4952	0.4952	4.0000e-005	0.0000	0.4963
Worker	7.5000e-004	5.4000e-004	5.6900e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.4244	1.4244	4.0000e-005	0.0000	1.4254
<b>Total</b>	<b>7.2400e-003</b>	<b>0.2959</b>	<b>0.0431</b>	<b>8.8000e-004</b>	<b>0.0211</b>	<b>1.0700e-003</b>	<b>0.0221</b>	<b>5.7800e-003</b>	<b>1.0300e-003</b>	<b>6.7900e-003</b>	<b>0.0000</b>	<b>83.8914</b>	<b>83.8914</b>	<b>5.4400e-003</b>	<b>0.0000</b>	<b>84.0274</b>



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**3.3 Building Construction - 2019**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0841	0.7607	0.6135	9.6000e-004		0.0462	0.0462		0.0434	0.0434	0.0000	84.4347	84.4347	0.0210	0.0000	84.9593
<b>Total</b>	<b>0.0841</b>	<b>0.7607</b>	<b>0.6135</b>	<b>9.6000e-004</b>		<b>0.0462</b>	<b>0.0462</b>		<b>0.0434</b>	<b>0.0434</b>	<b>0.0000</b>	<b>84.4347</b>	<b>84.4347</b>	<b>0.0210</b>	<b>0.0000</b>	<b>84.9593</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.3800e-003	0.2513	0.0500	5.6000e-004	0.0138	1.8900e-003	0.0157	3.9700e-003	1.8100e-003	5.7800e-003	0.0000	53.9184	53.9184	4.5900e-003	0.0000	54.0332
Worker	0.0275	0.0200	0.2097	5.8000e-004	0.0608	3.8000e-004	0.0611	0.0161	3.5000e-004	0.0165	0.0000	52.4896	52.4896	1.4400e-003	0.0000	52.5255
<b>Total</b>	<b>0.0348</b>	<b>0.2713</b>	<b>0.2598</b>	<b>1.1400e-003</b>	<b>0.0745</b>	<b>2.2700e-003</b>	<b>0.0768</b>	<b>0.0201</b>	<b>2.1600e-003</b>	<b>0.0223</b>	<b>0.0000</b>	<b>106.4080</b>	<b>106.4080</b>	<b>6.0300e-003</b>	<b>0.0000</b>	<b>106.5587</b>

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**3.3 Building Construction - 2019**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0841	0.7607	0.6135	9.6000e-004		0.0462	0.0462		0.0434	0.0434	0.0000	84.4346	84.4346	0.0210	0.0000	84.9592
<b>Total</b>	<b>0.0841</b>	<b>0.7607</b>	<b>0.6135</b>	<b>9.6000e-004</b>		<b>0.0462</b>	<b>0.0462</b>		<b>0.0434</b>	<b>0.0434</b>	<b>0.0000</b>	<b>84.4346</b>	<b>84.4346</b>	<b>0.0210</b>	<b>0.0000</b>	<b>84.9592</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	7.3800e-003	0.2513	0.0500	5.6000e-004	0.0138	1.8900e-003	0.0157	3.9700e-003	1.8100e-003	5.7800e-003	0.0000	53.9184	53.9184	4.5900e-003	0.0000	54.0332
Worker	0.0275	0.0200	0.2097	5.8000e-004	0.0608	3.8000e-004	0.0611	0.0161	3.5000e-004	0.0165	0.0000	52.4896	52.4896	1.4400e-003	0.0000	52.5255
<b>Total</b>	<b>0.0348</b>	<b>0.2713</b>	<b>0.2598</b>	<b>1.1400e-003</b>	<b>0.0745</b>	<b>2.2700e-003</b>	<b>0.0768</b>	<b>0.0201</b>	<b>2.1600e-003</b>	<b>0.0223</b>	<b>0.0000</b>	<b>106.4080</b>	<b>106.4080</b>	<b>6.0300e-003</b>	<b>0.0000</b>	<b>106.5587</b>

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**3.3 Building Construction - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1274	1.1667	1.0152	1.6300e-003		0.0675	0.0675		0.0634	0.0634	0.0000	140.2209	140.2209	0.0350	0.0000	141.0947
<b>Total</b>	<b>0.1274</b>	<b>1.1667</b>	<b>1.0152</b>	<b>1.6300e-003</b>		<b>0.0675</b>	<b>0.0675</b>		<b>0.0634</b>	<b>0.0634</b>	<b>0.0000</b>	<b>140.2209</b>	<b>140.2209</b>	<b>0.0350</b>	<b>0.0000</b>	<b>141.0947</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0104	0.3820	0.0747	9.4000e-004	0.0232	2.1600e-003	0.0254	6.6900e-003	2.0700e-003	8.7600e-003	0.0000	90.3023	90.3023	7.2200e-003	0.0000	90.4827
Worker	0.0429	0.0300	0.3206	9.5000e-004	0.1025	6.3000e-004	0.1031	0.0272	5.8000e-004	0.0278	0.0000	85.7290	85.7290	2.1500e-003	0.0000	85.7827
<b>Total</b>	<b>0.0533</b>	<b>0.4120</b>	<b>0.3953</b>	<b>1.8900e-003</b>	<b>0.1257</b>	<b>2.7900e-003</b>	<b>0.1285</b>	<b>0.0339</b>	<b>2.6500e-003</b>	<b>0.0366</b>	<b>0.0000</b>	<b>176.0313</b>	<b>176.0313</b>	<b>9.3700e-003</b>	<b>0.0000</b>	<b>176.2654</b>

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**3.3 Building Construction - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1274	1.1667	1.0152	1.6300e-003		0.0675	0.0675		0.0634	0.0634	0.0000	140.2207	140.2207	0.0350	0.0000	141.0945
<b>Total</b>	<b>0.1274</b>	<b>1.1667</b>	<b>1.0152</b>	<b>1.6300e-003</b>		<b>0.0675</b>	<b>0.0675</b>		<b>0.0634</b>	<b>0.0634</b>	<b>0.0000</b>	<b>140.2207</b>	<b>140.2207</b>	<b>0.0350</b>	<b>0.0000</b>	<b>141.0945</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0104	0.3820	0.0747	9.4000e-004	0.0232	2.1600e-003	0.0254	6.6900e-003	2.0700e-003	8.7600e-003	0.0000	90.3023	90.3023	7.2200e-003	0.0000	90.4827
Worker	0.0429	0.0300	0.3206	9.5000e-004	0.1025	6.3000e-004	0.1031	0.0272	5.8000e-004	0.0278	0.0000	85.7290	85.7290	2.1500e-003	0.0000	85.7827
<b>Total</b>	<b>0.0533</b>	<b>0.4120</b>	<b>0.3953</b>	<b>1.8900e-003</b>	<b>0.1257</b>	<b>2.7900e-003</b>	<b>0.1285</b>	<b>0.0339</b>	<b>2.6500e-003</b>	<b>0.0366</b>	<b>0.0000</b>	<b>176.0313</b>	<b>176.0313</b>	<b>9.3700e-003</b>	<b>0.0000</b>	<b>176.2654</b>

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**3.4 Paving - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1902
Paving	5.8700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0194</b>	<b>0.1407</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>		<b>6.9300e-003</b>	<b>6.9300e-003</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1902</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.0800e-003	4.1000e-004	1.0000e-005	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4918	0.4918	4.0000e-005	0.0000	0.4928
Worker	6.9000e-004	4.8000e-004	5.1600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3794	1.3794	3.0000e-005	0.0000	1.3803
<b>Total</b>	<b>7.5000e-004</b>	<b>2.5600e-003</b>	<b>5.5700e-003</b>	<b>3.0000e-005</b>	<b>1.7800e-003</b>	<b>2.0000e-005</b>	<b>1.8000e-003</b>	<b>4.8000e-004</b>	<b>2.0000e-005</b>	<b>5.0000e-004</b>	<b>0.0000</b>	<b>1.8712</b>	<b>1.8712</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.8730</b>

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**3.4 Paving - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0136	0.1407	0.1465	2.3000e-004		7.5300e-003	7.5300e-003		6.9300e-003	6.9300e-003	0.0000	20.0282	20.0282	6.4800e-003	0.0000	20.1901
Paving	5.8700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
<b>Total</b>	<b>0.0194</b>	<b>0.1407</b>	<b>0.1465</b>	<b>2.3000e-004</b>		<b>7.5300e-003</b>	<b>7.5300e-003</b>		<b>6.9300e-003</b>	<b>6.9300e-003</b>	<b>0.0000</b>	<b>20.0282</b>	<b>20.0282</b>	<b>6.4800e-003</b>	<b>0.0000</b>	<b>20.1901</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.0800e-003	4.1000e-004	1.0000e-005	1.3000e-004	1.0000e-005	1.4000e-004	4.0000e-005	1.0000e-005	5.0000e-005	0.0000	0.4918	0.4918	4.0000e-005	0.0000	0.4928
Worker	6.9000e-004	4.8000e-004	5.1600e-003	2.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3794	1.3794	3.0000e-005	0.0000	1.3803
<b>Total</b>	<b>7.5000e-004</b>	<b>2.5600e-003</b>	<b>5.5700e-003</b>	<b>3.0000e-005</b>	<b>1.7800e-003</b>	<b>2.0000e-005</b>	<b>1.8000e-003</b>	<b>4.8000e-004</b>	<b>2.0000e-005</b>	<b>5.0000e-004</b>	<b>0.0000</b>	<b>1.8712</b>	<b>1.8712</b>	<b>7.0000e-005</b>	<b>0.0000</b>	<b>1.8730</b>

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**3.5 Architectural Coating - 2020**

**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e-003	0.0225	0.0244	4.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003	0.0000	3.4043	3.4043	2.6000e-004	0.0000	3.4109
<b>Total</b>	<b>0.7247</b>	<b>0.0225</b>	<b>0.0244</b>	<b>4.0000e-005</b>		<b>1.4800e-003</b>	<b>1.4800e-003</b>		<b>1.4800e-003</b>	<b>1.4800e-003</b>	<b>0.0000</b>	<b>3.4043</b>	<b>3.4043</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>3.4109</b>

**Unmitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5200e-003	1.0600e-003	0.0114	3.0000e-005	3.6300e-003	2.0000e-005	3.6500e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.0347	3.0347	8.0000e-005	0.0000	3.0366
<b>Total</b>	<b>1.5200e-003</b>	<b>1.0600e-003</b>	<b>0.0114</b>	<b>3.0000e-005</b>	<b>3.6300e-003</b>	<b>2.0000e-005</b>	<b>3.6500e-003</b>	<b>9.6000e-004</b>	<b>2.0000e-005</b>	<b>9.8000e-004</b>	<b>0.0000</b>	<b>3.0347</b>	<b>3.0347</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>3.0366</b>

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**3.5 Architectural Coating - 2020**

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.7215					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.2300e-003	0.0225	0.0244	4.0000e-005		1.4800e-003	1.4800e-003		1.4800e-003	1.4800e-003	0.0000	3.4043	3.4043	2.6000e-004	0.0000	3.4109
<b>Total</b>	<b>0.7247</b>	<b>0.0225</b>	<b>0.0244</b>	<b>4.0000e-005</b>		<b>1.4800e-003</b>	<b>1.4800e-003</b>		<b>1.4800e-003</b>	<b>1.4800e-003</b>	<b>0.0000</b>	<b>3.4043</b>	<b>3.4043</b>	<b>2.6000e-004</b>	<b>0.0000</b>	<b>3.4109</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5200e-003	1.0600e-003	0.0114	3.0000e-005	3.6300e-003	2.0000e-005	3.6500e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	3.0347	3.0347	8.0000e-005	0.0000	3.0366
<b>Total</b>	<b>1.5200e-003</b>	<b>1.0600e-003</b>	<b>0.0114</b>	<b>3.0000e-005</b>	<b>3.6300e-003</b>	<b>2.0000e-005</b>	<b>3.6500e-003</b>	<b>9.6000e-004</b>	<b>2.0000e-005</b>	<b>9.8000e-004</b>	<b>0.0000</b>	<b>3.0347</b>	<b>3.0347</b>	<b>8.0000e-005</b>	<b>0.0000</b>	<b>3.0366</b>

**4.0 Operational Detail - Mobile**

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**4.1 Mitigation Measures Mobile**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.1442	2.0301	2.2533	0.0126	0.9184	0.0172	0.9355	0.2482	0.0163	0.2645	0.0000	1,170.1708	1,170.1708	0.0449	0.0000	1,171.2920
Unmitigated	0.1442	2.0301	2.2533	0.0126	0.9184	0.0172	0.9355	0.2482	0.0163	0.2645	0.0000	1,170.1708	1,170.1708	0.0449	0.0000	1,171.2920

**4.2 Trip Summary Information**

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	258.04	258.04	258.04	2,362,253	2,362,253
Total	258.04	258.04	258.04	2,362,253	2,362,253

**4.3 Trip Type Information**

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No Rail	16.60	8.40	60.00	80.30	0.00	19.70	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Other Non-Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Parking Lot	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Unrefrigerated Warehouse-No Rail	0.560986	0.040087	0.192245	0.000000	0.000000	0.052000	0.045000	0.100000	0.001423	0.001265	0.004826	0.001000	0.001168

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	124.7898	124.7898	5.1500e-003	1.0700e-003	125.2363
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	124.7898	124.7898	5.1500e-003	1.0700e-003	125.2363
NaturalGas Mitigated	1.6200e-003	0.0148	0.0124	9.0000e-005		1.1200e-003	1.1200e-003		1.1200e-003	1.1200e-003	0.0000	16.0651	16.0651	3.1000e-004	2.9000e-004	16.1606
NaturalGas Unmitigated	1.6200e-003	0.0148	0.0124	9.0000e-005		1.1200e-003	1.1200e-003		1.1200e-003	1.1200e-003	0.0000	16.0651	16.0651	3.1000e-004	2.9000e-004	16.1606

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	301049	1.6200e-003	0.0148	0.0124	9.0000e-005		1.1200e-003	1.1200e-003		1.1200e-003	1.1200e-003	0.0000	16.0651	16.0651	3.1000e-004	2.9000e-004	16.1606
<b>Total</b>		<b>1.6200e-003</b>	<b>0.0148</b>	<b>0.0124</b>	<b>9.0000e-005</b>		<b>1.1200e-003</b>	<b>1.1200e-003</b>		<b>1.1200e-003</b>	<b>1.1200e-003</b>	<b>0.0000</b>	<b>16.0651</b>	<b>16.0651</b>	<b>3.1000e-004</b>	<b>2.9000e-004</b>	<b>16.1606</b>

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**5.2 Energy by Land Use - NaturalGas**

**Mitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	301049	1.6200e-003	0.0148	0.0124	9.0000e-005		1.1200e-003	1.1200e-003		1.1200e-003	1.1200e-003	0.0000	16.0651	16.0651	3.1000e-004	2.9000e-004	16.1606
<b>Total</b>		<b>1.6200e-003</b>	<b>0.0148</b>	<b>0.0124</b>	<b>9.0000e-005</b>		<b>1.1200e-003</b>	<b>1.1200e-003</b>		<b>1.1200e-003</b>	<b>1.1200e-003</b>	<b>0.0000</b>	<b>16.0651</b>	<b>16.0651</b>	<b>3.1000e-004</b>	<b>2.9000e-004</b>	<b>16.1606</b>

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	41667.5	13.2762	5.5000e-004	1.1000e-004	13.3237
Unrefrigerated Warehouse-No Rail	349988	111.5137	4.6000e-003	9.5000e-004	111.9126
<b>Total</b>		<b>124.7898</b>	<b>5.1500e-003</b>	<b>1.0600e-003</b>	<b>125.2363</b>

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

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	41667.5	13.2762	5.5000e-004	1.1000e-004	13.3237
Unrefrigerated Warehouse-No Rail	349988	111.5137	4.6000e-003	9.5000e-004	111.9126
<b>Total</b>		<b>124.7898</b>	<b>5.1500e-003</b>	<b>1.0600e-003</b>	<b>125.2363</b>

**6.0 Area Detail****6.1 Mitigation Measures Area**

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.6244	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7700e-003	9.7700e-003	3.0000e-005	0.0000	0.0104
Unmitigated	0.6244	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7700e-003	9.7700e-003	3.0000e-005	0.0000	0.0104

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7700e-003	9.7700e-003	3.0000e-005	0.0000	0.0104
<b>Total</b>	<b>0.6244</b>	<b>5.0000e-005</b>	<b>5.0600e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>9.7700e-003</b>	<b>9.7700e-003</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0104</b>

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**6.2 Area by SubCategory**

**Mitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0722					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.5517					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.8000e-004	5.0000e-005	5.0600e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	9.7700e-003	9.7700e-003	3.0000e-005	0.0000	0.0104
<b>Total</b>	<b>0.6244</b>	<b>5.0000e-005</b>	<b>5.0600e-003</b>	<b>0.0000</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>		<b>2.0000e-005</b>	<b>2.0000e-005</b>	<b>0.0000</b>	<b>9.7700e-003</b>	<b>9.7700e-003</b>	<b>3.0000e-005</b>	<b>0.0000</b>	<b>0.0104</b>

**7.0 Water Detail**

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**7.1 Mitigation Measures Water**

Apply Water Conservation Strategy



Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	127.7981	0.8989	0.0221	156.8643
Unmitigated	158.4300	1.1236	0.0277	194.7580

**7.2 Water by Land Use**

**Unmitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	34.2944 / 1.48888	158.4300	1.1236	0.0277	194.7580
<b>Total</b>		<b>158.4300</b>	<b>1.1236</b>	<b>0.0277</b>	<b>194.7580</b>

## Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Annual

**7.2 Water by Land Use****Mitigated**

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	27.4355 / 1.48888	127.7981	0.8989	0.0221	156.8643
<b>Total</b>		<b>127.7981</b>	<b>0.8989</b>	<b>0.0221</b>	<b>156.8643</b>

**8.0 Waste Detail****8.1 Mitigation Measures Waste**

Institute Recycling and Composting Services

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Annual

**Category/Year**

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	13.8655	0.8194	0.0000	34.3512
Unmitigated	28.2969	1.6723	0.0000	70.1045

**8.2 Waste by Land Use**

**Unmitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	139.4	28.2969	1.6723	0.0000	70.1045
<b>Total</b>		<b>28.2969</b>	<b>1.6723</b>	<b>0.0000</b>	<b>70.1045</b>

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Annual

**8.2 Waste by Land Use**

**Mitigated**

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	68.306	13.8655	0.8194	0.0000	34.3512
<b>Total</b>		<b>13.8655</b>	<b>0.8194</b>	<b>0.0000</b>	<b>34.3512</b>

**9.0 Operational Offroad**

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

**Fire Pumps and Emergency Generators**

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

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

Perry Street and Barrett Avenue-Warehouse - Riverside-South Coast County, Annual

Equipment Type	Number
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## 11.0 Vegetation

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Perry Street and Barrett Avenue-Warehouse (VOC Mitigation) - Riverside-South Coast County, Summer

**Perry Street and Barrett Avenue-Warehouse (VOC Mitigation)  
Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	148.30	1000sqft	3.40	148,300.00	0
Other Asphalt Surfaces	76.22	1000sqft	1.75	76,220.00	0
Other Non-Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0
Parking Lot	119.05	1000sqft	2.73	119,050.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2020
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Onsite and Offsite =9.03 per site plan and offsite improvements  
 Construction Phase - Per Applicant  
 Off-road Equipment - Per Applicant/ 8 hrs a day  
 Architectural Coating - VOC mitigation 10g/L



### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/11/2020	6/5/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.63

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 222,450; Non-Residential Outdoor: 74,150; Striped Parking Area:

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Water Exposed Area



### 3.2 Architectural Coating - 2020

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	10.2841					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291		375.9904
<b>Total</b>	<b>10.6070</b>	<b>2.2451</b>	<b>2.4419</b>	<b>3.9600e-003</b>		<b>0.1479</b>	<b>0.1479</b>		<b>0.1479</b>	<b>0.1479</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0291</b>		<b>375.9904</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1679	0.0993	1.3306	3.6500e-003	0.3689	2.2300e-003	0.3711	0.0978	2.0600e-003	0.0999		363.5262	363.5262	9.3200e-003		363.7592
<b>Total</b>	<b>0.1679</b>	<b>0.0993</b>	<b>1.3306</b>	<b>3.6500e-003</b>	<b>0.3689</b>	<b>2.2300e-003</b>	<b>0.3711</b>	<b>0.0978</b>	<b>2.0600e-003</b>	<b>0.0999</b>		<b>363.5262</b>	<b>363.5262</b>	<b>9.3200e-003</b>		<b>363.7592</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	10.2841					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479	0.0000	375.2641	375.2641	0.0291		375.9904
<b>Total</b>	<b>10.6070</b>	<b>2.2451</b>	<b>2.4419</b>	<b>3.9600e-003</b>		<b>0.1479</b>	<b>0.1479</b>		<b>0.1479</b>	<b>0.1479</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0291</b>		<b>375.9904</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1679	0.0993	1.3306	3.6500e-003	0.3689	2.2300e-003	0.3711	0.0978	2.0600e-003	0.0999		363.5262	363.5262	9.3200e-003		363.7592
<b>Total</b>	<b>0.1679</b>	<b>0.0993</b>	<b>1.3306</b>	<b>3.6500e-003</b>	<b>0.3689</b>	<b>2.2300e-003</b>	<b>0.3711</b>	<b>0.0978</b>	<b>2.0600e-003</b>	<b>0.0999</b>		<b>363.5262</b>	<b>363.5262</b>	<b>9.3200e-003</b>		<b>363.7592</b>

Perry Street and Barrett Avenue-Warehouse (VOC Mitigation) - Riverside-South Coast County, Winter

**Perry Street and Barrett Avenue-Warehouse (VOC Mitigation)**  
**Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	148.30	1000sqft	3.40	148,300.00	0
Other Asphalt Surfaces	76.22	1000sqft	1.75	76,220.00	0
Other Non-Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0
Parking Lot	119.05	1000sqft	2.73	119,050.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10	<b>Operational Year</b>		2020	
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Onsite and Offsite =9.03 per site plan and offsite improvements  
 Construction Phase - Per Applicant  
 Off-road Equipment - Per Applicant/ 8 hrs a day  
 Trips and VMT - 2 water truck trips added to grading and paving  
 Architectural Coating - VOC mitigation 10g/L



### 3.0 Construction Detail

#### Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Architectural Coating	Architectural Coating	5/11/2020	6/5/2020	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 5.63

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 222,450; Non-Residential Outdoor: 74,150; Striped Parking Area:

#### OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	8.00	78	0.48

#### Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Architectural Coating	1	33.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

### 3.1 Mitigation Measures Construction

Water Exposed Area

### 3.2 Architectural Coating - 2020

#### Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Archit. Coating	10.2841					0.0000	0.0000		0.0000	0.0000			0.0000				0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479		375.2641	375.2641	0.0291			375.9904
<b>Total</b>	<b>10.6070</b>	<b>2.2451</b>	<b>2.4419</b>	<b>3.9600e-003</b>		<b>0.1479</b>	<b>0.1479</b>		<b>0.1479</b>	<b>0.1479</b>		<b>375.2641</b>	<b>375.2641</b>	<b>0.0291</b>			<b>375.9904</b>

#### Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000			0.0000
Worker	0.1645	0.1027	1.0764	3.2700e-003	0.3689	2.2300e-003	0.3711	0.0978	2.0600e-003	0.0999		326.1178	326.1178	8.1000e-003			326.3203
<b>Total</b>	<b>0.1645</b>	<b>0.1027</b>	<b>1.0764</b>	<b>3.2700e-003</b>	<b>0.3689</b>	<b>2.2300e-003</b>	<b>0.3711</b>	<b>0.0978</b>	<b>2.0600e-003</b>	<b>0.0999</b>		<b>326.1178</b>	<b>326.1178</b>	<b>8.1000e-003</b>			<b>326.3203</b>

**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	10.2841					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.3229	2.2451	2.4419	3.9600e-003		0.1479	0.1479		0.1479	0.1479	0.0000	375.2641	375.2641	0.0291		375.9904
<b>Total</b>	<b>10.6070</b>	<b>2.2451</b>	<b>2.4419</b>	<b>3.9600e-003</b>		<b>0.1479</b>	<b>0.1479</b>		<b>0.1479</b>	<b>0.1479</b>	<b>0.0000</b>	<b>375.2641</b>	<b>375.2641</b>	<b>0.0291</b>		<b>375.9904</b>

**Mitigated Construction Off-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.1645	0.1027	1.0764	3.2700e-003	0.3689	2.2300e-003	0.3711	0.0978	2.0600e-003	0.0999		326.1178	326.1178	8.1000e-003		326.3203
<b>Total</b>	<b>0.1645</b>	<b>0.1027</b>	<b>1.0764</b>	<b>3.2700e-003</b>	<b>0.3689</b>	<b>2.2300e-003</b>	<b>0.3711</b>	<b>0.0978</b>	<b>2.0600e-003</b>	<b>0.0999</b>		<b>326.1178</b>	<b>326.1178</b>	<b>8.1000e-003</b>		<b>326.3203</b>

Perry Street and Barrett Avenue-Warehouse -Operation LST - Riverside-South Coast County, Summer

**Perry Street and Barrett Avenue-Warehouse -Operation LST  
Riverside-South Coast County, Summer**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	148.30	1000sqft	3.40	148,300.00	0
Other Asphalt Surfaces	76.22	1000sqft	1.75	76,220.00	0
Other Non-Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0
Parking Lot	119.05	1000sqft	2.73	119,050.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2020
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Onsite and Offsite =9.03 per site plan and offsite improvements  
 Construction Phase - construction not modeled  
 Off-road Equipment - Per Applicant/ 8hrs a day  
 Trips and VMT - not modeled  
 Grading - Per site plan  
 Vehicle Trips - Per TIA; onsite trip length 0.2 mile



Water And Wastewater -

Construction Off-road Equipment Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix - Per TIA

Off-road Equipment - not modeled

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblFleetMix	HHD	0.07	0.10
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.3390e-003	0.05
tblFleetMix	MCY	4.6290e-003	4.8260e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.1200e-003	1.1680e-003
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	1.3650e-003	1.4230e-003
tblFleetMix	SBUS	9.5900e-004	1.0000e-003
tblFleetMix	UBUS	1.2130e-003	1.2650e-003
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.20
tblVehicleTrips	CNW_TTP	41.00	19.70
tblVehicleTrips	CW_TL	16.60	0.20
tblVehicleTrips	CW_TTP	59.00	80.30
tblVehicleTrips	DV_TP	5.00	0.00



### 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.3470	3.2754	1.1909	4.6700e-003	0.0408	2.8600e-003	0.0436	0.0110	2.6900e-003	0.0137		488.8033	488.8033	0.0945		491.1666
Unmitigated	0.3470	3.2754	1.1909	4.6700e-003	0.0408	2.8600e-003	0.0436	0.0110	2.6900e-003	0.0137		488.8033	488.8033	0.0945		491.1666

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated Annual VMT	Mitigated Annual VMT
	Weekday	Saturday	Sunday		
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	258.04	258.04	258.04	18,785	18,785
<b>Total</b>	<b>258.04</b>	<b>258.04</b>	<b>258.04</b>	<b>18,785</b>	<b>18,785</b>

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.20	8.40	0.20	80.30	0.00	19.70	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Other Non-Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Parking Lot	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Unrefrigerated Warehouse-No Rail	0.560986	0.040087	0.192245	0.000000	0.000000	0.052000	0.045000	0.100000	0.001423	0.001265	0.004826	0.001000	0.001168

Perry Street and Barrett Avenue-Warehouse -Operation LST - Riverside-South Coast County, Winter

**Perry Street and Barrett Avenue-Warehouse -Operation LST  
Riverside-South Coast County, Winter**

**1.0 Project Characteristics**

**1.1 Land Usage**

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	148.30	1000sqft	3.40	148,300.00	0
Other Asphalt Surfaces	76.22	1000sqft	1.75	76,220.00	0
Other Non-Asphalt Surfaces	50.00	1000sqft	1.15	50,000.00	0
Parking Lot	119.05	1000sqft	2.73	119,050.00	0

**1.2 Other Project Characteristics**

<b>Urbanization</b>	Urban	<b>Wind Speed (m/s)</b>	2.4	<b>Precipitation Freq (Days)</b>	28
<b>Climate Zone</b>	10			<b>Operational Year</b>	2020
<b>Utility Company</b>	Southern California Edison				
<b>CO2 Intensity (lb/MW hr)</b>	702.44	<b>CH4 Intensity (lb/MW hr)</b>	0.029	<b>N2O Intensity (lb/MW hr)</b>	0.006

**1.3 User Entered Comments & Non-Default Data**

Project Characteristics -  
 Land Use - Onsite and Offsite =9.03 per site plan and offsite improvements  
 Construction Phase - construction not modeled  
 Off-road Equipment - Per Applicant/ 8hrs a day  
 Trips and VMT - not modeled  
 Grading - Per site plan  
 Vehicle Trips - Per TIA; onsite trip length 0.2 mile

Water And Wastewater -

Construction Off-road Equipment Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix - Per TIA

Off-road Equipment - not modeled

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	0.00
tblFleetMix	HHD	0.07	0.10
tblFleetMix	LDA	0.54	0.56
tblFleetMix	LDT1	0.04	0.04
tblFleetMix	LDT2	0.18	0.19
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.3390e-003	0.05
tblFleetMix	MCY	4.6290e-003	4.8260e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.1200e-003	1.1680e-003
tblFleetMix	MHD	0.02	0.05
tblFleetMix	OBUS	1.3650e-003	1.4230e-003
tblFleetMix	SBUS	9.5900e-004	1.0000e-003
tblFleetMix	UBUS	1.2130e-003	1.2650e-003
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.20
tblVehicleTrips	CNW_TTP	41.00	19.70
tblVehicleTrips	CW_TL	16.60	0.20
tblVehicleTrips	CW_TTP	59.00	80.30
tblVehicleTrips	DV_TP	5.00	0.00



## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.2880	3.1595	1.4224	4.1500e-003	0.0408	3.1700e-003	0.0440	0.0110	2.9900e-003	0.0140		432.9880	432.9880	0.1070		435.6619
Unmitigated	0.2880	3.1595	1.4224	4.1500e-003	0.0408	3.1700e-003	0.0440	0.0110	2.9900e-003	0.0140		432.9880	432.9880	0.1070		435.6619

### 4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00		
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	258.04	258.04	258.04	18,785	18,785
Total	258.04	258.04	258.04	18,785	18,785

### 4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Non-Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.20	8.40	0.20	80.30	0.00	19.70	100	0	0

### 4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Other Non-Asphalt Surfaces	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Parking Lot	0.538064	0.038449	0.184390	0.122109	0.017402	0.005339	0.017250	0.067711	0.001365	0.001213	0.004629	0.000959	0.001120
Unrefrigerated Warehouse-No Rail	0.560986	0.040087	0.192245	0.000000	0.000000	0.052000	0.045000	0.100000	0.001423	0.001265	0.004826	0.001000	0.001168



**Particulate Matter Idling Emissions Calculations for Operation LST**

Pollutant	Emission Factor*	Idling Time	Daily Truck Trips**	Idling Emissions	Idling Emissions
	(g/hr-veh)	(min)		(g/day)	(lb/day)
LHDT2					
PM-10	0.762011	15	13	2.476536	0.005459855
PM-2.5	0.729047	15	13	2.369403	0.005223666
MHDT					
PM-10	0.152423	15	12	0.457269	0.001008111
PM-2.5	0.145829	15	12	0.437487	0.000964499
HHDT					
PM-10	0.016322	15	26	0.106093	0.000233896
PM-2.5	0.015616	15	26	0.101504	0.000223779
PM-10 Sub-Total					0.006701862
PM-2.5 Sub-Total					0.006411944
CalEEMod Total					
PM-10 Total					0.044
PM-2.5 Total					0.014
Operation LST Total					
PM-10 Total					0.050701862
PM-2.5 Total					0.020411944

\* Annual emission factors from EMFAC2014 for 2020 in Riverside County

\*\* Project-specific Traffic Impact Analysis, March 2019