



Technical Memorandum

To: Matt Pioli, First Industrial Realty Trust

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

Date: May 6, 2020

Re: Air Quality/Greenhouse Gas Analysis for the First Industrial Warehouse at Wilson Avenue Project (DPR No. 19-00007), City of Perris

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®** version 2016.3.2 (CalEEMod) was used to quantify Project-related emissions.

The Project proposes development of an approximate 303,228 square foot (SF) high-cube, non-refrigerated warehouse building that includes 8,000 SF office and 4,000 SF mezzanine, on approximately 15.60 gross acres south of Rider Street on Wilson Avenue, in the City of Perris, California. The Project is located within the Perris Valley Commerce Center Specific Plan adopted in 2012. The Project sewer lines will connect to existing sewer lines along the frontage of the Project within Wilson Avenue; no improvements are proposed. The Project will construct off-site potable and recycled water lines in Wilson Avenue. The potable water line will be constructed along Wilson Avenue from the southern Project's frontage to Rider Street; the recycled water line will be constructed along the Project's frontage on Wilson Avenue stretching approximately 600 feet. It is also anticipated that Wilson Avenue will be repaved from the Project's southern frontage to Rider Street (approximately 1,650 SF). The total off-site disturbance is approximate 1.67 acres.

▪ Regional Significance Thresholds

The thresholds contained in the *SCAQMD CEQA Air Quality Handbook*¹ (SCAQMD 1993) and posted in a supplemental table as mass daily thresholds on SCAQMD's website² 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 _x	CO	SO _x	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 (17.27 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 ten months, beginning no sooner than June 2020. 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 June 2020 with grading and end with architectural coatings (painting):

Construction Activity	Start Date	End Date	Total Working Days
Grading	June 01, 2020	July 15, 2020	33 Days
Building Construction	July 16, 2020	April 16, 2021	197 Days
Paving	March 16, 2021	April 16, 2021	24 Days
Architectural Coatings	March 16, 2021	April 16, 2021	24 Days

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

² <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf?sfvrsn=2>

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

Construction Activity	Off-Road Equipment	Unit Amount
Grading	Excavators	2
	Grader	1
	Rubber Tired Dozer	1
	Scraper	2
	Tractors/Loaders/Backhoes	2
Building Construction	Crane	1
	Forklifts	3
	Generator Set	1
	Tractor/Loader/Backhoe	3
	Welder	1
Paving	Crushing/Proc. Equipment	1
	Paver	1
	Paving Equipment	1
	Rollers	1
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 per day were added to the grading and paving activities to account for water truck trips.
- Vendor trips from concrete trucks utilized during building construction were based on CalEEMod defaults.
- The Project site will balance; no soil import or export is required.
- Off-site infrastructure improvements will also be required for potable water, recycled water, and repaving a portion of Wilson Avenue. These off-site improvements are within the existing paved roadway (44 feet wide) between the Project's frontage and Rider Street. The off-site improvements will disturb approximately 1.67 acres.

The results of this analysis are summarized below.

Table 2 – Unmitigated Estimated Maximum Daily Construction Emissions

Activity	Peak Daily Emissions (lb/day)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	75	100	550	150	150	55
Grading-2020	4.56	50.46	32.80	0.06	5.70	3.46
Building Construction-2020	4.21	34.26	33.02	0.10	5.61	2.37
Building Construction-2021	3.81	30.99	31.38	0.09	5.39	2.17
Paving-2021	1.37	10.17	12.07	0.02	0.67	0.55
Architectural Coatings-2021	122.92	2.21	4.75	0.01	0.83	0.32
Maximum¹	128.10	50.46	48.20	0.12	6.89	3.46
Exceeds Threshold?	Yes	No	No	No	No	No

Note: ¹ Maximum emissions are the greater of either grading or building construction alone in 2020, or the sum of building construction, paving and architectural coating in 2021 since these activities overlap. Maximum emissions 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 2021. 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 DPR 19-00007.³ 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. To account for the energy used for parking lot lighting, the parking lot lighting energy intensity rate was conservatively applied to the approximate 8.64 acres that comprise the Project site’s concrete parking lot and landscaped areas. CalEEMod defaults were used for the remaining land uses and reflect the 2016 Title 24 standards. The Project would be subject to the 2019 Title 24 standards, which will further reduce energy consumption from the Project. 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 _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Area	6.97	0.00	0.03	0.00	0.00	0.00
Energy	0.02	0.17	0.14	0.00	0.01	0.01
Mobile	2.00	37.59	30.03	0.23	13.19	3.71
Total	8.99	37.76	30.20	0.23	13.20	3.72
Exceeds Threshold?	No	No	No	No	No	No

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 _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Thresholds	55	55	550	150	150	55
Area	6.97	0.00	0.03	0.00	0.00	0.00
Energy	0.02	0.17	0.14	0.00	0.01	0.01
Mobile	1.88	38.43	26.01	0.22	13.19	3.71
Total	8.87	38.60	26.18	0.22	13.20	3.72
Exceeds Threshold?	No	No	No	No	No	No

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.

³ Albert A. Webb Associates, *Traffic Impact Analysis Warehouse Building DPR 19-00007*, November 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) methodology⁴ 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 NO₂, CO, PM-10, and PM-2.5. SCAQMD has provided LST lookup tables⁵ 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 more than five acres, it is anticipated that a smaller area will be disturbed per day. The SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds is used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod.⁶ Based on this SCAQMD guidance and the Project's equipment list during grading (above), the Project will disturb approximately four acres per day.

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 residential properties on Wilson Avenue, approximately 45 feet (14 meters) west of the Project site, and on Clapper Street, east of the Perris Valley Storm Drain Channel, 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 _x	CO	PM-10	PM-2.5
LST Threshold for 4-acres at 25 meters¹	237	1,346	11	7
Grading-2020	50.20	31.96	5.46	3.39
Building Construction-2020	20.65	17.97	1.19	1.12
Building Construction-2021	18.75	17.67	1.03	0.96
Paving-2021	9.95	11.67	0.55	0.52
Architectural Coating-2021	2.04	2.42	0.13	0.13
Maximum²	50.20	31.96	5.46	3.39
Exceeds Threshold?	No	No	No	No

Note: ¹ LST for 4-acre site predicted using Appendix K of SCAQMD LST Methodology

⁴ 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 October 2019.)

⁵ <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>

⁶ <http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/caleemod-guidance.pdf?sfvrsn=2>

² Maximum emissions are the greater of either grading or building construction alone in 2020, or the sum of building construction, paving and architectural coating in 2021 since these activities overlap.

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 0.31 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.⁷ 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 Wilson Avenue, approximately 45 feet west of the Project site, and on Clapper Street, east of the Perris Valley Storm Drain Channel, 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 _x	CO	PM-10 ¹	PM-2.5 ¹
LST Threshold for 5-acre at 25 meters	270	1,577	4	2
On-Site Truck Travel	12.49	3.40	0.14	0.04
Exceeds Threshold?	No	No	No	No

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

¹ 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.

⁷ Idling emission factors obtained from EMFAC2017; idling calculations attached herewith

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 thoroughly analyzed as part of the SCAQMD’s 2003 Air Quality Management Plan (2003 AQMP)⁸ and the Revised 1992 Federal Attainment Plan for Carbon Monoxide (1992 CO Plan).⁹ 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)¹⁰ 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 28,010 at the intersection of Perris Boulevard and Rider Street, which is lower than the values studied by SCAQMD.¹¹ 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 2010¹² 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 (MTCO₂E/yr), respectively. Alternatively, a lead agency has the option to use 3,000 MTCO₂E/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 MTCO₂E/yr for stationary source projects where SCAQMD is the lead agency. This approach is also

⁸ 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 October 2019.)

⁹ SCAQMD, *Revision to the 1992 Carbon Monoxide Attainment Plan*, September 1994. (Available at SCAQMD.)

¹⁰ 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, accessed October 2019.)

¹¹ Albert A. Webb Associates, *Traffic Impact Analysis Warehouse Building DPR 19-00007*, November 2019.

¹² [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)

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 (Optimus Logistics Center 2, Duke Warehouse at Perris Boulevard and Markham Street, and IDI- Warehouse at Indian Avenue and Ramona Expressway). 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 CO₂, methane (CH₄), nitrous oxide (N₂O), and CO₂E.¹³

Table 7 – Project Construction Equipment GHG Emissions

Year	Metric Tons per year (MT/yr)			
	Total CO ₂	Total CH ₄	Total N ₂ O	Total CO ₂ E
2020	602.68	0.09	0.00	604.82
2021	346.79	0.04	0.00	347.77
Total	949.47	0.13	0.00	952.59
			Amortized	31.75

Evaluation of the table above indicates that an estimated 952.59 MTCO₂E will occur from Project construction equipment over the course of the estimated construction period. The draft SCAQMD GHG threshold Guidance document released in October 2008¹⁴ 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 CO₂ 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,

¹³ CO₂E is the sum of CO₂ emissions estimated plus the sum of CH₄ and N₂O emissions estimated multiplied by their respective global warming potential (GWP).

¹⁴ [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)

Appendix A). The following table summarizes the GHG emissions estimates reported by CalEEMod for the Project based on the assumptions described previously.

Table 8 – Energy-Related GHG Emissions

Source	Metric Tons per year (MT/yr)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
Electricity	269.98	0.01	0.00	270.95
Natural Gas	32.85	0.00	0.00	33.04
Total	302.83	0.01	0.00	303.99

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. As stated above, the trip generation rate and fleet mix were adjusted based on the rates and ratios found in the TIA for DPR 19-00007. 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 Perris¹⁵, the most recent 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. Indoor water demand was obtained from the Design Conditions Report,¹⁶ using the maximum daily demand estimate. Outdoor water demand was provided by the landscape architect.¹⁷ 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 4,179.96 MTCO₂E/yr which includes construction-related emissions amortized over a typical project life of 30 years.

¹⁵ CalRecycle, *Perris Jurisdiction Diversion / Disposal Rate Detail*, 2004. Available at: <https://www2.calrecycle.ca.gov/LGCentral/DiversionProgram/JurisdictionDiversionSummary>, accessed October 2019.

¹⁶ Albert A Webb Associates, *Wilson Avenue PM 21527 Design Conditions Report*, September 2019.

¹⁷ Scott Peterson Landscape Architect, Inc., *First Industrial* (email), September 19, 2019.

Table 9 – Total Project-Related GHG Emissions

Source	Metric Tons per year (MT/yr)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
Amortized Construction	--	--	--	31.75
Area	0.01	0.00	0.00	0.01
Energy	302.83	0.01	0.00	303.99
Mobile	3,740.58	0.14	0.00	3,744.11
Solid Waste	28.35	1.68	0.00	70.24
Water	24.62	0.16	0.00	29.86
Total	4,096.39	1.99	0.00	4,179.96

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 MTCO₂E/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 _x	CO	SO ₂	PM-10	PM-2.5
SCAQMD Daily Construction Thresholds	75	100	550	150	150	55
Grading-2020 ¹	4.56	50.46	32.80	0.06	5.70	3.46
Building Construction-2020 ¹	4.21	34.26	33.02	0.10	5.61	2.37
Building Construction-2021 ¹	3.81	30.99	31.38	0.09	5.39	2.17
Paving-2021 ¹	1.37	10.17	12.07	0.02	0.67	0.55
Architectural Coatings-2021	17.51	2.21	4.75	0.01	0.83	0.32
Maximum²	22.69	50.46	48.20	0.12	6.89	3.46
Exceeds Threshold?	No	No	No	No	No	No

Notes: ¹Maximum emissions are from Table 2.

² Maximum emissions are the greater of either grading or building construction alone in 2020, or the sum of building construction, paving and architectural coating in 2021 since these activities overlap. Maximum emissions are shown in bold.

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 MTCO₂E/yr.

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

CALEEMOD OUTPUT FILES

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

First Industrial Warehouse at Wilson Avenue
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	303.23	1000sqft	6.96	303,228.00	0
Other Asphalt Surfaces	1.67	Acre	1.67	72,745.20	0
Other Non-Asphalt Surfaces	8.64	Acre	8.64	376,358.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

Project Characteristics -

Land Use - Per RGA Site Plan; Onsite and offsite =17.27

Construction Phase - Per Applicant

Off-road Equipment - 8hr/day

Off-road Equipment - Per Applicant 8hr/day

Off-road Equipment - Per Applicant and Engineer

Trips and VMT - 2 daily water truck trips added to Grading and Paving

Vehicle Trips - Per TIA; 60 truck trip length assumed

Energy Use - Added 0.35 to Lighting Energy Intensity to account for parking lot lighting energy

Water And Wastewater - Per Design Conditions Report and Landscape Architect

Construction Off-road Equipment Mitigation - Per Rule 403

Water Mitigation - Per CALGreen Code

Waste Mitigation - Per City of Perris 2004 diversion rate

Fleet Mix - Per TIA

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	300.00	197.00
tblConstructionPhase	NumDays	30.00	33.00
tblConstructionPhase	NumDays	20.00	24.00
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.07	0.20
tblFleetMix	LDA	0.54	0.48
tblFleetMix	LDT1	0.04	0.03
tblFleetMix	LDT2	0.19	0.16
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1410e-003	0.05

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

tblFleetMix	MCY	4.5820e-003	4.0100e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0380e-003	9.1000e-004
tblFleetMix	MHD	0.02	0.07
tblFleetMix	OBUS	1.3830e-003	1.2100e-003
tblFleetMix	SBUS	9.4500e-004	8.3000e-004
tblFleetMix	UBUS	1.1830e-003	1.0400e-003
tblGrading	AcresOfGrading	82.50	75.00
tblLandUse	LandUseSquareFeet	303,230.00	303,228.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
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	32.18
tblVehicleTrips	CW_TTP	59.00	67.82
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	IndoorWaterUseRate	70,121,937.50	6,183,100.00

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

tblWater	OutdoorWaterUseRate	0.00	713,580.00
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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					
2020	4.5575	50.4635	33.0247	0.0959	8.6687	2.1764	10.8451	3.6335	2.0024	5.6358	0.0000	9,604.047 0	9,604.047 0	1.9522	0.0000	9,629.677 5
2021	128.0987	43.3577	48.2057	0.1251	5.1485	1.7452	6.8938	1.3836	1.6525	3.0361	0.0000	12,436.96 22	12,436.96 22	1.4465	0.0000	12,473.12 47
Maximum	128.0987	50.4635	48.2057	0.1251	8.6687	2.1764	10.8451	3.6335	2.0024	5.6358	0.0000	12,436.96 22	12,436.96 22	1.9522	0.0000	12,473.12 47

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					
2020	4.5575	50.4635	33.0247	0.0959	4.3198	2.1764	5.7014	1.4555	2.0024	3.4578	0.0000	9,604.047 0	9,604.047 0	1.9522	0.0000	9,629.677 5
2021	128.0987	43.3577	48.2057	0.1251	5.1485	1.7452	6.8938	1.3836	1.6525	3.0361	0.0000	12,436.96 22	12,436.96 22	1.4465	0.0000	12,473.12 46
Maximum	128.0987	50.4635	48.2057	0.1251	5.1485	2.1764	6.8938	1.4555	2.0024	3.4578	0.0000	12,436.96 22	12,436.96 22	1.9522	0.0000	12,473.12 46

First Industrial Warehouse at Wilson Avenue - 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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	31.47	0.00	29.00	43.41	0.00	25.12	0.00	0.00	0.00	0.00	0.00	0.00

First Industrial Warehouse at Wilson Avenue - 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	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0686	0.0686	1.8000e-004			0.0732	
Energy	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126	198.4054	198.4054	3.8000e-003	3.6400e-003		199.5845	
Mobile	2.0035	37.5873	30.0254	0.2252	13.0001	0.1926	13.1926	3.5307	0.1827	3.7134	23,370.61 75	23,370.61 75	0.8503			23,391.87 36	
Total	8.9920	37.7529	30.1964	0.2262	13.0001	0.2052	13.2053	3.5307	0.1954	3.7261	23,569.09 15	23,569.09 15	0.8542	3.6400e-003	23,591.53 12		

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Area	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0686	0.0686	1.8000e-004			0.0732	
Energy	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126	198.4054	198.4054	3.8000e-003	3.6400e-003		199.5845	
Mobile	2.0035	37.5873	30.0254	0.2252	13.0001	0.1926	13.1926	3.5307	0.1827	3.7134	23,370.61 75	23,370.61 75	0.8503			23,391.87 36	
Total	8.9920	37.7529	30.1964	0.2262	13.0001	0.2052	13.2053	3.5307	0.1954	3.7261	23,569.09 15	23,569.09 15	0.8542	3.6400e-003	23,591.53 12		

First Industrial Warehouse at Wilson Avenue - 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	N20	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	6/1/2020	7/15/2020	5	33	
2	Building Construction	Building Construction	7/16/2020	4/16/2021	5	197	
3	Paving	Paving	3/16/2021	4/16/2021	5	24	
4	Architectural Coating	Architectural Coating	3/16/2021	4/16/2021	5	24	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 10.31

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 454,842; Non-Residential Outdoor: 151,614; Striped Parking Area: 26,946 (Architectural Coating – sqft)

OffRoad Equipment

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
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
Grading	8	20.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	316.00	123.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	63.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

3.2 Grading - 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					
Fugitive Dust					8.4323	0.0000	8.4323	3.5705	0.0000	3.5705			0.0000			0.0000	
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.865 3	6,005.865 3	1.9424			6,054.425 7
Total	4.4501	50.1975	31.9583	0.0620	8.4323	2.1739	10.6062	3.5705	2.0000	5.5705		6,005.865 3	6,005.865 3	1.9424			6,054.425 7

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	0.1018	0.0602	0.8064	2.2100e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605			220.3189	220.3189	5.6500e-003		220.4601
Total	0.1074	0.2660	0.8441	2.7300e-003	0.2364	2.5200e-003	0.2389	0.0630	2.3700e-003	0.0653			275.3971	275.3971	9.7800e-003		275.6416

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

3.2 Grading - 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					
Fugitive Dust					3.2886	0.0000	3.2886	1.3925	0.0000	1.3925			0.0000			0.0000	
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.865 3	6,005.865 3	1.9424		6,054.425 7	
Total	4.4501	50.1975	31.9583	0.0620	3.2886	2.1739	5.4625	1.3925	2.0000	3.3925	0.0000	6,005.865 3	6,005.865 3	1.9424		6,054.425 7	

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	0.1018	0.0602	0.8064	2.2100e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605			220.3189	220.3189	5.6500e-003		220.4601
Total	0.1074	0.2660	0.8441	2.7300e-003	0.2364	2.5200e-003	0.2389	0.0630	2.3700e-003	0.0653			275.3971	275.3971	9.7800e-003		275.6416

First Industrial Warehouse at Wilson Avenue - 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		2,735.699 9	2,735.699 9	0.6819		2,752.748 1	
Total	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218		2,735.699 9	2,735.699 9	0.6819		2,752.748 1	

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	0.3428	12.6557	2.3153	0.0321	0.7876	0.0720	0.8596	0.2268	0.0689	0.2956		3,387.308 4	3,387.308 4	0.2541		3,393.660 0	
Worker	1.6081	0.9510	12.7416	0.0350	3.5321	0.0214	3.5535	0.9367	0.0197	0.9564		3,481.038 7	3,481.038 7	0.0892		3,483.269 4	
Total	1.9509	13.6067	15.0569	0.0671	4.3198	0.0934	4.4132	1.1635	0.0886	1.2521		6,868.347 1	6,868.347 1	0.3433		6,876.929 4	

First Industrial Warehouse at Wilson Avenue - 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	2,735.699 9	2,735.699 9	0.6819		2,752.748 1	
Total	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218	0.0000	2,735.699 9	2,735.699 9	0.6819		2,752.748 1	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3428	12.6557	2.3153	0.0321	0.7876	0.0720	0.8596	0.2268	0.0689	0.2956	3,387.308 4	3,387.308 4	0.2541			3,393.660 0	
Worker	1.6081	0.9510	12.7416	0.0350	3.5321	0.0214	3.5535	0.9367	0.0197	0.9564	3,481.038 7	3,481.038 7	0.0892			3,483.269 4	
Total	1.9509	13.6067	15.0569	0.0671	4.3198	0.0934	4.4132	1.1635	0.0886	1.2521	6,868.347 1	6,868.347 1	0.3433			6,876.929 4	

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

3.3 Building Construction - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.043 8	2,736.043 8	0.6751		2,752.921 2	
Total	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.043 8	2,736.043 8	0.6751		2,752.921 2	

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	0.2872	11.3823	2.0308	0.0319	0.7876	0.0217	0.8093	0.2268	0.0207	0.2475		3,360.987 6	3,360.987 6	0.2405		3,366.998 7	
Worker	1.4981	0.8535	11.6829	0.0338	3.5321	0.0208	3.5530	0.9367	0.0192	0.9559		3,364.612 9	3,364.612 9	0.0802		3,366.618 5	
Total	1.7853	12.2358	13.7137	0.0656	4.3198	0.0425	4.3622	1.1635	0.0399	1.2034		6,725.600 4	6,725.600 4	0.3207		6,733.617 3	

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

3.3 Building Construction - 2021**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	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625	0.0000	2,736.043 8	2,736.043 8	0.6751		2,752.921 2	
Total	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625	0.0000	2,736.043 8	2,736.043 8	0.6751		2,752.921 2	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.2872	11.3823	2.0308	0.0319	0.7876	0.0217	0.8093	0.2268	0.0207	0.2475	3,360.987 6	3,360.987 6	0.2405			3,366.998 7	
Worker	1.4981	0.8535	11.6829	0.0338	3.5321	0.0208	3.5530	0.9367	0.0192	0.9559	3,364.612 9	3,364.612 9	0.0802			3,366.618 5	
Total	1.7853	12.2358	13.7137	0.0656	4.3198	0.0425	4.3622	1.1635	0.0399	1.2034	6,725.600 4	6,725.600 4	0.3207			6,733.617 3	

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

3.4 Paving - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.1399	9.9547	11.6660	0.0184		0.5470	0.5470		0.5199	0.5199	1,768.135 6	1,768.135 6	0.4025			1,778.198 9	
Paving	0.1823					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Total	1.3223	9.9547	11.6660	0.0184		0.5470	0.5470		0.5199	0.5199		1,768.135 6	1,768.135 6	0.4025			1,778.198 9

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6700e-003	0.1851	0.0330	5.2000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.4000e-004	4.0200e-003	54.6502	54.6502	3.9100e-003			54.7480
Worker	0.0474	0.0270	0.3697	1.0700e-003	0.1118	6.6000e-004	0.1124	0.0296	6.1000e-004	0.0303	106.4751	106.4751	2.5400e-003			106.5386
Total	0.0521	0.2121	0.4027	1.5900e-003	0.1246	1.0100e-003	0.1256	0.0333	9.5000e-004	0.0343		161.1253	161.1253	6.4500e-003		161.2865

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

3.4 Paving - 2021**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	1.1399	9.9547	11.6660	0.0184		0.5470	0.5470		0.5199	0.5199	0.0000	1,768.135 6	1,768.135 6	0.4025		1,778.198 9	
Paving	0.1823					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Total	1.3223	9.9547	11.6660	0.0184		0.5470	0.5470		0.5199	0.5199	0.0000	1,768.135 6	1,768.135 6	0.4025		1,778.198 9	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.6700e-003	0.1851	0.0330	5.2000e-004	0.0128	3.5000e-004	0.0132	3.6900e-003	3.4000e-004	4.0200e-003	54.6502	54.6502	3.9100e-003			54.7480
Worker	0.0474	0.0270	0.3697	1.0700e-003	0.1118	6.6000e-004	0.1124	0.0296	6.1000e-004	0.0303	106.4751	106.4751	2.5400e-003			106.5386
Total	0.0521	0.2121	0.4027	1.5900e-003	0.1246	1.0100e-003	0.1256	0.0333	9.5000e-004	0.0343		161.1253	161.1253	6.4500e-003		161.2865

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

3.5 Architectural Coating - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Archit. Coating	122.3258						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Off-Road	0.2919	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079
Total	122.6176	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079

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	0.2987	0.1702	2.3292	6.7300e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906			670.7931	670.7931	0.0160		671.1929
Total	0.2987	0.1702	2.3292	6.7300e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906			670.7931	670.7931	0.0160		671.1929

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

3.5 Architectural Coating - 2021**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	122.3258						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Off-Road	0.2919	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079
Total	122.6176	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079

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	0.2987	0.1702	2.3292	6.7300e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906			670.7931	670.7931	0.0160		671.1929
Total	0.2987	0.1702	2.3292	6.7300e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906			670.7931	670.7931	0.0160		671.1929

4.0 Operational Detail - Mobile

First Industrial Warehouse at Wilson Avenue - 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	2.0035	37.5873	30.0254	0.2252	13.0001	0.1926	13.1926	3.5307	0.1827	3.7134	23,370.61 75	23,370.61 75	0.8503		23,391.87 36		
Unmitigated	2.0035	37.5873	30.0254	0.2252	13.0001	0.1926	13.1926	3.5307	0.1827	3.7134	23,370.61 75	23,370.61 75	0.8503		23,391.87 36		

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00				
Other Non-Asphalt Surfaces	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	527.62	527.62	527.62	5,870,338		5,870,338	
Total	527.62	527.62	527.62	5,870,338		5,870,338	

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
Unrefrigerated Warehouse-No	16.60	8.40	60.00	67.82	0.00	32.18	100	0	0

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Unrefrigerated Warehouse-No Rail	0.475000	0.032930	0.162270	0.000000	0.000000	0.053800	0.066700	0.201300	0.001210	0.001040	0.004010	0.000830	0.000910

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126	198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845	
NaturalGas Unmitigated	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126	198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845	

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
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
Unrefrigerated Warehouse-No Rail	1686.45	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845
Total		0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845

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
Unrefrigerated Warehouse-No Rail	1.68645	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845
Total		0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.9703	2.9000e-004	0.0321	0.0000			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0686	0.0686	1.8000e-004		0.0732
Unmitigated	6.9703	2.9000e-004	0.0321	0.0000			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0686	0.0686	1.8000e-004		0.0732

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Summer

6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.8043						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	6.1630						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	3.0000e-003	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0686	0.0686	1.8000e-004		0.0732
Total	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0686	0.0686	1.8000e-004		0.0732

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	0.8043						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	6.1630						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	3.0000e-003	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0686	0.0686	1.8000e-004		0.0732
Total	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0686	0.0686	1.8000e-004		0.0732

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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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

First Industrial Warehouse at Wilson Avenue
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	303.23	1000sqft	6.96	303,228.00	0
Other Asphalt Surfaces	1.67	Acre	1.67	72,745.20	0
Other Non-Asphalt Surfaces	8.64	Acre	8.64	376,358.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

Project Characteristics -

Land Use - Per RGA Site Plan; Onsite and offsite =17.27

Construction Phase - Per Applicant

Off-road Equipment - 8hr/day

Off-road Equipment - Per Applicant 8hr/day

Off-road Equipment - Per Applicant and Engineer

Trips and VMT - 2 daily water truck trips added to Grading and Paving

Vehicle Trips - Per TIA; 60 truck trip length assumed

Energy Use - Added 0.35 to Lighting Energy Intensity to account for parking lot lighting energy

Water And Wastewater - Per Design Conditions Report and Landscape Architect

Construction Off-road Equipment Mitigation - Per Rule 403

Water Mitigation - Per CALGreen Code

Waste Mitigation - Per City of Perris 2004 diversion rate

Fleet Mix - Per TIA

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	300.00	197.00
tblConstructionPhase	NumDays	30.00	33.00
tblConstructionPhase	NumDays	20.00	24.00
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.07	0.20
tblFleetMix	LDA	0.54	0.48
tblFleetMix	LDT1	0.04	0.03
tblFleetMix	LDT2	0.19	0.16
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1410e-003	0.05

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

tblFleetMix	MCY	4.5820e-003	4.0100e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0380e-003	9.1000e-004
tblFleetMix	MHD	0.02	0.07
tblFleetMix	OBUS	1.3830e-003	1.2100e-003
tblFleetMix	SBUS	9.4500e-004	8.3000e-004
tblFleetMix	UBUS	1.1830e-003	1.0400e-003
tblGrading	AcresOfGrading	82.50	75.00
tblLandUse	LandUseSquareFeet	303,230.00	303,228.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
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	32.18
tblVehicleTrips	CW_TTP	59.00	67.82
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	IndoorWaterUseRate	70,121,937.50	6,183,100.00

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

tblWater	OutdoorWaterUseRate	0.00	713,580.00
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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					
2020	4.5557	50.4645	32.6547	0.0911	8.6687	2.1764	10.8451	3.6335	2.0024	5.6358	0.0000	9,118.5510	9,118.5510	1.9519	0.0000	9,144.6062
2021	128.0824	43.2940	45.8104	0.1196	5.1485	1.7459	6.8944	1.3836	1.6531	3.0367	0.0000	11,882.3115	11,882.3115	1.4615	0.0000	11,918.8495
Maximum	128.0824	50.4645	45.8104	0.1196	8.6687	2.1764	10.8451	3.6335	2.0024	5.6358	0.0000	11,882.3115	11,882.3115	1.9519	0.0000	11,918.8495

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					
2020	4.5557	50.4645	32.6547	0.0911	4.3198	2.1764	5.7014	1.4555	2.0024	3.4578	0.0000	9,118.5510	9,118.5510	1.9519	0.0000	9,144.6062
2021	128.0824	43.2940	45.8104	0.1196	5.1485	1.7459	6.8944	1.3836	1.6531	3.0367	0.0000	11,882.3115	11,882.3115	1.4615	0.0000	11,918.8495
Maximum	128.0824	50.4645	45.8104	0.1196	5.1485	2.1764	6.8944	1.4555	2.0024	3.4578	0.0000	11,882.3115	11,882.3115	1.9519	0.0000	11,918.8495

First Industrial Warehouse at Wilson Avenue - 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	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	31.47	0.00	29.00	43.41	0.00	25.11	0.00	0.00	0.00	0.00	0.00	0.00

First Industrial Warehouse at Wilson Avenue - 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	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0686	0.0686	1.8000e-004			0.0732	
Energy	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126	198.4054	198.4054	3.8000e-003	3.6400e-003		199.5845	
Mobile	1.8774	38.4279	26.0059	0.2155	13.0001	0.1936	13.1937	3.5307	0.1837	3.7144	22,387.03 58	22,387.03 58	0.8779			22,408.98 30	
Total	8.8659	38.5935	26.1770	0.2164	13.0001	0.2063	13.2064	3.5307	0.1964	3.7271	22,585.50 98	22,585.50 98	0.8819	3.6400e-003		22,608.64 06	

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Area	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0686	0.0686	1.8000e-004			0.0732	
Energy	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126	198.4054	198.4054	3.8000e-003	3.6400e-003		199.5845	
Mobile	1.8774	38.4279	26.0059	0.2155	13.0001	0.1936	13.1937	3.5307	0.1837	3.7144	22,387.03 58	22,387.03 58	0.8779			22,408.98 30	
Total	8.8659	38.5935	26.1770	0.2164	13.0001	0.2063	13.2064	3.5307	0.1964	3.7271	22,585.50 98	22,585.50 98	0.8819	3.6400e-003		22,608.64 06	

First Industrial Warehouse at Wilson Avenue - 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	N20	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	6/1/2020	7/15/2020	5	33	
2	Building Construction	Building Construction	7/16/2020	4/16/2021	5	197	
3	Paving	Paving	3/16/2021	4/16/2021	5	24	
4	Architectural Coating	Architectural Coating	3/16/2021	4/16/2021	5	24	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 10.31

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 454,842; Non-Residential Outdoor: 151,614; Striped Parking Area: 26,946 (Architectural Coating – sqft)

OffRoad Equipment

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
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
Grading	8	20.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	316.00	123.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	63.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

3.2 Grading - 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					
Fugitive Dust					8.4323	0.0000	8.4323	3.5705	0.0000	3.5705			0.0000			0.0000	
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000		6,005.865 3	6,005.865 3	1.9424			6,054.425 7
Total	4.4501	50.1975	31.9583	0.0620	8.4323	2.1739	10.6062	3.5705	2.0000	5.5705		6,005.865 3	6,005.865 3	1.9424			6,054.425 7

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	0.0997	0.0623	0.6524	1.9800e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605			197.6472	197.6472	4.9100e-003		197.7699
Total	0.1056	0.2670	0.6964	2.4800e-003	0.2364	2.5300e-003	0.2389	0.0630	2.3800e-003	0.0654			250.6557	250.6557	9.5100e-003		250.8934

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

3.2 Grading - 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					
Fugitive Dust					3.2886	0.0000	3.2886	1.3925	0.0000	1.3925			0.0000			0.0000	
Off-Road	4.4501	50.1975	31.9583	0.0620		2.1739	2.1739		2.0000	2.0000	0.0000	6,005.865 3	6,005.865 3	1.9424		6,054.425 7	
Total	4.4501	50.1975	31.9583	0.0620	3.2886	2.1739	5.4625	1.3925	2.0000	3.3925	0.0000	6,005.865 3	6,005.865 3	1.9424		6,054.425 7	

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	0.0997	0.0623	0.6524	1.9800e-003	0.2236	1.3500e-003	0.2249	0.0593	1.2500e-003	0.0605			197.6472	197.6472	4.9100e-003	197.7699	
Total	0.1056	0.2670	0.6964	2.4800e-003	0.2364	2.5300e-003	0.2389	0.0630	2.3800e-003	0.0654			250.6557	250.6557	9.5100e-003	250.8934	

First Industrial Warehouse at Wilson Avenue - 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	2,735.699 9	2,735.699 9	0.6819		2,752.748 1		
Total	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218	2,735.699 9	2,735.699 9	0.6819		2,752.748 1		

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3616	12.5894	2.7109	0.0309	0.7876	0.0728	0.8605	0.2268	0.0697	0.2965	3,260.026 0	3,260.026 0	0.2827		3,267.093 9		
Worker	1.5748	0.9838	10.3071	0.0313	3.5321	0.0214	3.5535	0.9367	0.0197	0.9564	3,122.825 1	3,122.825 1	0.0776		3,124.764 2		
Total	1.9364	13.5732	13.0180	0.0623	4.3198	0.0942	4.4140	1.1635	0.0894	1.2529	6,382.851 1	6,382.851 1	0.3603		6,391.858 1		

First Industrial Warehouse at Wilson Avenue - 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	2,735.699 9	2,735.699 9	0.6819		2,752.748 1	
Total	2.2551	20.6494	17.9678	0.0288		1.1948	1.1948		1.1218	1.1218	0.0000	2,735.699 9	2,735.699 9	0.6819		2,752.748 1	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3616	12.5894	2.7109	0.0309	0.7876	0.0728	0.8605	0.2268	0.0697	0.2965	3,260.026 0	3,260.026 0	0.2827			3,267.093 9	
Worker	1.5748	0.9838	10.3071	0.0313	3.5321	0.0214	3.5535	0.9367	0.0197	0.9564	3,122.825 1	3,122.825 1	0.0776			3,124.764 2	
Total	1.9364	13.5732	13.0180	0.0623	4.3198	0.0942	4.4140	1.1635	0.0894	1.2529	6,382.851 1	6,382.851 1	0.3603			6,391.858 1	

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

3.3 Building Construction - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Off-Road	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.043 8	2,736.043 8	0.6751		2,752.921 2	
Total	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625		2,736.043 8	2,736.043 8	0.6751		2,752.921 2	

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	0.3050	11.2843	2.4023	0.0307	0.7876	0.0223	0.8099	0.2268	0.0213	0.2481		3,234.570 6	3,234.570 6	0.2679		3,241.268 5	
Worker	1.4702	0.8827	9.4304	0.0303	3.5321	0.0208	3.5530	0.9367	0.0192	0.9559		3,018.411 6	3,018.411 6	0.0698		3,020.155 4	
Total	1.7752	12.1670	11.8327	0.0610	4.3198	0.0431	4.3629	1.1635	0.0405	1.2040		6,252.982 2	6,252.982 2	0.3377		6,261.423 9	

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

3.3 Building Construction - 2021**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	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625	0.0000	2,736.043 8	2,736.043 8	0.6751		2,752.921 2	
Total	2.0228	18.7492	17.6706	0.0288		1.0251	1.0251		0.9625	0.9625	0.0000	2,736.043 8	2,736.043 8	0.6751		2,752.921 2	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.3050	11.2843	2.4023	0.0307	0.7876	0.0223	0.8099	0.2268	0.0213	0.2481	3,234.570 6	3,234.570 6	0.2679			3,241.268 5	
Worker	1.4702	0.8827	9.4304	0.0303	3.5321	0.0208	3.5530	0.9367	0.0192	0.9559	3,018.411 6	3,018.411 6	0.0698			3,020.155 4	
Total	1.7752	12.1670	11.8327	0.0610	4.3198	0.0431	4.3629	1.1635	0.0405	1.2040	6,252.982 2	6,252.982 2	0.3377			6,261.423 9	

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

3.4 Paving - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Off-Road	1.1399	9.9547	11.6660	0.0184		0.5470	0.5470		0.5199	0.5199	1,768.135 6	1,768.135 6	0.4025			1,778.198 9	
Paving	0.1823					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Total	1.3223	9.9547	11.6660	0.0184		0.5470	0.5470		0.5199	0.5199		1,768.135 6	1,768.135 6	0.4025			1,778.198 9

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.9600e-003	0.1835	0.0391	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.5000e-004	4.0300e-003	52.5946	52.5946	4.3600e-003			52.7036
Worker	0.0465	0.0279	0.2984	9.6000e-004	0.1118	6.6000e-004	0.1124	0.0296	6.1000e-004	0.0303	95.5194	95.5194	2.2100e-003			95.5745
Total	0.0515	0.2114	0.3375	1.4600e-003	0.1246	1.0200e-003	0.1256	0.0333	9.6000e-004	0.0343		148.1140	148.1140	6.5700e-003		148.2781

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

3.4 Paving - 2021**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	1.1399	9.9547	11.6660	0.0184		0.5470	0.5470		0.5199	0.5199	0.0000	1,768.135 6	1,768.135 6	0.4025		1,778.198 9	
Paving	0.1823					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000	
Total	1.3223	9.9547	11.6660	0.0184		0.5470	0.5470		0.5199	0.5199	0.0000	1,768.135 6	1,768.135 6	0.4025		1,778.198 9	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	4.9600e-003	0.1835	0.0391	5.0000e-004	0.0128	3.6000e-004	0.0132	3.6900e-003	3.5000e-004	4.0300e-003	52.5946	52.5946	4.3600e-003			52.7036	
Worker	0.0465	0.0279	0.2984	9.6000e-004	0.1118	6.6000e-004	0.1124	0.0296	6.1000e-004	0.0303	95.5194	95.5194	2.2100e-003			95.5745	
Total	0.0515	0.2114	0.3375	1.4600e-003	0.1246	1.0200e-003	0.1256	0.0333	9.6000e-004	0.0343		148.1140	148.1140	6.5700e-003		148.2781	

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

3.5 Architectural Coating - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day											lb/day					
Archit. Coating	122.3258						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Off-Road	0.2919	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079
Total	122.6176	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079

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	0.2931	0.1760	1.8801	6.0400e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906			601.7719	601.7719	0.0139		602.1196
Total	0.2931	0.1760	1.8801	6.0400e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906			601.7719	601.7719	0.0139		602.1196

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

3.5 Architectural Coating - 2021**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	122.3258						0.0000	0.0000		0.0000	0.0000			0.0000		0.0000	
Off-Road	0.2919	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079
Total	122.6176	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255	0.0000	375.2641	375.2641	0.0258		375.9079

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	0.2931	0.1760	1.8801	6.0400e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906			601.7719	601.7719	0.0139		602.1196
Total	0.2931	0.1760	1.8801	6.0400e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906			601.7719	601.7719	0.0139		602.1196

4.0 Operational Detail - Mobile

First Industrial Warehouse at Wilson Avenue - 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	1.8774	38.4279	26.0059	0.2155	13.0001	0.1936	13.1937	3.5307	0.1837	3.7144	22,387.03 58	22,387.03 58	0.8779		22,408.98 30	
Unmitigated	1.8774	38.4279	26.0059	0.2155	13.0001	0.1936	13.1937	3.5307	0.1837	3.7144	22,387.03 58	22,387.03 58	0.8779		22,408.98 30	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00				
Other Non-Asphalt Surfaces	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	527.62	527.62	527.62	5,870,338		5,870,338	
Total	527.62	527.62	527.62	5,870,338		5,870,338	

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
Unrefrigerated Warehouse-No	16.60	8.40	60.00	67.82	0.00	32.18	100	0	0

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Unrefrigerated Warehouse-No Rail	0.475000	0.032930	0.162270	0.000000	0.000000	0.053800	0.066700	0.201300	0.001210	0.001040	0.004010	0.000830	0.000910

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126	198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845	
NaturalGas Unmitigated	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126	198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845	

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

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
Unrefrigerated Warehouse-No Rail	1686.45	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845
Total		0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845

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
Unrefrigerated Warehouse-No Rail	1.68645	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845
Total		0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126		198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.9703	2.9000e-004	0.0321	0.0000			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0686	0.0686	1.8000e-004		0.0732
Unmitigated	6.9703	2.9000e-004	0.0321	0.0000			1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0686	0.0686	1.8000e-004		0.0732

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Winter

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	0.8043						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	6.1630						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	3.0000e-003	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0686	0.0686	1.8000e-004		0.0732
Total	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0686	0.0686	1.8000e-004		0.0732

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	0.8043						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Consumer Products	6.1630						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000
Landscaping	3.0000e-003	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0686	0.0686	1.8000e-004		0.0732
Total	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004		0.0686	0.0686	1.8000e-004		0.0732

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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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Annual

First Industrial Warehouse at Wilson Avenue
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	303.23	1000sqft	6.96	303,228.00	0
Other Asphalt Surfaces	1.67	Acre	1.67	72,745.20	0
Other Non-Asphalt Surfaces	8.64	Acre	8.64	376,358.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Annual

Project Characteristics -

Land Use - Per RGA Site Plan; Onsite and offsite =17.27

Construction Phase - Per Applicant

Off-road Equipment - 8hr/day

Off-road Equipment - Per Applicant 8hr/day

Off-road Equipment - Per Applicant and Engineer

Trips and VMT - 2 daily water truck trips added to Grading and Paving

Vehicle Trips - Per TIA; 60 truck trip length assumed

Energy Use - Added 0.35 to Lighting Energy Intensity to account for parking lot lighting energy

Water And Wastewater - Per Design Conditions Report and Landscape Architect

Construction Off-road Equipment Mitigation - Per Rule 403

Water Mitigation - Per CALGreen Code

Waste Mitigation - Per City of Perris 2004 diversion rate

Fleet Mix - Per TIA

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	20.00	24.00
tblConstructionPhase	NumDays	300.00	197.00
tblConstructionPhase	NumDays	30.00	33.00
tblConstructionPhase	NumDays	20.00	24.00
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.07	0.20
tblFleetMix	LDA	0.54	0.48
tblFleetMix	LDT1	0.04	0.03
tblFleetMix	LDT2	0.19	0.16
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1410e-003	0.05

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tblFleetMix	MCY	4.5820e-003	4.0100e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0380e-003	9.1000e-004
tblFleetMix	MHD	0.02	0.07
tblFleetMix	OBUS	1.3830e-003	1.2100e-003
tblFleetMix	SBUS	9.4500e-004	8.3000e-004
tblFleetMix	UBUS	1.1830e-003	1.0400e-003
tblGrading	AcresOfGrading	82.50	75.00
tblLandUse	LandUseSquareFeet	303,230.00	303,228.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
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	32.18
tblVehicleTrips	CW_TTP	59.00	67.82
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	IndoorWaterUseRate	70,121,937.50	6,183,100.00

First Industrial Warehouse at Wilson Avenue - Riverside-South Coast County, Annual

tblWater	OutdoorWaterUseRate	0.00	713,580.00
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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					
2020	0.3205	2.9176	2.4352	6.6700e-003	0.4001	0.1139	0.5140	0.1293	0.1063	0.2356	0.0000	602.6782	602.6782	0.0857	0.0000	604.8200
2021	1.6306	1.3316	1.3304	3.8300e-003	0.1713	0.0487	0.2200	0.0462	0.0459	0.0921	0.0000	346.7908	346.7908	0.0394	0.0000	347.7744
Maximum	1.6306	2.9176	2.4352	6.6700e-003	0.4001	0.1139	0.5140	0.1293	0.1063	0.2356	0.0000	602.6782	602.6782	0.0857	0.0000	604.8200

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					
2020	0.3205	2.9176	2.4352	6.6700e-003	0.3152	0.1139	0.4291	0.0934	0.1063	0.1997	0.0000	602.6779	602.6779	0.0857	0.0000	604.8197
2021	1.6306	1.3316	1.3304	3.8300e-003	0.1713	0.0487	0.2200	0.0462	0.0459	0.0921	0.0000	346.7906	346.7906	0.0394	0.0000	347.7743
Maximum	1.6306	2.9176	2.4352	6.6700e-003	0.3152	0.1139	0.4291	0.0934	0.1063	0.1997	0.0000	602.6779	602.6779	0.0857	0.0000	604.8197

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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	14.85	0.00	11.56	20.48	0.00	10.97	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	6-1-2020	8-31-2020	1.5299	1.5299
2	9-1-2020	11-30-2020	1.2490	1.2490
3	12-1-2020	2-28-2021	1.1568	1.1568
4	3-1-2021	5-31-2021	2.1450	2.1450
	Highest		2.1450	2.1450

2.2 Overall OperationalUnmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr															MT/yr	
Area	1.2719	4.0000e-005	4.0200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7800e-003	7.7800e-003	2.0000e-005	0.0000	8.3000e-003	
Energy	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	302.8300	302.8300	0.0118	2.9100e-003	303.9911	
Mobile	0.3411	7.0791	4.8631	0.0397	2.3288	0.0351	2.3639	0.6335	0.0333	0.6667	0.0000	3,740.5842	3,740.5842	0.1411	0.0000	3,744.1117	
Waste						0.0000	0.0000		0.0000	0.0000	57.8605	0.0000	57.8605	3.4195	0.0000	143.3471	
Water						0.0000	0.0000		0.0000	0.0000	1.9616	28.1783	30.1399	0.2026	5.0000e-003	36.6953	
Total	1.6164	7.1093	4.8925	0.0399	2.3288	0.0374	2.3662	0.6335	0.0356	0.6690	59.8222	4,071.6002	4,131.4224	3.7750	7.9100e-003	4,228.1534	

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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	1.2719	4.0000e-005	4.0200e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7800e-003	7.7800e-003	2.0000e-005	0.0000	8.3000e-003	
Energy	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	302.8300	302.8300	0.0118	2.9100e-003	303.9911	
Mobile	0.3411	7.0791	4.8631	0.0397	2.3288	0.0351	2.3639	0.6335	0.0333	0.6667	0.0000	3,740.5842	3,740.5842	0.1411	0.0000	3,744.1117	
Waste						0.0000	0.0000		0.0000	0.0000	28.3517	0.0000	28.3517	1.6755	0.0000	70.2401	
Water						0.0000	0.0000		0.0000	0.0000	1.5693	23.0478	24.6171	0.1621	4.0000e-003	29.8632	
Total	1.6164	7.1093	4.8925	0.0399	2.3288	0.0374	2.3662	0.6335	0.0356	0.6690	29.9210	4,066.4698	4,096.3907	1.9906	6.9100e-003	4,148.2144	

	ROG	NOx	CO	SO2	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	49.98	0.13	0.85	47.27	12.64	1.89

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	6/1/2020	7/15/2020	5	33	
2	Building Construction	Building Construction	7/16/2020	4/16/2021	5	197	
3	Paving	Paving	3/16/2021	4/16/2021	5	24	
4	Architectural Coating	Architectural Coating	3/16/2021	4/16/2021	5	24	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 10.31

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 454,842; Non-Residential Outdoor: 151,614; Striped Parking Area: 26,946 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Crushing/Proc. Equipment	1	8.00	85	0.78
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	8.00	80	0.38
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
Grading	8	20.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	316.00	123.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	4	10.00	2.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	63.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

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3.2 Grading - 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					
Fugitive Dust					0.1391	0.0000	0.1391	0.0589	0.0000	0.0589	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0734	0.8283	0.5273	1.0200e-003		0.0359	0.0359		0.0330	0.0330	0.0000	89.8991	89.8991	0.0291	0.0000	90.6260	
Total	0.0734	0.8283	0.5273	1.0200e-003	0.1391	0.0359	0.1750	0.0589	0.0330	0.0919	0.0000	89.8991	89.8991	0.0291	0.0000	90.6260	

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	9.0000e-005	3.4300e-003	6.7000e-004	1.0000e-005	2.1000e-004	2.0000e-005	2.3000e-004	6.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.8114	0.8114	6.0000e-005	0.0000	0.8131	
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	
Total	1.6100e-003	4.4900e-003	0.0120	4.0000e-005	3.8400e-003	4.0000e-005	3.8800e-003	1.0200e-003	4.0000e-005	1.0600e-003	0.0000	3.8461	3.8461	1.4000e-004	0.0000	3.8496	

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3.2 Grading - 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					
Fugitive Dust					0.0543	0.0000	0.0543	0.0230	0.0000	0.0230	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Off-Road	0.0734	0.8283	0.5273	1.0200e-003		0.0359	0.0359		0.0330	0.0330	0.0000	89.8990	89.8990	0.0291	0.0000	90.6259	
Total	0.0734	0.8283	0.5273	1.0200e-003	0.0543	0.0359	0.0901	0.0230	0.0330	0.0560	0.0000	89.8990	89.8990	0.0291	0.0000	90.6259	

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	9.0000e-005	3.4300e-003	6.7000e-004	1.0000e-005	2.1000e-004	2.0000e-005	2.3000e-004	6.0000e-005	2.0000e-005	8.0000e-005	0.0000	0.8114	0.8114	6.0000e-005	0.0000	0.8131	
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	
Total	1.6100e-003	4.4900e-003	0.0120	4.0000e-005	3.8400e-003	4.0000e-005	3.8800e-003	1.0200e-003	4.0000e-005	1.0600e-003	0.0000	3.8461	3.8461	1.4000e-004	0.0000	3.8496	

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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	0.1364	1.2493	1.0871	1.7400e-003		0.0723	0.0723		0.0679	0.0679	0.0000	150.1480	150.1480	0.0374	0.0000	151.0837
Total	0.1364	1.2493	1.0871	1.7400e-003		0.0723	0.0723		0.0679	0.0679	0.0000	150.1480	150.1480	0.0374	0.0000	151.0837

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	0.0211	0.7740	0.1514	1.9100e-003	0.0470	4.3800e-003	0.0514	0.0136	4.1900e-003	0.0178	0.0000	182.9773	182.9773	0.0146	0.0000	183.3430
Worker	0.0879	0.0616	0.6574	1.9400e-003	0.2101	1.2900e-003	0.2114	0.0558	1.1900e-003	0.0570	0.0000	175.8077	175.8077	4.4000e-003	0.0000	175.9177
Total	0.1090	0.8356	0.8088	3.8500e-003	0.2571	5.6700e-003	0.2628	0.0694	5.3800e-003	0.0747	0.0000	358.7850	358.7850	0.0190	0.0000	359.2607

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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	0.1364	1.2493	1.0871	1.7400e-003		0.0723	0.0723		0.0679	0.0679	0.0000	150.1478	150.1478	0.0374	0.0000	151.0835	
Total	0.1364	1.2493	1.0871	1.7400e-003		0.0723	0.0723		0.0679	0.0679	0.0000	150.1478	150.1478	0.0374	0.0000	151.0835	

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	0.0211	0.7740	0.1514	1.9100e-003	0.0470	4.3800e-003	0.0514	0.0136	4.1900e-003	0.0178	0.0000	182.9773	182.9773	0.0146	0.0000	183.3430	
Worker	0.0879	0.0616	0.6574	1.9400e-003	0.2101	1.2900e-003	0.2114	0.0558	1.1900e-003	0.0570	0.0000	175.8077	175.8077	4.4000e-003	0.0000	175.9177	
Total	0.1090	0.8356	0.8088	3.8500e-003	0.2571	5.6700e-003	0.2628	0.0694	5.3800e-003	0.0747	0.0000	358.7850	358.7850	0.0190	0.0000	359.2607	

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3.3 Building Construction - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Off-Road	0.0769	0.7125	0.6715	1.0900e-003		0.0390	0.0390		0.0366	0.0366	0.0000	94.3197	94.3197	0.0233	0.0000	94.9015	
Total	0.0769	0.7125	0.6715	1.0900e-003		0.0390	0.0390		0.0366	0.0366	0.0000	94.3197	94.3197	0.0233	0.0000	94.9015	

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	0.0112	0.4358	0.0839	1.1900e-003	0.0295	8.3000e-004	0.0304	8.5200e-003	8.0000e-004	9.3100e-003	0.0000	114.0331	114.0331	8.7000e-003	0.0000	114.2505	
Worker	0.0515	0.0347	0.3780	1.1800e-003	0.1320	7.9000e-004	0.1328	0.0351	7.3000e-004	0.0358	0.0000	106.7327	106.7327	2.4900e-003	0.0000	106.7948	
Total	0.0626	0.4705	0.4619	2.3700e-003	0.1615	1.6200e-003	0.1631	0.0436	1.5300e-003	0.0451	0.0000	220.7657	220.7657	0.0112	0.0000	221.0454	

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3.3 Building Construction - 2021**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	0.0769	0.7125	0.6715	1.0900e-003		0.0390	0.0390		0.0366	0.0366	0.0000	94.3196	94.3196	0.0233	0.0000	94.9014	
Total	0.0769	0.7125	0.6715	1.0900e-003		0.0390	0.0390		0.0366	0.0366	0.0000	94.3196	94.3196	0.0233	0.0000	94.9014	

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	0.0112	0.4358	0.0839	1.1900e-003	0.0295	8.3000e-004	0.0304	8.5200e-003	8.0000e-004	9.3100e-003	0.0000	114.0331	114.0331	8.7000e-003	0.0000	114.2505	
Worker	0.0515	0.0347	0.3780	1.1800e-003	0.1320	7.9000e-004	0.1328	0.0351	7.3000e-004	0.0358	0.0000	106.7327	106.7327	2.4900e-003	0.0000	106.7948	
Total	0.0626	0.4705	0.4619	2.3700e-003	0.1615	1.6200e-003	0.1631	0.0436	1.5300e-003	0.0451	0.0000	220.7657	220.7657	0.0112	0.0000	221.0454	

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3.4 Paving - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr										MT/yr						
Off-Road	0.0137	0.1195	0.1400	2.2000e-004			6.5600e-003	6.5600e-003		6.2400e-003	6.2400e-003	0.0000	19.2483	19.2483	4.3800e-003	0.0000	19.3579
Paving	2.1900e-003						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0159	0.1195	0.1400	2.2000e-004			6.5600e-003	6.5600e-003		6.2400e-003	6.2400e-003	0.0000	19.2483	19.2483	4.3800e-003	0.0000	19.3579

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	2.2400e-003	4.3000e-004	1.0000e-005	1.5000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.5855	0.5855	4.0000e-005	0.0000	0.5867
Worker	5.1000e-004	3.5000e-004	3.7800e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.0666	1.0666	2.0000e-005	0.0000	1.0672
Total	5.7000e-004	2.5900e-003	4.2100e-003	2.0000e-005	1.4700e-003	1.0000e-005	1.4900e-003	3.9000e-004	1.0000e-005	4.1000e-004	0.0000	1.6522	1.6522	6.0000e-005	0.0000	1.6539

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3.4 Paving - 2021**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	0.0137	0.1195	0.1400	2.2000e-004			6.5600e-003	6.5600e-003		6.2400e-003	6.2400e-003	0.0000	19.2483	19.2483	4.3800e-003	0.0000	19.3578
Paving	2.1900e-003						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0159	0.1195	0.1400	2.2000e-004			6.5600e-003	6.5600e-003		6.2400e-003	6.2400e-003	0.0000	19.2483	19.2483	4.3800e-003	0.0000	19.3578

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	2.2400e-003	4.3000e-004	1.0000e-005	1.5000e-004	0.0000	1.6000e-004	4.0000e-005	0.0000	5.0000e-005	0.0000	0.5855	0.5855	4.0000e-005	0.0000	0.5867
Worker	5.1000e-004	3.5000e-004	3.7800e-003	1.0000e-005	1.3200e-003	1.0000e-005	1.3300e-003	3.5000e-004	1.0000e-005	3.6000e-004	0.0000	1.0666	1.0666	2.0000e-005	0.0000	1.0672
Total	5.7000e-004	2.5900e-003	4.2100e-003	2.0000e-005	1.4700e-003	1.0000e-005	1.4900e-003	3.9000e-004	1.0000e-005	4.1000e-004	0.0000	1.6522	1.6522	6.0000e-005	0.0000	1.6539

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3.5 Architectural Coating - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	1.4679						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.5000e-003	0.0244	0.0291	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.0852	4.0852	2.8000e-004	0.0000	4.0922	
Total	1.4714	0.0244	0.0291	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.0852	4.0852	2.8000e-004	0.0000	4.0922	

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.2400e-003	2.1800e-003	0.0238	7.0000e-005	8.3100e-003	5.0000e-005	8.3600e-003	2.2100e-003	5.0000e-005	2.2500e-003	0.0000	6.7197	6.7197	1.6000e-004	0.0000	6.7236	
Total	3.2400e-003	2.1800e-003	0.0238	7.0000e-005	8.3100e-003	5.0000e-005	8.3600e-003	2.2100e-003	5.0000e-005	2.2500e-003	0.0000	6.7197	6.7197	1.6000e-004	0.0000	6.7236	

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3.5 Architectural Coating - 2021**Mitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Archit. Coating	1.4679						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.5000e-003	0.0244	0.0291	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.0852	4.0852	2.8000e-004	0.0000	4.0922	
Total	1.4714	0.0244	0.0291	5.0000e-005		1.5100e-003	1.5100e-003		1.5100e-003	1.5100e-003	0.0000	4.0852	4.0852	2.8000e-004	0.0000	4.0922	

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	
Worker	3.2400e-003	2.1800e-003	0.0238	7.0000e-005	8.3100e-003	5.0000e-005	8.3600e-003	2.2100e-003	5.0000e-005	2.2500e-003	0.0000	6.7197	6.7197	1.6000e-004	0.0000	6.7236	
Total	3.2400e-003	2.1800e-003	0.0238	7.0000e-005	8.3100e-003	5.0000e-005	8.3600e-003	2.2100e-003	5.0000e-005	2.2500e-003	0.0000	6.7197	6.7197	1.6000e-004	0.0000	6.7236	

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	0.3411	7.0791	4.8631	0.0397	2.3288	0.0351	2.3639	0.6335	0.0333	0.6667	0.0000	3,740.584	3,740.584	0.1411	0.0000	3,744.111
Unmitigated	0.3411	7.0791	4.8631	0.0397	2.3288	0.0351	2.3639	0.6335	0.0333	0.6667	0.0000	3,740.584	3,740.584	0.1411	0.0000	3,744.111

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00				
Other Non-Asphalt Surfaces	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	527.62	527.62	527.62	5,870,338		5,870,338	
Total	527.62	527.62	527.62	5,870,338		5,870,338	

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
Unrefrigerated Warehouse-No	16.60	8.40	60.00	67.82	0.00	32.18	100	0	0

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4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Unrefrigerated Warehouse-No Rail	0.475000	0.032930	0.162270	0.000000	0.000000	0.053800	0.066700	0.201300	0.001210	0.001040	0.004010	0.000830	0.000910

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	269.9818	269.9818	0.0112	2.3100e-003	270.9477
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	269.9818	269.9818	0.0112	2.3100e-003	270.9477
NaturalGas Mitigated	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	32.8482	32.8482	6.3000e-004	6.0000e-004	33.0434
NaturalGas Unmitigated	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	32.8482	32.8482	6.3000e-004	6.0000e-004	33.0434

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5.2 Energy by Land Use - NaturalGas**Unmitigated**

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
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
Unrefrigerated Warehouse-No Rail	615553	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	32.8482	32.8482	6.3000e-004	6.0000e-004	33.0434
Total		3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	32.8482	32.8482	6.3000e-004	6.0000e-004	33.0434

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
Unrefrigerated Warehouse-No Rail	615553	3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	32.8482	32.8482	6.3000e-004	6.0000e-004	33.0434
Total		3.3200e-003	0.0302	0.0254	1.8000e-004		2.2900e-003	2.2900e-003		2.2900e-003	2.2900e-003	0.0000	32.8482	32.8482	6.3000e-004	6.0000e-004	33.0434

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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	131725	41.9706	1.7300e-003	3.6000e-004	42.1207
Unrefrigerated Warehouse-No Rail	715618	228.0113	9.4100e-003	1.9500e-003	228.8270
Total		269.9818	0.0111	2.3100e-003	270.9477

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	131725	41.9706	1.7300e-003	3.6000e-004	42.1207
Unrefrigerated Warehouse-No Rail	715618	228.0113	9.4100e-003	1.9500e-003	228.8270
Total		269.9818	0.0111	2.3100e-003	270.9477

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6.0 Area Detail**6.1 Mitigation Measures Area**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category	tons/yr											MT/yr					
Mitigated	1.2719	4.0000e-005	4.0200e-003	0.0000			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7800e-003	7.7800e-003	2.0000e-005	0.0000	8.3000e-003
Unmitigated	1.2719	4.0000e-005	4.0200e-003	0.0000			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7800e-003	7.7800e-003	2.0000e-005	0.0000	8.3000e-003

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6.2 Area by SubCategory**Unmitigated**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.1468						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1248						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.0200e-003	0.0000			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7800e-003	7.7800e-003	2.0000e-005	0.0000	8.3000e-003
Total	1.2719	4.0000e-005	4.0200e-003	0.0000			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7800e-003	7.7800e-003	2.0000e-005	0.0000	8.3000e-003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
SubCategory	tons/yr											MT/yr					
Architectural Coating	0.1468						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.1248						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	3.8000e-004	4.0000e-005	4.0200e-003	0.0000			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7800e-003	7.7800e-003	2.0000e-005	0.0000	8.3000e-003
Total	1.2719	4.0000e-005	4.0200e-003	0.0000			1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	7.7800e-003	7.7800e-003	2.0000e-005	0.0000	8.3000e-003

7.0 Water Detail

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7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	24.6171	0.1621	4.0000e-003	29.8632
Unmitigated	30.1399	0.2026	5.0000e-003	36.6953

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7.2 Water by Land Use**Unmitigated**

	Indoor/Out door 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
Unrefrigerated Warehouse-No Rail	6.1831 / 0.71358	30.1399	0.2026	5.0000e- 003	36.6953
Total		30.1399	0.2026	5.0000e- 003	36.6953

Mitigated

	Indoor/Out door 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
Unrefrigerated Warehouse-No Rail	4.94648 / 0.71358	24.6171	0.1621	4.0000e- 003	29.8632
Total		24.6171	0.1621	4.0000e- 003	29.8632

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8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
MT/yr				
Mitigated	28.3517	1.6755	0.0000	70.2401
Unmitigated	57.8605	3.4195	0.0000	143.3471

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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
Unrefrigerated Warehouse-No Rail	285.04	57.8605	3.4195	0.0000	143.3471
Total		57.8605	3.4195	0.0000	143.3471

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
Unrefrigerated Warehouse-No Rail	139.67	28.3517	1.6755	0.0000	70.2401
Total		28.3517	1.6755	0.0000	70.2401

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9.0 Operational Offroad

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

Fire Pumps and Emergency Generators

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

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

Equipment Type	Number
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11.0 Vegetation

LST
CALEEMOD OUTPUT FILES

First Industrial Warehouse at Wilson Avenue (Operation LST) - Riverside-South Coast County, Summer

First Industrial Warehouse at Wilson Avenue (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	303.23	1000sqft	6.96	303,228.00	0
Other Asphalt Surfaces	1.67	Acre	1.67	72,745.20	0
Other Non-Asphalt Surfaces	8.64	Acre	8.64	376,358.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per RGA Site Plan; Onsite and offsite =17.27

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT -

Vehicle Trips - Per TIA; onsite trip length 0.31 mile

Energy Use -

Water And Wastewater -

Construction Off-road Equipment Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

Off-road Equipment -

First Industrial Warehouse at Wilson Avenue (Operation LST) - Riverside-South Coast County, Summer

First Industrial Warehouse at Wilson Avenue (Operation LST)

Riverside-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	0.00
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.07	0.20
tblFleetMix	LDA	0.54	0.48
tblFleetMix	LDT1	0.04	0.03
tblFleetMix	LDT2	0.19	0.16
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1410e-003	0.05
tblFleetMix	MCY	4.5820e-003	4.0100e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0380e-003	9.1000e-004
tblFleetMix	MHD	0.02	0.07
tblFleetMix	OBUS	1.3830e-003	1.2100e-003
tblFleetMix	SBUS	9.4500e-004	8.3000e-004
tblFleetMix	UBUS	1.1830e-003	1.0400e-003
tblGrading	AcresOfGrading	0.00	75.00
tblLandUse	LandUseSquareFeet	303,230.00	303,228.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	20.00
tblVehicleTrips	CNW_TL	6.90	0.31
tblVehicleTrips	CNW_TTP	41.00	32.18
tblVehicleTrips	CW_TL	16.60	0.31
tblVehicleTrips	CW_TTP	59.00	67.82
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	IndoorWaterUseRate	70,121,937.50	6,183,100.00
tblWater	OutdoorWaterUseRate	0.00	713,580.00

First Industrial Warehouse at Wilson Avenue (Operation LST) - Riverside-South Coast County, Summer

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	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0686	0.0686	1.8000e-004			0.0732	
Energy	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126	198.4054	198.4054	3.8000e-003	3.6400e-003		199.5845	
Mobile	0.6935	12.4888	2.7306	0.0181	0.1319	7.0000e-003	0.1388	0.0358	6.6100e-003	0.0424	1,900.8646	1,900.8646	0.3565			1,909.7761	
Total	7.6820	12.6544	2.9016	0.0191	0.1319	0.0197	0.1515	0.0358	0.0193	0.0551	2,099.3387	2,099.3387	0.3604	3.6400e-003		2,109.4337	

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004	1.1000e-004	1.1000e-004		0.0686	0.0686	1.8000e-004		0.0732	
Energy	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126	0.0126	0.0126		198.4054	198.4054	3.8000e-003	3.6400e-003	199.5845	
Mobile	0.6935	12.4888	2.7306	0.0181	0.1319	7.0000e-003	0.1388	0.0358	6.6100e-003	0.0424	1,900.864	1,900.864	0.3565		1,909.7761	
Total	7.6820	12.6544	2.9016	0.0191	0.1319	0.0197	0.1515	0.0358	0.0193	0.0551		2,099.338	2,099.338	0.3604	3.6400e-003	2,109.4337

First Industrial Warehouse at Wilson Avenue (Operation LST) - Riverside-South Coast County, Summer

First Industrial Warehouse at Wilson Avenue (Operation LST)
Riverside-South Coast County, Summer

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	0.6935	12.4888	2.7306	0.0181	0.1319	7.0000e-003	0.1388	0.0358	6.6100e-003	0.0424	1,900.864	1,900.864	0.3565			1,909.776
Unmitigated	0.6935	12.4888	2.7306	0.0181	0.1319	7.0000e-003	0.1388	0.0358	6.6100e-003	0.0424	1,900.864	1,900.864	0.3565			1,909.776

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				
Unrefrigerated Warehouse-No Rail	527.62	527.62	527.62	59,537		59,537	
Total	527.62	527.62	527.62	59,537		59,537	

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
Unrefrigerated Warehouse-No Rail	0.31	8.40	0.31	67.82	0.00	32.18	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	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Unrefrigerated Warehouse-No Rail	0.475000	0.032930	0.162270	0.000000	0.000000	0.053800	0.066700	0.201300	0.001210	0.001040	0.004010	0.000830	0.000910

First Industrial Warehouse at Wilson Avenue (Operation LST) - Riverside-South Coast County, Winter

First Industrial Warehouse at Wilson Avenue (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	303.23	1000sqft	6.96	303,228.00	0
Other Asphalt Surfaces	1.67	Acre	1.67	72,745.20	0
Other Non-Asphalt Surfaces	8.64	Acre	8.64	376,358.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per RGA Site Plan; Onsite and offsite =17.27

Construction Phase - Construction not modeled

Off-road Equipment - Construction not modeled

Trips and VMT -

Vehicle Trips - Per TIA; onsite trip length 0.31 mile

Energy Use -

Water And Wastewater -

Construction Off-road Equipment Mitigation -

Water Mitigation -

Waste Mitigation -

Fleet Mix -

Off-road Equipment -

First Industrial Warehouse at Wilson Avenue (Operation LST) - Riverside-South Coast County, Winter

First Industrial Warehouse at Wilson Avenue (Operation LST)
Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	30.00	0.00
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.07	0.20
tblFleetMix	LDA	0.54	0.48
tblFleetMix	LDT1	0.04	0.03
tblFleetMix	LDT2	0.19	0.16
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1410e-003	0.05
tblFleetMix	MCY	4.5820e-003	4.0100e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0380e-003	9.1000e-004
tblFleetMix	MHD	0.02	0.07
tblFleetMix	OBUS	1.3830e-003	1.2100e-003
tblFleetMix	SBUS	9.4500e-004	8.3000e-004
tblFleetMix	UBUS	1.1830e-003	1.0400e-003
tblGrading	AcresOfGrading	0.00	75.00
tblLandUse	LandUseSquareFeet	303,230.00	303,228.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblTripsAndVMT	VendorTripNumber	0.00	2.00
tblTripsAndVMT	WorkerTripNumber	0.00	20.00
tblVehicleTrips	CNW_TL	6.90	0.31
tblVehicleTrips	CNW_TTP	41.00	32.18
tblVehicleTrips	CW_TL	16.60	0.31
tblVehicleTrips	CW_TTP	59.00	67.82
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	IndoorWaterUseRate	70,121,937.50	6,183,100.00
tblWater	OutdoorWaterUseRate	0.00	713,580.00

First Industrial Warehouse at Wilson Avenue (Operation LST) - Riverside-South Coast County, Winter

First Industrial Warehouse at Wilson Avenue (Operation LST)

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	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0686	0.0686	1.8000e-004			0.0732	
Energy	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126	198.4054	198.4054	3.8000e-003	3.6400e-003		199.5845	
Mobile	0.6152	12.0363	3.4043	0.0160	0.1319	8.0600e-003	0.1399	0.0358	7.6200e-003	0.0434	1,677.974	1,677.974	0.4040			1,688.0741	
Total	7.6037	12.2020	3.5754	0.0170	0.1319	0.0207	0.1526	0.0358	0.0203	0.0561	1,876.4482	1,876.4482	0.4080	3.6400e-003		1,887.7317	

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day										lb/day						
Area	6.9703	2.9000e-004	0.0321	0.0000		1.1000e-004	1.1000e-004		1.1000e-004	1.1000e-004	0.0686	0.0686	1.8000e-004			0.0732	
Energy	0.0182	0.1653	0.1389	9.9000e-004		0.0126	0.0126		0.0126	0.0126	198.4054	198.4054	3.8000e-003	3.6400e-003		199.5845	
Mobile	0.6152	12.0363	3.4043	0.0160	0.1319	8.0600e-003	0.1399	0.0358	7.6200e-003	0.0434	1,677.974	1,677.974	0.4040			1,688.0741	
Total	7.6037	12.2020	3.5754	0.0170	0.1319	0.0207	0.1526	0.0358	0.0203	0.0561	1,876.4482	1,876.4482	0.4080	3.6400e-003		1,887.7317	

First Industrial Warehouse at Wilson Avenue (Operation LST) - Riverside-South Coast County, Winter

First Industrial Warehouse at Wilson Avenue (Operation LST)
Riverside-South Coast County, Winter

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	0.6152	12.0363	3.4043	0.0160	0.1319	8.0600e-003	0.1399	0.0358	7.6200e-003	0.0434	1,677.974	1,677.974	0.4040			1,688.0741	
Unmitigated	0.6152	12.0363	3.4043	0.0160	0.1319	8.0600e-003	0.1399	0.0358	7.6200e-003	0.0434	1,677.974	1,677.974	0.4040			1,688.0741	

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated		Mitigated	
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT	Annual VMT	Annual VMT
Other Asphalt Surfaces	0.00	0.00	0.00				
Other Non-Asphalt Surfaces	0.00	0.00	0.00				
Unrefrigerated Warehouse-No Rail	527.62	527.62	527.62	59,537	59,537	59,537	59,537
Total	527.62	527.62	527.62	59,537	59,537	59,537	59,537

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
Unrefrigerated Warehouse-No Rail	0.31	8.40	0.31	67.82	0.00	32.18	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	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Other Non-Asphalt Surfaces	0.542116	0.037578	0.185203	0.118503	0.016241	0.005141	0.017392	0.068695	0.001383	0.001183	0.004582	0.000945	0.001038
Unrefrigerated Warehouse-No Rail	0.475000	0.032930	0.162270	0.000000	0.000000	0.053800	0.066700	0.201300	0.001210	0.001040	0.004010	0.000830	0.000910

IDLING SPREADSHEET

Particulate Matter Idling Emissions Calculations for Operation LST

Pollutant	Emission Factor*	Idling Time	Daily Truck Trips**	Idling Emissions (g/day)	Idling Emissions (lb/day)
	(g/hr-veh)	(min)			
LHDT2					
PM-10	0.000231045	15	28	0.001617	3.56559E-06
PM-2.5	0.00022105	15	28	0.001547	3.41134E-06
MHDT					
PM-10	0.000507446	15	35	0.00444	9.78891E-06
PM-2.5	0.000485494	15	35	0.004248	9.36545E-06
HHDT					
PM-10	0.0037052	15	106	0.098188	0.000216468
PM-2.5	0.003544915	15	106	0.09394	0.000207104
PM-10 Sub-Total					0.000229823
PM-2.5 Sub-Total					0.000219881
CalEEMod Total					
PM-10 Total					0.1399
PM-2.5 Total					0.0434
Operation LST Total					
PM-10 Total					0.14
PM-2.5 Total					0.04

* Annual idling emission factors from EMFAC2017 for 2021 in Riverside County

** Project-specific Traffic Impact Analysis, November 2019

VOC
CALEEMOD OUTPUT FILES

First Industrial Warehouse at Wilson Avenue (VOC Mitigation) - Riverside-South Coast County, Summer

First Industrial Warehouse at Wilson Avenue (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	303.23	1000sqft	6.96	303,228.00	0
Other Asphalt Surfaces	1.67	Acre	1.67	72,745.20	0
Other Non-Asphalt Surfaces	8.64	Acre	8.64	376,358.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per RGA Site Plan; Onsite and offsite =17.27

Construction Phase - Per Applicant

Off-road Equipment - 8hr/day

Off-road Equipment - Per Applicant 8hr/day

Trips and VMT - _

Vehicle Trips - _

Energy Use - _

Water And Wastewater - _

Construction Off-road Equipment Mitigation - _

Water Mitigation - _

Waste Mitigation - _

Fleet Mix - _

Architectural Coating - VOC mitigation 10g/L

First Industrial Warehouse at Wilson Avenue (VOC Mitigation) - Riverside-South Coast County, Summer

First Industrial Warehouse at Wilson Avenue (VOC Mitigation)

Riverside-South Coast County, Summer

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstructionPhase	NumDays	20.00	24.00
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.07	0.20
tblFleetMix	LDA	0.54	0.48
tblFleetMix	LDT1	0.04	0.03
tblFleetMix	LDT2	0.19	0.16
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1410e-003	0.05
tblFleetMix	MCY	4.5820e-003	4.0100e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0380e-003	9.1000e-004
tblFleetMix	MHD	0.02	0.07
tblFleetMix	OBUS	1.3830e-003	1.2100e-003
tblFleetMix	SBUS	9.4500e-004	8.3000e-004
tblFleetMix	UBUS	1.1830e-003	1.0400e-003
tblLandUse	LandUseSquareFeet	303,230.00	303,228.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblVehicleTrips	CNW_TL	6.90	60.00
tblVehicleTrips	CNW_TTP	41.00	32.18
tblVehicleTrips	CW_TTP	59.00	67.82
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	IndoorWaterUseRate	70,121,937.50	6,183,100.00
tblWater	OutdoorWaterUseRate	0.00	713,580.00

First Industrial Warehouse at Wilson Avenue (VOC Mitigation) - Riverside-South Coast County, Summer

First Industrial Warehouse at Wilson Avenue (VOC Mitigation)

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					
2021	17.5067	2.2060	4.7526	0.0107	0.7042	0.1296	0.8338	0.1868	0.1293	0.3160	0.0000	1,046.0571	1,046.0571	0.0417	0.0000	1,047.1008
Maximum	17.5067	2.2060	4.7526	0.0107	0.7042	0.1296	0.8338	0.1868	0.1293	0.3160	0.0000	1,046.0571	1,046.0571	0.0417	0.0000	1,047.1008

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					
2021	17.5067	2.2060	4.7526	0.0107	0.7042	0.1296	0.8338	0.1868	0.1293	0.3160	0.0000	1,046.0571	1,046.0571	0.0417	0.0000	1,047.1008
Maximum	17.5067	2.2060	4.7526	0.0107	0.7042	0.1296	0.8338	0.1868	0.1293	0.3160	0.0000	1,046.0571	1,046.0571	0.0417	0.0000	1,047.1008

First Industrial Warehouse at Wilson Avenue (VOC Mitigation) - Riverside-South Coast County, Summer

First Industrial Warehouse at Wilson Avenue (VOC Mitigation)
Riverside-South Coast County, Summer

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	3/16/2021	4/16/2021	5	24	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 10.31

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 454,842; Non-Residential Outdoor: 151,614; Striped Parking Area: 26,946

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	63.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

First Industrial Warehouse at Wilson Avenue (VOC Mitigation) - Riverside-South Coast County, Summer

First Industrial Warehouse at Wilson Avenue (VOC Mitigation)

Riverside-South Coast County, Summer

3.2 Architectural Coating - 2021Unmitigated 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	16.9161						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.2919	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079
Total	17.2080	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.2987	0.1702	2.3292	6.7300e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906		670.7931	670.7931	0.0160		671.1929
Total	0.2987	0.1702	2.3292	6.7300e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906		670.7931	670.7931	0.0160		671.1929

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	16.9161						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.2919	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079
Total	17.2080	2.0358	2.4234	3.9600e-003			0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
Worker	0.2987	0.1702	2.3292	6.7300e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906		670.7931	670.7931	0.0160		671.1929
Total	0.2987	0.1702	2.3292	6.7300e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906		670.7931	670.7931	0.0160		671.1929

First Industrial Warehouse at Wilson Avenue (VOC Mitigation) - Riverside-South Coast County, Winter

First Industrial Warehouse at Wilson Avenue (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	303.23	1000sqft	6.96	303,228.00	0
Other Asphalt Surfaces	1.67	Acre	1.67	72,745.20	0
Other Non-Asphalt Surfaces	8.64	Acre	8.64	376,358.40	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.4	Precipitation Freq (Days)	28
Climate Zone	10			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Per RGA Site Plan; Onsite and offsite =17.27

Construction Phase - Per Applicant

Off-road Equipment - 8hr/day

Off-road Equipment - Per Applicant 8hr/day

Trips and VMT - _

Vehicle Trips - _

Energy Use - _

Water And Wastewater - _

Construction Off-road Equipment Mitigation - _

Water Mitigation - _

Waste Mitigation - _

Fleet Mix - _

Architectural Coating - VOC mitigation 10g/L

First Industrial Warehouse at Wilson Avenue (VOC Mitigation) - Riverside-South Coast County, Winter

First Industrial Warehouse at Wilson Avenue (VOC Mitigation)

Riverside-South Coast County, Winter

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstructionPhase	NumDays	20.00	24.00
tblEnergyUse	LightingElect	0.00	0.35
tblFleetMix	HHD	0.07	0.20
tblFleetMix	LDA	0.54	0.48
tblFleetMix	LDT1	0.04	0.03
tblFleetMix	LDT2	0.19	0.16
tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	5.1410e-003	0.05
tblFleetMix	MCY	4.5820e-003	4.0100e-003
tblFleetMix	MDV	0.12	0.00
tblFleetMix	MH	1.0380e-003	9.1000e-004
tblFleetMix	MHD	0.02	0.07
tblFleetMix	OBUS	1.3830e-003	1.2100e-003
tblFleetMix	SBUS	9.4500e-004	8.3000e-004
tblFleetMix	UBUS	1.1830e-003	1.0400e-003
tblLandUse	LandUseSquareFeet	303,230.00	303,228.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblVehicleTrips	CNW_TL	6.90	60.00
tblVehicleTrips	CNW_TTP	41.00	32.18
tblVehicleTrips	CW_TTP	59.00	67.82
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	IndoorWaterUseRate	70,121,937.50	6,183,100.00
tblWater	OutdoorWaterUseRate	0.00	713,580.00

First Industrial Warehouse at Wilson Avenue (VOC Mitigation) - Riverside-South Coast County, Winter

First Industrial Warehouse at Wilson Avenue (VOC Mitigation)

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						
2021	17.5011	2.2118	4.3035	0.0100	0.7042	0.1296	0.8338	0.1868	0.1293	0.3160	0.0000	977.0360	977.0360	0.0397	0.0000	978.0275	
Maximum	17.5011	2.2118	4.3035	0.0100	0.7042	0.1296	0.8338	0.1868	0.1293	0.3160	0.0000	977.0360	977.0360	0.0397	0.0000	978.0275	

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						
2021	17.5011	2.2118	4.3035	0.0100	0.7042	0.1296	0.8338	0.1868	0.1293	0.3160	0.0000	977.0360	977.0360	0.0397	0.0000	978.0275	
Maximum	17.5011	2.2118	4.3035	0.0100	0.7042	0.1296	0.8338	0.1868	0.1293	0.3160	0.0000	977.0360	977.0360	0.0397	0.0000	978.0275	

First Industrial Warehouse at Wilson Avenue (VOC Mitigation) - Riverside-South Coast County, Winter

First Industrial Warehouse at Wilson Avenue (VOC Mitigation)

Riverside-South Coast County, Winter

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	3/16/2021	4/16/2021	5	24	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 10.31

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 454,842; Non-Residential Outdoor: 151,614; 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	63.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

First Industrial Warehouse at Wilson Avenue (VOC Mitigation) - Riverside-South Coast County, Winter

First Industrial Warehouse at Wilson Avenue (VOC Mitigation)

Riverside-South Coast County, Winter

3.2 Architectural Coating - 2021**Unmitigated Construction On-Site**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e	
Category	lb/day												lb/day				
Archit. Coating	16.9161						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079	
Total	17.2080	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		375.2641	375.2641	0.0258		375.9079	

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	0.2931	0.1760	1.8801	6.0400e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906		601.7719	601.7719	0.0139		602.1196	
Total	0.2931	0.1760	1.8801	6.0400e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906		601.7719	601.7719	0.0139		602.1196	

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	16.9161						0.0000	0.0000		0.0000	0.0000		0.0000			0.0000	
Off-Road	0.2919	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		0.0000	375.2641	375.2641	0.0258		375.9079
Total	17.2080	2.0358	2.4234	3.9600e-003		0.1255	0.1255		0.1255	0.1255		0.0000	375.2641	375.2641	0.0258		375.9079

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	0.2931	0.1760	1.8801	6.0400e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906		601.7719	601.7719	0.0139		602.1196	
Total	0.2931	0.1760	1.8801	6.0400e-003	0.7042	4.1500e-003	0.7083	0.1868	3.8200e-003	0.1906		601.7719	601.7719	0.0139		602.1196	