

ENVIRONMENT | PLANNING | DEVELOPMENT SOLUTIONS, INC.

To: Renee Escario
From: Alex J. Garber
Date: 10/15/2021
Re: Air Quality, Energy, and Greenhouse Gas Impact Analysis for the Slater Avenue Mixed-Use Development

This technical memorandum presents an analysis of the Air Quality, Energy and Greenhouse Gas (GHG) impacts for the proposed Slater Avenue Mixed-Use Project (Project; proposed Project), located at 10201, 10221, and 10231 Slater Avenue in the City of Fountain Valley. The Project proposes the construction and operation of a four to five story mixed-use development with 270 Mid-Rise Apartments, 7,000 square foot (sf) High-Turnover Sit Down Restaurant (5,000 sf building and 2,000 sf patio), a six story 541 space parking structure with an elevator, and a 11,630 sf Pool deck. The Project site is 3.34-acres currently developed with a 6,500 sf High-Turnover Sit Down Restaurant and 52,000 sf Office Building space. The Project site is shown in Figure 1, *Project Site*. To support the CEQA document for the proposed Project, this report analyzes the proposed Project's construction and operational impacts to air quality (emission of criteria pollutants) emissions using the California Emissions Estimator Model (CalEEMod) land use emission model (Version 2020.4.0). The emissions for demolition of the existing restaurant and office buildings were calculated, and credit was taken for the existing operational emissions of the restaurant and office buildings. Construction is anticipated to last approximately 15 months. Table 1: *Construction Schedule*, Table 2: *Anticipated Construction Equipment Inventory*, and Table 3: *Construction Vehicle Trips* show the assumptions used for the construction of the Project. These assumptions utilized CalEEMod defaults, except for the following changes:

- All Hours of Operation were changed to 8 hrs for a conservative analysis;
- Crawler Tractors were used instead of Tractors/Loaders/Backhoes for Site Preparation and Grading; and
- Site preparation and Architectural Coating construction days were extended due to information from the client.

Table 1. Construction Schedule

Construction Activity	Start Date	End Date	Total Days
Demolition	9/1/2022	9/28/2022	20
Site Preparation	9/29/2022	11/2/2022	25
Grading	11/3/2022	11/14/2022	8
Building Construction	11/15/2022	10/2/2023	230
Paving	10/3/2023	10/26/2023	18
Architectural Coating	10/27/2023	11/30/2023	25

Table 2. Anticipated Construction Equipment Usage

Construction Activity	Equipment	Number	Hours per day	Horse- power	Load Factor
Demolition	Concrete/Industrial Saws	1	8	81	0.73
	Excavators	3	8	158	0.38
	Rubber Tired Dozers	2	8	247	0.4
Site Preparation	Crawler Tractors	4	8	212	0.43
	Rubber Tired Dozers	3	8	247	0.4
Grading	Crawler Tractors	3	8	212	0.43
	Excavators	1	8	158	0.38
	Graders	1	8	187	0.41
	Rubber Tired Dozers	1	8	247	0.4
Building Construction	Cranes	1	8	231	0.29
	Forklifts	3	8	89	0.2
	Generator Sets	1	8	84	0.74
	Tractors/Loaders/Backhoes	3	8	97	0.37
	Welders	1	8	46	0.45
Paving	Cement and Mortar Mixers	2	8	9	0.56
	Pavers	1	8	130	0.42
	Paving Equipment	2	8	132	0.36
	Rollers	2	8	80	0.38
	Tractors/Loaders/Backhoes	1	8	97	0.37
Architectural Coating	Air Compressors	1	8	78	0.48

Table 3. Construction Vehicle Trips

Construction Activity	Worker Trip Number	Vendor Trip Number	Hauling Trip Number
Demolition	15	0	719
Site Preparation	18	0	0
Grading	15	0	319
Building Construction	299	70	0
Paving	20	0	0
Architectural Coating	60	0	0

Summary of Air Quality, Energy, and GHG Impacts

Air Quality

The Project's maximum daily emissions (regional and local) for construction and operation of the Project would not exceed SCAQMD's regional thresholds of significance. In addition, all construction activities would comply with applicable SCAQMD rules and regulations, including Rule 403 to minimize fugitive PM dust emissions. Projects that do not exceed the regional thresholds are assumed to not have a significant impact on a project level and cumulative level. Therefore, the proposed Project would result in less than significant impacts related to air quality emissions.

Energy

The Project's energy consumption for construction does not have any unusual characteristics and is not less efficient compared with other similar construction sites. The operation of the Project is also similar to other residential projects and would comply with Title 24 as well as all applicable city business and energy codes and ordinances.

GHG

The proposed Project's net GHG emissions of 1,698 net MTCO_{2e} per year are below the SCAQMD significance threshold of 3,000 MTCO_{2e} per year for residential, commercial, and mixed-use projects. Therefore, the Project would have a less than significant impact on GHG emissions.

Air Quality Impact Tables

Regional Emissions

The SCAQMD has adopted maximum daily emission thresholds¹ (pounds/day) for the criteria pollutants during construction and operation of a project. The regional thresholds apply to the criteria pollutants mentioned above and can be found in Table 4: *Regional Construction Emissions Estimates* and Table 5: *Regional Operational Emissions Estimates* along with the CalEEMod projects emissions. These emission thresholds include the Project emissions generated both from onsite sources (such as off-road construction equipment and fugitive dust) and offsite sources (vehicle travel leaving and arriving to the site). As can be seen in Table 4 and Table 5, the Project emissions would not exceed regional construction emission thresholds. Therefore, construction of the Project would have less than significant regional air quality impacts.

Table 4. Regional Construction Emissions

Construction Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NO _x	CO	SO _x	PM-10	PM-2.5
2022						
Demolition	2.8	31.6	22.7	0.1	4.7	1.8
Site Prep	4.5	50.4	20.6	0.1	8.1	5.2
Grading	3.1	40.3	17.7	0.1	4.6	2.6
Building Construction	2.9	20.6	28.3	0.1	4.7	1.9
Maximum Daily Emissions	4.5	50.5	28.3	0.1	8.0	5.1
2023						
Building Construction	2.7	18.6	27.4	0.1	4.5	1.7
Paving	1.2	10.6	15.2	0.0	0.8	0.5
Architectural Coating	73.0	1.9	4.2	0.0	0.8	0.3
Maximum Daily Emissions	73.0	18.6	27.4	0.1	4.5	1.7
Maximum Daily Emissions 2022-2023	73.0	50.4	28.3	0.1	8.0	5.1
SCAQMD Significance Thresholds	75	100	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

¹ SCAQMD April 2019

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

Table 5. Regional Operational Emission Estimates

Operational Activity	Maximum Daily Regional Emissions (pounds/day)					
	ROG	NO _x	CO	SO _x	PM-10	PM-2.5
Area	6.7	0.3	22.3	0.0	0.1	0.1
Energy	0.1	1.2	0.7	0.0	0.1	0.1
Mobile	5.5	5.6	51.1	0.1	12.3	3.3
Total Project Operational Emissions	12.3	7.1	74.1	0.1	12.5	3.5
Existing Operational Emissions	4.2	3.7	24.9	0.1	5.0	1.4
Total Net Project Operational Emissions	8.1	3.4	49.2	0.0	7.5	2.1
SCAQMD Significance Thresholds	55	55	550	150	150	55
Threshold Exceeded?	No	No	No	No	No	No

Local Emissions

Localized significance thresholds (LSTs) were also adopted by the SCAQMD because project-related construction or operational air emissions have the potential to exceed the state and national air quality standards in the project vicinity, while not exceeding the regional emission significance thresholds adopted by the SCAQMD. These thresholds set the maximum rates of daily construction or operational emissions from a project site that would not exceed a national or state ambient air quality standard². The differences between regional thresholds and LSTs are as follows:

1. Regional thresholds include all sources of project construction and operational emissions generated from onsite and offsite emission sources whereas the LSTs only consider the emissions generated from onsite emission sources.
2. LSTs only apply to CO, NO_x, PM-10, and PM-2.5, while regional thresholds include both ROG and SO_x.
3. Regional Thresholds apply to emission sources located anywhere within the SCAQMD whereas the LSTs are location dependent and also depend on the size of the project, and emission location relative to the nearest sensitive receptor.

A sensitive receptor is defined as an individual who is most susceptible to negative health affects when exposed to air pollutants including children, the elderly, and adults with chronic health issues. Such receptors include residences, schools, elderly care centers, and hospitals. SCAQMD provides screening look up tables (Appendix C of the SCAQMD 2008 Final Localized Significance Threshold Methodology)³ for projects that disturb less than or equal to 5 acres in size in a day. These tables were created to easily determine if the daily emissions of NO_x, CO, PM-10, and PM-2.5 from a project could result in a significant impact to the local air quality. To calculate the amount of acres graded, The SCAQMD Fact Sheet for Applying CalEEMod to Localized Significance Threshold⁴ was used to calculate the appropriate acres graded. The thresholds are determined by:

² SCAQMD 2008: Final Localized Significance Threshold Methodology.

<http://www.aqmd.gov/docs/defaultsource/ceqa/handbook/localized-significance-thresholds/final-lst-methodology-document.pdf>

³ SCAQMD 2008: Final Localized Significance Threshold Methodology Appendix C.

<http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2>

⁴ SCAQMD Fact Sheet for Applying CalEEMod to Localized Significance Thresholds.

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

- Source receptor area (SRA), the geographic area within the SCAQMD that can act as both a source of emissions and a receptor of emission impacts (the Project is located within SRA 17, Central Orange County),
- Size of the project, and
- Distance to the nearest sensitive receptor.

The phase with the most significant impact is the site preparation phase. It is conservatively assumed the entire site area of 3.34 acres would be graded each day during site preparation; therefore, 3.34 acres were used for the look up tables. The thresholds between 2 acres and 5 acres from Appendix C were interpolated as the tables give thresholds for 2-acre and 5-acre sites. Distance to the nearest sensitive receptor also determines the emission thresholds. The sensitive receptors closest to the Project include residences along the north and east boundary the Project site, at a distance of 22 feet and 73 feet from the Project property line to the residential structure, respectively. These receptors are less than the minimum distance provided in the lookup tables (25 meters). Therefore, 25 meters (82 feet) was used. Table 6: *Localized Construction Emission Estimates* shows the thresholds and estimated maximum daily construction emissions for the proposed Project. As seen in Table 6, the localized emissions generated by the proposed Project would not exceed threshold and would therefore, have a less than significant localized construction air quality impact.

The LSTs for Operation are also determined by the size of the Project site and the distance to the nearest sensitive receptor. These thresholds for a 3.34-acre were also interpolated between the Appendix C thresholds for 2- and 5-acre sites. Table 7: *Localized Operational Emission Estimates* shows the thresholds and estimated maximum daily operational vehicular emissions for the proposed Project. As seen in Table 7, the localized emissions generated by the proposed Project would not exceed threshold and would therefore have a less than significant localized operational air quality impact.

Table 6. Localized Construction Emission Estimates

Construction Activity	Maximum Daily Regional Emissions (pounds/day)			
	NO _x	CO	PM-10	PM-2.5
2022				
Demolition	25.7	20.6	3.7	1.5
Site Prep	50.4	20.0	7.9	5.2
Grading	33.9	15.5	3.7	2.3
Building Construction	16.8	17.4	0.9	0.8
Maximum Daily Emissions	50.4	20.6	7.8	5.1
2023				
Building Construction	15.4	17.3	0.7	0.7
Paving	10.6	14.5	0.5	0.5
Architectural Coating	1.7	2.4	0.1	0.1
Maximum Daily Emissions	15.4	17.3	0.7	0.7
Maximum Daily Emission 2022-2023	50.4	20.6	7.9	5.2
SCAQMD Significance Thresholds	145	955	9.1	5.3
Threshold Exceeded?	No	No	No	No

Table 7. Localized Operational Emission Estimates

Operational Activity	Maximum Daily Regional Emissions (pounds/day)			
	NO _x	CO	PM-10	PM-2.5
Area	0.3	22.4	0.1	0.1
Energy	1.2	0.7	0.1	0.1
Mobile	1.4	12.3	0.2	0.1
Total Project Operational Emissions	2.9	35.4	0.4	0.3
Existing Operational Emissions	1.4	7.5	0.1	0.1
Total Net Project Operational Emissions	1.5	27.9	0.3	0.2
SCAQMD Significance Thresholds	133	1,067	2.4	1.4
Threshold Exceeded?	No	No	No	No

Energy

The State CEQA Guidelines do not have specific thresholds for Energy consumption. Rather, the question in Appendix G: VI Energy (a) asks, “[Does the proposed Project] Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation?”. Therefore, for the purpose of this analysis, a significant impact would occur if:

- The Project design and/or location encourages wasteful, inefficient, and unnecessary consumption of energy, especially fossil fuels such as coal, natural gas, and petroleum, as well as the use of fuel by vehicles anticipated to travel to and from the Project.

The following assumptions were used to calculate the energy consumption of the proposed Project:

- The Project’s construction and operational energy consumption would be provided by Southern California Edison Company.
- Construction equipment fuel consumption derived from ARB Offroad2017 emission model
- Fuel Consumption from vehicle travel derived from ARB EMFAC2021 emission model
- Electrical and natural gas usage derived from the CalEEMod model

Construction

Electricity and Natural Gas Usage:

Due to the Project size and the fact that construction is temporary, the electricity used would be substantially less than that required for Project operation and would have a negligible contribution to the Project's overall energy consumption. The electric power used would be for as-necessary lighting and electronic equipment such as computers inside temporary construction trailers. Natural Gas is not anticipated to be needed for construction activities. Any consumption of natural gas would be minor and negligible in comparison to the operation of the proposed Project.

Petroleum Fuel Usage:

The construction equipment associated with construction activities (off-road/heavy duty vehicles) would rely on diesel fuel as would vendor and haul trucks involved in delivering building materials and removing the demolition debris from the Project site. Construction workers would travel to and from the Project site throughout the duration of construction, and for a conservative analysis it is assumed that construction workers would travel in gasoline-powered passenger vehicles.

Table 8: *Construction Equipment Fuel Usage*, used the total fuel consumption and horsepower-hour data contained within the ARB OffRoad2017 emission model for specific types of diesel construction equipment. It should be noted that the total fuel consumption is a conservative analysis and would likely overstate the amount of fuel usage, as specific construction equipment is not expected to operate during the duration of the construction activity (i.e. crane). Table 9: *Estimate Project Vehicle Fuel Usage*, summarizes the Project's construction vehicle fuel usage based on vehicle miles traveled and fuel usage factors contained in the ARB EMFAC2021. The trips included are worker vehicles, vendor vehicles, and haul vehicles. Table 10: *Total Construction Fuel Usage*, shows the overall fuel consumption for construction of the proposed Project.

Table 8. Construction Equipment Fuel Usage

Activity	Equipment	Number	Hours per day	Horsepower	Load Factor	Days of Construction	Total Horsepower-hours	Fuel Rate (gal/hp-hr)	Fuel Use (gallons)
Demolition	Concrete/Industrial Saws	1	8	81	0.73	20	9461	0.041885965	396
	Excavators	3	8	158	0.38	20	28819	0.01985595	572
	Rubber Tired Dozers	2	8	247	0.4	20	31616	0.020601315	651
Site Preparation	Crawler Tractors	4	8	212	0.43	25	58342	0.022175849	1617
	Rubber Tired Dozers	3	8	247	0.4	25	47424	0.020601315	1221
Grading	Crawler Tractors	3	8	212	0.43	8	17503	0.022175849	388
	Excavators	1	8	158	0.38	8	3843	0.01985595	76
	Graders	1	8	187	0.41	8	4907	0.021161331	104
	Rubber Tired Dozers	1	8	247	0.4	8	6323	0.020601315	130
Building Construction	Cranes	1	8	231	0.29	230	123262	0.014895293	1836
	Forklifts	3	8	89	0.2	230	98256	0.010444403	1026
	Generator Sets	1	8	84	0.74	230	114374	0.04232413	4841
	Tractors/Loaders/Backhoes	3	8	97	0.37	230	198113	0.019146832	3793
	Welders	1	8	46	0.45	230	38088	0.025824348	984
Paving	Cement and Mortar Mixers	2	8	9	0.56	18	1452	0.032005386	46
	Pavers	1	8	130	0.42	18	7862	0.021532281	169
	Paving Equipment	2	8	132	0.36	18	13686	0.018464524	253
	Rollers	2	8	80	0.38	18	8755	0.019836075	174
	Tractors/Loaders/Backhoes	1	8	97	0.37	18	5168	0.019146832	99
Architectural Coating	Air Compressors	1	8	78	0.48	25	7488	0.027592396	207
Total									18,583

Table 9. Estimated Construction Vehicle Fuel Usage

Construction Source	Number	VMT	Fuel Rate	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Haul Trucks	1,038	338,640	5.85	57,887	0
Vendor Trucks	70	111,090	8.90	12,482	0
Worker Vehicles	427	1,049,727	26.24	0	40,005
Total				70,369	40

Table 10. Total Construction Fuel Usage

Construction Source	Gallons of Diesel Fuel	Gallons of Gasoline Fuel
Construction Vehicles	70,369	40,005
Off-road Construction Equipment	18,583	0
Total	88,952	40,005

Operation

The operation of the proposed Project would consume electricity, natural gas, and petroleum. The net energy consumption can be found in Table 11: *Project Annual Operational Energy Requirements*, below. Electricity and Natural Gas consumption were found in the Annual CalEEMod Output Sheets in Appendix A. The gasoline consumption rates utilize the same assumptions that were used for the worker vehicles.

Table 11. Project Annual Operational Energy Requirements

Operational Source	Energy Usage	
Electricity (Kilowatt-Hours)		
Project	2,461,200	
Natural Gas (Thousands British Thermal Units)		
Project	4,820,110	
Petroleum (gasoline) Consumption		
	Annual VMT	Gallons of Gasoline Fuel
Project	5,358,430	204,208

Conclusion

The proposed Project has no unusual characteristics that would make the construction fuel and energy consumption associated with construction of the Project less efficient compared with other similar construction sites throughout the state. The consumption would also be temporary and localized. Operation of the proposed restaurants and 270 multi-family residential units would comply with all the energy efficiency requirements under Title 24 and all applicable city business and energy codes ordinances. Therefore, the construction and operation of the Project would result in a less than significant impact for inefficient, wasteful, or unnecessary energy use, and no mitigation would be required.

Greenhouse gas

The SCAQMD Greenhouse Gas Emissions (GHG) CEQA Significance Threshold Working Group recommends a tiered approach to evaluate potential GHG impacts from various uses. This includes a Numerical Screening Thresholds approach that provides screening values for the lead agency to determine if project GHG emissions could result in significant impacts. SCAQMD methodology includes averaging project's construction emissions over 30 years and are adding them to the project's operational emissions. If a project's operational plus amortized construction emissions are below one of the following screening thresholds, then the project impact would be less than significant:

- Option 1: All land use types: 3,000 MT CO_{2e} per year
- Option 2: Based on land use type: residential: 3,500 MT CO_{2e} per year; commercial: 1,400 MT CO_{2e} per year; or mixed use: 3,000 MT CO_{2e} per year

State Executive Order S-3-05's year 2050 goal is the basis of SCAQMD's draft these screening thresholds. The objective of the Executive Order is to contribute to capping worldwide CO₂ concentrations at 450 ppm, stabilizing global climate change. The City of Fountain Valley utilizes screening threshold Option 1, and therefore the threshold is 3,000 MT CO_{2e} per year.

The Project's construction GHG emissions are shown in Table 12: *Project Construction GHG Emissions*, and the overall construction and operational emissions are shown in Table 13: *Project Net Total GHG Emissions*. These emissions were calculated using the CalEEMod Model. The Construction emissions are amortized over 30 years and added to the Project's operational emissions. As shown in Table 13, the total Project GHG emissions are 1,698 net MT CO_{2e} per year, which is below the 3,000 MT CO_{2e} per year threshold. Therefore, the Project would have a less than significant GHG impact.

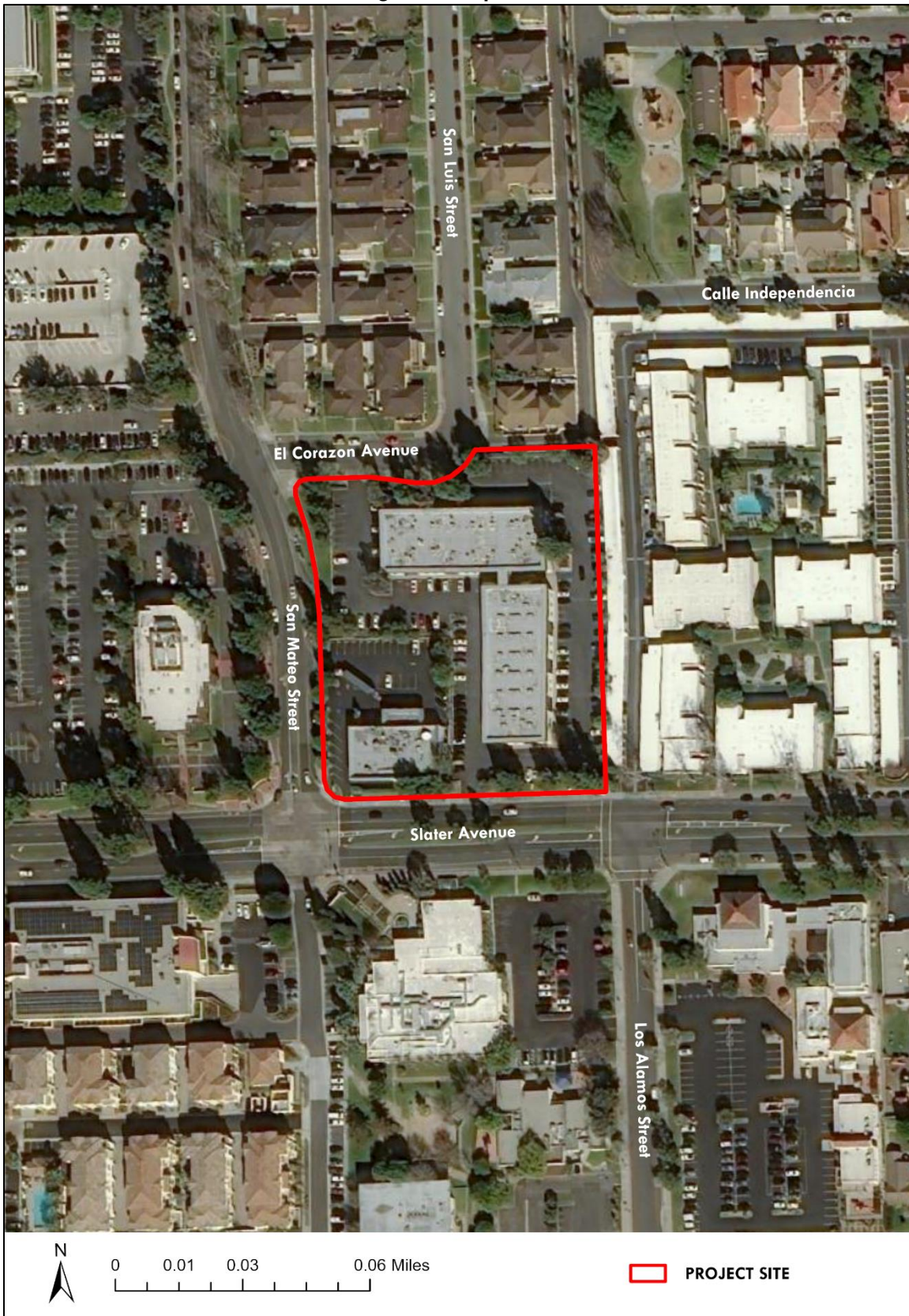
Table 12. Project Construction GHG Emissions

Activity	Bio CO ₂	NBio CO ₂	Total CO ₂	CH ₄	N ₂ O	Total GHG Emissions (MTCO ₂ e)
2022	0	256	256	0.1	0	260
2023	0	644	644	0.1	0	653
Total Construction Emissions	0	896	896	0.2	0	913
					Total Emissions Amortized Over 30 Years	30

Table 13. Project Total Net GHG Emissions

Activity	Bio CO ₂	NBio CO ₂	Total CO ₂	CH ₄	N ₂ O	Total GHG Emissions (MTCO ₂ e)
Area	0	5	5	0	0	5
Energy	0	694	694	0	0	697
Mobile	0	1765	1,765	0.1	0.1	1791
Waste	56	0	56	3.3	0	138
Water	6	71	77	0.7	0	99
Subtotal	62	2,534	2,596	4.1	0.1	2,730
					Amortized Construction Emissions	30
					Total Emissions	2,760
					Existing Emissions	1,058
					Total Net Emissions	1,702
					Significance Threshold	3,000
					Threshold Exceeded?	No

Figure 1: Project Site



Existing CalEEMod Sheets

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Slater Avenue Existing Land Uses
Orange County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	49.40	1000sqft	1.19	49,400.00	0
Parking Lot	1.64	Acre	1.64	71,438.40	0
City Park	0.33	Acre	0.33	14,549.04	0
High Turnover (Sit Down Restaurant)	6.50	1000sqft	0.18	6,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - SF of General Office Building and High Turnover Sit Down Restaurant reduced due to existing uses not being used to its full capacity.
 Construction Phase - Operational Analysis only.
 Off-road Equipment - Operational Analysis Only
 Grading -
 Vehicle Trips - Used Trip rates from project Traffic Impact Study (EPD Solutions, 2021)

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	0.00

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseEndDate	8/11/2021	8/4/2021
tblLandUse	LotAcreage	1.13	1.19
tblLandUse	LotAcreage	0.15	0.18
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	1.76
tblVehicleTrips	ST_TR	122.40	108.02
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	0.56
tblVehicleTrips	SU_TR	142.64	125.88
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	7.77
tblVehicleTrips	WD_TR	112.18	99.00

2.0 Emissions Summary

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

		Highest	
--	--	---------	--

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2337	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4400e-003	1.4400e-003	0.0000	0.0000	1.5300e-003
Energy	0.0115	0.1043	0.0876	6.3000e-004		7.9300e-003	7.9300e-003		7.9300e-003	7.9300e-003	0.0000	277.1308	277.1308	0.0160	3.7600e-003	278.6495
Mobile	0.4068	0.4607	3.5361	7.0800e-003	0.7002	7.0700e-003	0.7073	0.1869	6.6200e-003	0.1936	0.0000	654.9259	654.9259	0.0510	0.0324	665.8389
Waste						0.0000	0.0000		0.0000	0.0000	25.0329	0.0000	25.0329	1.4794	0.0000	62.0178
Water						0.0000	0.0000		0.0000	0.0000	3.4114	36.4567	39.8682	0.3535	8.6500e-003	51.2814
Total	0.6520	0.5650	3.6245	7.7100e-003	0.7002	0.0150	0.7152	0.1869	0.0146	0.2015	28.4443	968.5149	996.9592	1.8998	0.0448	1,057.7891

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2337	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4400e-003	1.4400e-003	0.0000	0.0000	1.5300e-003
Energy	0.0115	0.1043	0.0876	6.3000e-004		7.9300e-003	7.9300e-003		7.9300e-003	7.9300e-003	0.0000	277.1308	277.1308	0.0160	3.7600e-003	278.6495
Mobile	0.4068	0.4607	3.5361	7.0800e-003	0.7002	7.0700e-003	0.7073	0.1869	6.6200e-003	0.1936	0.0000	654.9259	654.9259	0.0510	0.0324	665.8389
Waste						0.0000	0.0000		0.0000	0.0000	25.0329	0.0000	25.0329	1.4794	0.0000	62.0178
Water						0.0000	0.0000		0.0000	0.0000	3.4114	36.4567	39.8682	0.3535	8.6500e-003	51.2814
Total	0.6520	0.5650	3.6245	7.7100e-003	0.7002	0.0150	0.7152	0.1869	0.0146	0.2015	28.4443	968.5149	996.9592	1.8998	0.0448	1,057.7891

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/5/2021	8/4/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.64

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	tons/yr										MT/yr					
Mitigated	0.4068	0.4607	3.5361	7.0800e-003	0.7002	7.0700e-003	0.7073	0.1869	6.6200e-003	0.1936	0.0000	654.9259	654.9259	0.0510	0.0324	665.8389
Unmitigated	0.4068	0.4607	3.5361	7.0800e-003	0.7002	7.0700e-003	0.7073	0.1869	6.6200e-003	0.1936	0.0000	654.9259	654.9259	0.0510	0.0324	665.8389

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	383.84	86.94	27.66	935,972	935,972
High Turnover (Sit Down Restaurant)	643.50	702.13	818.22	922,412	922,412
Parking Lot	0.00	0.00	0.00		
Total	1,027.34	789.07	845.88	1,858,384	1,858,384

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
General Office Building	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
High Turnover (Sit Down Restaurant)	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
Parking Lot	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	163.5985	163.5985	0.0138	1.6700e-003	164.4425
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	163.5985	163.5985	0.0138	1.6700e-003	164.4425
Natural Gas Mitigated	0.0115	0.1043	0.0876	6.3000e-004		7.9300e-003	7.9300e-003		7.9300e-003	7.9300e-003	0.0000	113.5323	113.5323	2.1800e-003	2.0800e-003	114.2070
Natural Gas Unmitigated	0.0115	0.1043	0.0876	6.3000e-004		7.9300e-003	7.9300e-003		7.9300e-003	7.9300e-003	0.0000	113.5323	113.5323	2.1800e-003	2.0800e-003	114.2070

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	447070	2.4100e-003	0.0219	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.8574	23.8574	4.6000e-004	4.4000e-004	23.9991
High Turnover (Sit Down Restaurant)	1.68044e+006	9.0600e-003	0.0824	0.0692	4.9000e-004		6.2600e-003	6.2600e-003		6.2600e-003	6.2600e-003	0.0000	89.6749	89.6749	1.7200e-003	1.6400e-003	90.2078
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0115	0.1043	0.0876	6.2000e-004		7.9300e-003	7.9300e-003		7.9300e-003	7.9300e-003	0.0000	113.5323	113.5323	2.1800e-003	2.0800e-003	114.2070

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	447070	2.4100e-003	0.0219	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.8574	23.8574	4.6000e-004	4.4000e-004	23.9991
High Turnover (Sit Down Restaurant)	1.68044e+006	9.0600e-003	0.0824	0.0692	4.9000e-004		6.2600e-003	6.2600e-003		6.2600e-003	6.2600e-003	0.0000	89.6749	89.6749	1.7200e-003	1.6400e-003	90.2078
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0115	0.1043	0.0876	6.2000e-004		7.9300e-003	7.9300e-003		7.9300e-003	7.9300e-003	0.0000	113.5323	113.5323	2.1800e-003	2.0800e-003	114.2070

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	666406	118.1841	9.9800e-003	1.2100e-003	118.7938
High Turnover (Sit Down Restaurant)	231075	40.9801	3.4600e-003	4.2000e-004	41.1915
Parking Lot	25003.4	4.4343	3.7000e-004	5.0000e-005	4.4571
Total		163.5985	0.0138	1.6800e-003	164.4425

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	666406	118.1841	9.9800e-003	1.2100e-003	118.7938
High Turnover (Sit Down Restaurant)	231075	40.9801	3.4600e-003	4.2000e-004	41.1915
Parking Lot	25003.4	4.4343	3.7000e-004	5.0000e-005	4.4571
Total		163.5985	0.0138	1.6800e-003	164.4425

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2337	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4400e-003	1.4400e-003	0.0000	0.0000	1.5300e-003
Unmitigated	0.2337	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4400e-003	1.4400e-003	0.0000	0.0000	1.5300e-003

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	0.0269					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4400e-003	1.4400e-003	0.0000	0.0000	1.5300e-003
Total	0.2337	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4400e-003	1.4400e-003	0.0000	0.0000	1.5300e-003

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0269					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2068					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4400e-003	1.4400e-003	0.0000	0.0000	1.5300e-003
Total	0.2337	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4400e-003	1.4400e-003	0.0000	0.0000	1.5300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	39.8682	0.3535	8.6500e-003	51.2814
Unmitigated	39.8682	0.3535	8.6500e-003	51.2814

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.393189	0.7747	7.0000e-005	1.0000e-005	0.7787
General Office Building	8.78005 / 5.38132	33.6634	0.2887	7.0700e-003	42.9882
High Turnover (Sit Down Restaurant)	1.97297 / 0.125934	5.4301	0.0647	1.5700e-003	7.5145
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		39.8682	0.3535	8.6500e-003	51.2814

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.393189	0.7747	7.0000e-005	1.0000e-005	0.7787
General Office Building	8.78005 / 5.38132	33.6634	0.2887	7.0700e-003	42.9882
High Turnover (Sit Down Restaurant)	1.97297 / 0.125934	5.4301	0.0647	1.5700e-003	7.5145
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		39.8682	0.3535	8.6500e-003	51.2814

8.0 Waste Detail

8.1 Mitigation Measures Waste

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	25.0329	1.4794	0.0000	62.0178
Unmitigated	25.0329	1.4794	0.0000	62.0178

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
General Office Building	45.94	9.3254	0.5511	0.0000	23.1033
High Turnover (Sit Down Restaurant)	77.35	15.7014	0.9279	0.0000	38.8994
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		25.0328	1.4794	0.0000	62.0178

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
General Office Building	45.94	9.3254	0.5511	0.0000	23.1033
High Turnover (Sit Down Restaurant)	77.35	15.7014	0.9279	0.0000	38.8994
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		25.0328	1.4794	0.0000	62.0178

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Slater Avenue Existing Land Uses - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number
----------------	--------

11.0 Vegetation

Slater Avenue Existing Land Uses - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Slater Avenue Existing Land Uses
Orange County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	49.40	1000sqft	1.19	49,400.00	0
Parking Lot	1.64	Acre	1.64	71,438.40	0
City Park	0.33	Acre	0.33	14,549.04	0
High Turnover (Sit Down Restaurant)	6.50	1000sqft	0.18	6,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - SF of General Office Building and High Turnover Sit Down Restaurant reduced due to existing uses not being used to its full capacity.

Construction Phase - Operational Analysis only.

Off-road Equipment - Operational Analysis Only

Grading -

Vehicle Trips - Used Trip rates from project Traffic Impact Study (EPD Solutions, 2021)

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	0.00

Slater Avenue Existing Land Uses - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseEndDate	8/11/2021	8/4/2021
tblLandUse	LotAcreage	1.13	1.19
tblLandUse	LotAcreage	0.15	0.18
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	1.76
tblVehicleTrips	ST_TR	122.40	108.02
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	0.56
tblVehicleTrips	SU_TR	142.64	125.88
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	7.77
tblVehicleTrips	WD_TR	112.18	99.00

2.0 Emissions Summary

Slater Avenue Existing Land Uses - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135
Energy	0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172
Mobile	2.9001	2.9431	24.3172	0.0507	4.9563	0.0491	5.0054	1.3212	0.0460	1.3672		5,164.8114	5,164.8114	0.3731	0.2351	5,244.1910
Total	4.2438	3.5146	24.8031	0.0541	4.9563	0.0926	5.0488	1.3212	0.0894	1.4107		5,850.5662	5,850.5662	0.3862	0.2477	5,934.0216

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	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135
Energy	0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172
Mobile	2.9001	2.9431	24.3172	0.0507	4.9563	0.0491	5.0054	1.3212	0.0460	1.3672		5,164.8114	5,164.8114	0.3731	0.2351	5,244.1910
Total	4.2438	3.5146	24.8031	0.0541	4.9563	0.0926	5.0488	1.3212	0.0894	1.4107		5,850.5662	5,850.5662	0.3862	0.2477	5,934.0216

Slater Avenue Existing Land Uses - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/5/2021	8/4/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.64

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Slater Avenue Existing Land Uses - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	2.9001	2.9431	24.3172	0.0507	4.9563	0.0491	5.0054	1.3212	0.0460	1.3672		5,164.811 4	5,164.811 4	0.3731	0.2351	5,244.191 0
Unmitigated	2.9001	2.9431	24.3172	0.0507	4.9563	0.0491	5.0054	1.3212	0.0460	1.3672		5,164.811 4	5,164.811 4	0.3731	0.2351	5,244.191 0

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	383.84	86.94	27.66	935,972	935,972
High Turnover (Sit Down Restaurant)	643.50	702.13	818.22	922,412	922,412
Parking Lot	0.00	0.00	0.00		
Total	1,027.34	789.07	845.88	1,858,384	1,858,384

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

Slater Avenue Existing Land Uses - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
General Office Building	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
High Turnover (Sit Down Restaurant)	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
Parking Lot	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
lb/day											lb/day					
NaturalGas Mitigated	0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172
NaturalGas Unmitigated	0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172

Slater Avenue Existing Land Uses - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1224.85	0.0132	0.1201	0.1009	7.2000e-004		9.1300e-003	9.1300e-003		9.1300e-003	9.1300e-003		144.0999	144.0999	2.7600e-003	2.6400e-003	144.9562
High Turnover (Sit Down Restaurant)	4603.96	0.0497	0.4514	0.3792	2.7100e-003		0.0343	0.0343		0.0343	0.0343		541.6422	541.6422	0.0104	9.9300e-003	544.8609
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172

Slater Avenue Existing Land Uses - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.22485	0.0132	0.1201	0.1009	7.2000e-004		9.1300e-003	9.1300e-003		9.1300e-003	9.1300e-003		144.0999	144.0999	2.7600e-003	2.6400e-003	144.9562
High Turnover (Sit Down Restaurant)	4.60396	0.0497	0.4514	0.3792	2.7100e-003		0.0343	0.0343		0.0343	0.0343		541.6422	541.6422	0.0104	9.9300e-003	544.8609
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Existing Land Uses - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135
Unmitigated	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135

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	0.1474					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1329					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135
Total	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135

Slater Avenue Existing Land Uses - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1474					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1329					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135
Total	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Existing Land Uses - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Slater Avenue Existing Land Uses - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Slater Avenue Existing Land Uses
Orange County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	49.40	1000sqft	1.19	49,400.00	0
Parking Lot	1.64	Acre	1.64	71,438.40	0
City Park	0.33	Acre	0.33	14,549.04	0
High Turnover (Sit Down Restaurant)	6.50	1000sqft	0.18	6,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - SF of General Office Building and High Turnover Sit Down Restaurant reduced due to existing uses not being used to its full capacity.
 Construction Phase - Operational Analysis only.
 Off-road Equipment - Operational Analysis Only
 Grading -
 Vehicle Trips - Used Trip rates from project Traffic Impact Study (EPD Solutions, 2021)

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	0.00

Slater Avenue Existing Land Uses - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseEndDate	8/11/2021	8/4/2021
tblLandUse	LotAcreage	1.13	1.19
tblLandUse	LotAcreage	0.15	0.18
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	1.76
tblVehicleTrips	ST_TR	122.40	108.02
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	0.56
tblVehicleTrips	SU_TR	142.64	125.88
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	7.77
tblVehicleTrips	WD_TR	112.18	99.00

2.0 Emissions Summary

Slater Avenue Existing Land Uses - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135
Energy	0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172
Mobile	2.8776	3.1496	24.3715	0.0487	4.9563	0.0492	5.0054	1.3212	0.0460	1.3673		4,969.1362	4,969.1362	0.3907	0.2458	5,052.1479
Total	4.2213	3.7211	24.8575	0.0522	4.9563	0.0926	5.0489	1.3212	0.0895	1.4107		5,654.8910	5,654.8910	0.4039	0.2584	5,741.9786

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	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135
Energy	0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172
Mobile	2.8776	3.1496	24.3715	0.0487	4.9563	0.0492	5.0054	1.3212	0.0460	1.3673		4,969.1362	4,969.1362	0.3907	0.2458	5,052.1479
Total	4.2213	3.7211	24.8575	0.0522	4.9563	0.0926	5.0489	1.3212	0.0895	1.4107		5,654.8910	5,654.8910	0.4039	0.2584	5,741.9786

Slater Avenue Existing Land Uses - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/5/2021	8/4/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.64

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Slater Avenue Existing Land Uses - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	2.8776	3.1496	24.3715	0.0487	4.9563	0.0492	5.0054	1.3212	0.0460	1.3673		4,969.136 2	4,969.136 2	0.3907	0.2458	5,052.147 9
Unmitigated	2.8776	3.1496	24.3715	0.0487	4.9563	0.0492	5.0054	1.3212	0.0460	1.3673		4,969.136 2	4,969.136 2	0.3907	0.2458	5,052.147 9

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	383.84	86.94	27.66	935,972	935,972
High Turnover (Sit Down Restaurant)	643.50	702.13	818.22	922,412	922,412
Parking Lot	0.00	0.00	0.00		
Total	1,027.34	789.07	845.88	1,858,384	1,858,384

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43

Slater Avenue Existing Land Uses - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
General Office Building	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
High Turnover (Sit Down Restaurant)	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
Parking Lot	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172
NaturalGas Unmitigated	0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172

Slater Avenue Existing Land Uses - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1224.85	0.0132	0.1201	0.1009	7.2000e-004		9.1300e-003	9.1300e-003		9.1300e-003	9.1300e-003		144.0999	144.0999	2.7600e-003	2.6400e-003	144.9562
High Turnover (Sit Down Restaurant)	4603.96	0.0497	0.4514	0.3792	2.7100e-003		0.0343	0.0343		0.0343	0.0343		541.6422	541.6422	0.0104	9.9300e-003	544.8609
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172

Slater Avenue Existing Land Uses - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.22485	0.0132	0.1201	0.1009	7.2000e-004		9.1300e-003	9.1300e-003		9.1300e-003	9.1300e-003		144.0999	144.0999	2.7600e-003	2.6400e-003	144.9562
High Turnover (Sit Down Restaurant)	4.60396	0.0497	0.4514	0.3792	2.7100e-003		0.0343	0.0343		0.0343	0.0343		541.6422	541.6422	0.0104	9.9300e-003	544.8609
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0629	0.5715	0.4800	3.4300e-003		0.0434	0.0434		0.0434	0.0434		685.7421	685.7421	0.0131	0.0126	689.8172

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Existing Land Uses - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135
Unmitigated	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135

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	0.1474					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1329					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135
Total	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135

Slater Avenue Existing Land Uses - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1474					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1329					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135
Total	1.2808	5.0000e-005	5.9300e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0127	0.0127	3.0000e-005		0.0135

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Existing Land Uses - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

CalEEMod Sheets

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Slater Avenue Mixed Use Development
Orange County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	541.00	Space	0.46	216,400.00	0
City Park	0.30	Acre	0.30	13,068.00	0
High Turnover (Sit Down Restaurant)	7.00	1000sqft	0.16	7,000.00	0
Recreational Swimming Pool	11.63	1000sqft	0.27	11,627.00	0
Apartments Mid Rise	270.00	Dwelling Unit	2.15	270,000.00	772

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acres based on project site plan.

Construction Phase - Schedule from client

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Assumed 8hr work day.

Off-road Equipment - Assumed 8hr work day.

Off-road Equipment - Assumed 8hr work day.

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading - Acres based on lot size (3x lot acres)

Trips and VMT -

Vehicle Trips - Trip Rate Based on Project Trip Generation (EPD Solutions 2021)

Woodstoves - No woodstoves and fireplaces proposed.

Construction Off-road Equipment Mitigation - [http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-\(pm\)-2.5-significance-thresholds-and-calculation-methodology/pm2-5-working-group-meeting-2-overhead-presentation.ppt](http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/pm2-5-working-group-meeting-2-overhead-presentation.ppt)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	68
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	68
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	25.00
tblConstructionPhase	NumDays	5.00	25.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	229.50	0.00
tblFireplaces	NumberNoFireplace	27.00	270.00
tblFireplaces	NumberWood	13.50	0.00
tblGrading	AcresOfGrading	20.00	10.00
tblGrading	AcresOfGrading	87.50	0.00
tblGrading	MaterialExported	0.00	2,550.00
tblLandUse	LandUseSquareFeet	11,630.00	11,627.00
tblLandUse	LotAcreage	4.87	0.46
tblLandUse	LotAcreage	7.11	2.15
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	ST_TR	4.91	4.52
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	122.40	104.98
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	4.09	3.76
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	142.64	122.34
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	5.44	5.01
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	112.18	96.21
tblVehicleTrips	WD_TR	28.82	0.00
tblWoodstoves	NumberCatalytic	13.50	0.00
tblWoodstoves	NumberNoncatalytic	13.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1456	1.4612	1.0294	2.8200e-003	0.4101	0.0610	0.4711	0.1704	0.0566	0.2270	0.0000	256.2720	256.2720	0.0506	9.5100e-003	260.3701
2023	1.1767	1.9427	2.8406	7.0600e-003	0.3751	0.0822	0.4573	0.1006	0.0772	0.1778	0.0000	643.7412	643.7412	0.0782	0.0238	652.7749
Maximum	1.1767	1.9427	2.8406	7.0600e-003	0.4101	0.0822	0.4711	0.1704	0.0772	0.2270	0.0000	643.7412	643.7412	0.0782	0.0238	652.7749

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.1456	1.4612	1.0294	2.8200e-003	0.1836	0.0610	0.2446	0.0686	0.0566	0.1252	0.0000	256.2719	256.2719	0.0506	9.5100e-003	260.3699
2023	1.1767	1.9427	2.8406	7.0600e-003	0.3751	0.0822	0.4573	0.1006	0.0772	0.1778	0.0000	643.7408	643.7408	0.0782	0.0238	652.7746
Maximum	1.1767	1.9427	2.8406	7.0600e-003	0.3751	0.0822	0.4573	0.1006	0.0772	0.1778	0.0000	643.7408	643.7408	0.0782	0.0238	652.7746

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	28.85	0.00	24.40	37.57	0.00	25.16	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)
5	7-15-2022	10-14-2022	0.6560	0.6560
6	10-15-2022	1-14-2023	1.0620	1.0620
7	1-15-2023	4-14-2023	0.6820	0.6820
8	4-15-2023	7-14-2023	0.6830	0.6830
9	7-15-2023	9-30-2023	0.5855	0.5855
		Highest	1.0620	1.0620

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1903	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725
Energy	0.0260	0.2274	0.1335	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	693.7022	693.7022	0.0418	9.1800e-003	697.4824
Mobile	0.8787	0.9521	8.5532	0.0189	2.0185	0.0133	2.0318	0.5388	0.0123	0.5511	0.0000	1,765.2206	1,765.2206	0.1144	0.0772	1,791.0798
Waste						0.0000	0.0000		0.0000	0.0000	55.5830	0.0000	55.5830	3.2849	0.0000	137.7045
Water						0.0000	0.0000		0.0000	0.0000	6.4733	70.7712	77.2445	0.6708	0.0164	98.9096
Total	2.0950	1.2117	11.4789	0.0205	2.0185	0.0467	2.0652	0.5388	0.0457	0.5845	62.0563	2,534.2561	2,596.3124	4.1163	0.1028	2,729.8488

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1903	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725
Energy	0.0260	0.2274	0.1335	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	693.7022	693.7022	0.0418	9.1800e-003	697.4824
Mobile	0.8787	0.9521	8.5532	0.0189	2.0185	0.0133	2.0318	0.5388	0.0123	0.5511	0.0000	1,765.2206	1,765.2206	0.1144	0.0772	1,791.0798
Waste						0.0000	0.0000		0.0000	0.0000	55.5830	0.0000	55.5830	3.2849	0.0000	137.7045
Water						0.0000	0.0000		0.0000	0.0000	6.4733	70.7712	77.2445	0.6708	0.0164	98.9096
Total	2.0950	1.2117	11.4789	0.0205	2.0185	0.0467	2.0652	0.5388	0.0457	0.5845	62.0563	2,534.2561	2,596.3124	4.1163	0.1028	2,729.8488

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2022	9/28/2022	5	20	
2	Site Preparation	Site Preparation	9/29/2022	11/2/2022	5	25	
3	Grading	Grading	11/3/2022	11/14/2022	5	8	

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	11/15/2022	10/2/2023	5	230
5	Paving	Paving	10/3/2023	10/26/2023	5	18
6	Architectural Coating	Architectural Coating	10/27/2023	11/30/2023	5	25

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0.46

Residential Indoor: 546,750; Residential Outdoor: 182,250; Non-Residential Indoor: 10,500; Non-Residential Outdoor: 3,500; Striped Parking Area: 12,984 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	3	8.00	212	0.43
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	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	Cement and Mortar Mixers	2	8.00	9	0.56

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Demolition	6	15.00	0.00	719.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	319.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	299.00	70.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	60.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0778	0.0000	0.0778	0.0118	0.0000	0.0118	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	0.0264	0.2572	0.2059	3.9000e-004	0.0778	0.0124	0.0902	0.0118	0.0116	0.0233	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289

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	1.4400e-003	0.0589	0.0158	2.1000e-004	6.1700e-003	4.2000e-004	6.6000e-003	1.6900e-003	4.1000e-004	2.1000e-003	0.0000	22.0519	22.0519	2.1000e-003	3.5300e-003	23.1570
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	3.4000e-004	4.7000e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3014	1.3014	3.0000e-005	3.0000e-005	1.3119
Total	1.8900e-003	0.0592	0.0205	2.2000e-004	7.8200e-003	4.3000e-004	8.2600e-003	2.1300e-003	4.2000e-004	2.5500e-003	0.0000	23.3534	23.3534	2.1300e-003	3.5600e-003	24.4689

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

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					0.0249	0.0000	0.0249	3.7700e-003	0.0000	3.7700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0264	0.2572	0.2059	3.9000e-004		0.0124	0.0124		0.0116	0.0116	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289
Total	0.0264	0.2572	0.2059	3.9000e-004	0.0249	0.0124	0.0373	3.7700e-003	0.0116	0.0153	0.0000	33.9902	33.9902	9.5500e-003	0.0000	34.2289

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	1.4400e-003	0.0589	0.0158	2.1000e-004	6.1700e-003	4.2000e-004	6.6000e-003	1.6900e-003	4.1000e-004	2.1000e-003	0.0000	22.0519	22.0519	2.1000e-003	3.5300e-003	23.1570
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.5000e-004	3.4000e-004	4.7000e-003	1.0000e-005	1.6500e-003	1.0000e-005	1.6600e-003	4.4000e-004	1.0000e-005	4.5000e-004	0.0000	1.3014	1.3014	3.0000e-005	3.0000e-005	1.3119
Total	1.8900e-003	0.0592	0.0205	2.2000e-004	7.8200e-003	4.3000e-004	8.2600e-003	2.1300e-003	4.2000e-004	2.5500e-003	0.0000	23.3534	23.3534	2.1300e-003	3.5600e-003	24.4689

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.2258	0.0000	0.2258	0.1241	0.0000	0.1241	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0560	0.6302	0.2501	7.1000e-004		0.0270	0.0270		0.0248	0.0248	0.0000	62.5644	62.5644	0.0202	0.0000	63.0703
Total	0.0560	0.6302	0.2501	7.1000e-004	0.2258	0.0270	0.2528	0.1241	0.0248	0.1490	0.0000	62.5644	62.5644	0.0202	0.0000	63.0703

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	5.1000e-004	7.0500e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9521	1.9521	5.0000e-005	5.0000e-005	1.9679
Total	6.8000e-004	5.1000e-004	7.0500e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9521	1.9521	5.0000e-005	5.0000e-005	1.9679

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

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					0.0723	0.0000	0.0723	0.0397	0.0000	0.0397	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0560	0.6302	0.2501	7.1000e-004		0.0270	0.0270		0.0248	0.0248	0.0000	62.5643	62.5643	0.0202	0.0000	63.0702
Total	0.0560	0.6302	0.2501	7.1000e-004	0.0723	0.0270	0.0993	0.0397	0.0248	0.0646	0.0000	62.5643	62.5643	0.0202	0.0000	63.0702

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.8000e-004	5.1000e-004	7.0500e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9521	1.9521	5.0000e-005	5.0000e-005	1.9679
Total	6.8000e-004	5.1000e-004	7.0500e-003	2.0000e-005	2.4700e-003	1.0000e-005	2.4800e-003	6.6000e-004	1.0000e-005	6.7000e-004	0.0000	1.9521	1.9521	5.0000e-005	5.0000e-005	1.9679

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0295	0.0000	0.0295	0.0138	0.0000	0.0138	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0117	0.1354	0.0620	1.8000e-004		5.4000e-003	5.4000e-003		4.9700e-003	4.9700e-003	0.0000	15.4055	15.4055	4.9800e-003	0.0000	15.5301
Total	0.0117	0.1354	0.0620	1.8000e-004	0.0295	5.4000e-003	0.0349	0.0138	4.9700e-003	0.0188	0.0000	15.4055	15.4055	4.9800e-003	0.0000	15.5301

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.4000e-004	0.0261	7.0200e-003	1.0000e-004	2.7400e-003	1.9000e-004	2.9300e-003	7.5000e-004	1.8000e-004	9.3000e-004	0.0000	9.7838	9.7838	9.3000e-004	1.5700e-003	10.2741
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.8800e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5206	0.5206	1.0000e-005	1.0000e-005	0.5248
Total	8.2000e-004	0.0263	8.9000e-003	1.1000e-004	3.4000e-003	1.9000e-004	3.5900e-003	9.2000e-004	1.8000e-004	1.1100e-003	0.0000	10.3044	10.3044	9.4000e-004	1.5800e-003	10.7989

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

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					9.4500e-003	0.0000	9.4500e-003	4.4300e-003	0.0000	4.4300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0117	0.1354	0.0620	1.8000e-004		5.4000e-003	5.4000e-003		4.9700e-003	4.9700e-003	0.0000	15.4055	15.4055	4.9800e-003	0.0000	15.5301
Total	0.0117	0.1354	0.0620	1.8000e-004	9.4500e-003	5.4000e-003	0.0149	4.4300e-003	4.9700e-003	9.4000e-003	0.0000	15.4055	15.4055	4.9800e-003	0.0000	15.5301

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	6.4000e-004	0.0261	7.0200e-003	1.0000e-004	2.7400e-003	1.9000e-004	2.9300e-003	7.5000e-004	1.8000e-004	9.3000e-004	0.0000	9.7838	9.7838	9.3000e-004	1.5700e-003	10.2741
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.8000e-004	1.4000e-004	1.8800e-003	1.0000e-005	6.6000e-004	0.0000	6.6000e-004	1.7000e-004	0.0000	1.8000e-004	0.0000	0.5206	0.5206	1.0000e-005	1.0000e-005	0.5248
Total	8.2000e-004	0.0263	8.9000e-003	1.1000e-004	3.4000e-003	1.9000e-004	3.5900e-003	9.2000e-004	1.8000e-004	1.1100e-003	0.0000	10.3044	10.3044	9.4000e-004	1.5800e-003	10.7989

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0309	0.2850	0.2965	4.9000e-004		0.0147	0.0147		0.0138	0.0138	0.0000	42.2127	42.2127	0.0104	0.0000	42.4715
Total	0.0309	0.2850	0.2965	4.9000e-004		0.0147	0.0147		0.0138	0.0138	0.0000	42.2127	42.2127	0.0104	0.0000	42.4715

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9600e-003	0.0559	0.0193	2.3000e-004	7.5000e-003	5.2000e-004	8.0200e-003	2.1600e-003	5.0000e-004	2.6600e-003	0.0000	22.3883	22.3883	1.2800e-003	3.2100e-003	23.3772
Worker	0.0153	0.0115	0.1592	4.8000e-004	0.0558	3.1000e-004	0.0561	0.0148	2.8000e-004	0.0151	0.0000	44.1010	44.1010	1.0900e-003	1.1000e-003	44.4565
Total	0.0173	0.0675	0.1785	7.1000e-004	0.0633	8.3000e-004	0.0641	0.0170	7.8000e-004	0.0178	0.0000	66.4892	66.4892	2.3700e-003	4.3100e-003	67.8337

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

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	0.0309	0.2850	0.2965	4.9000e-004		0.0147	0.0147		0.0138	0.0138	0.0000	42.2127	42.2127	0.0104	0.0000	42.4714
Total	0.0309	0.2850	0.2965	4.9000e-004		0.0147	0.0147		0.0138	0.0138	0.0000	42.2127	42.2127	0.0104	0.0000	42.4714

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.9600e-003	0.0559	0.0193	2.3000e-004	7.5000e-003	5.2000e-004	8.0200e-003	2.1600e-003	5.0000e-004	2.6600e-003	0.0000	22.3883	22.3883	1.2800e-003	3.2100e-003	23.3772
Worker	0.0153	0.0115	0.1592	4.8000e-004	0.0558	3.1000e-004	0.0561	0.0148	2.8000e-004	0.0151	0.0000	44.1010	44.1010	1.0900e-003	1.1000e-003	44.4565
Total	0.0173	0.0675	0.1785	7.1000e-004	0.0633	8.3000e-004	0.0641	0.0170	7.8000e-004	0.0178	0.0000	66.4892	66.4892	2.3700e-003	4.3100e-003	67.8337

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1640	1.5129	1.6964	2.8300e-003		0.0733	0.0733		0.0689	0.0689	0.0000	243.4331	243.4331	0.0593	0.0000	244.9156
Total	0.1640	1.5129	1.6964	2.8300e-003		0.0733	0.0733		0.0689	0.0689	0.0000	243.4331	243.4331	0.0593	0.0000	244.9156

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	6.8000e-003	0.2518	0.1012	1.2300e-003	0.0432	1.2400e-003	0.0445	0.0125	1.1800e-003	0.0137	0.0000	122.9546	122.9546	7.3000e-003	0.0177	128.3986
Worker	0.0828	0.0592	0.8548	2.6700e-003	0.3217	1.6700e-003	0.3234	0.0854	1.5400e-003	0.0870	0.0000	247.6436	247.6436	5.6900e-003	5.9100e-003	249.5464
Total	0.0896	0.3110	0.9559	3.9000e-003	0.3649	2.9100e-003	0.3678	0.0979	2.7200e-003	0.1006	0.0000	370.5982	370.5982	0.0130	0.0236	377.9450

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

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	0.1640	1.5129	1.6964	2.8300e-003		0.0733	0.0733		0.0689	0.0689	0.0000	243.4328	243.4328	0.0593	0.0000	244.9153
Total	0.1640	1.5129	1.6964	2.8300e-003		0.0733	0.0733		0.0689	0.0689	0.0000	243.4328	243.4328	0.0593	0.0000	244.9153

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	6.8000e-003	0.2518	0.1012	1.2300e-003	0.0432	1.2400e-003	0.0445	0.0125	1.1800e-003	0.0137	0.0000	122.9546	122.9546	7.3000e-003	0.0177	128.3986
Worker	0.0828	0.0592	0.8548	2.6700e-003	0.3217	1.6700e-003	0.3234	0.0854	1.5400e-003	0.0870	0.0000	247.6436	247.6436	5.6900e-003	5.9100e-003	249.5464
Total	0.0896	0.3110	0.9559	3.9000e-003	0.3649	2.9100e-003	0.3678	0.0979	2.7200e-003	0.1006	0.0000	370.5982	370.5982	0.0130	0.0236	377.9450

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.9900e-003	0.0952	0.1309	2.0000e-004		4.7300e-003	4.7300e-003		4.3800e-003	4.3800e-003	0.0000	17.5947	17.5947	5.5100e-003	0.0000	17.7324
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.9900e-003	0.0952	0.1309	2.0000e-004		4.7300e-003	4.7300e-003		4.3800e-003	4.3800e-003	0.0000	17.5947	17.5947	5.5100e-003	0.0000	17.7324

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	5.1000e-004	3.6000e-004	5.2500e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.5213	1.5213	3.0000e-005	4.0000e-005	1.5329
Total	5.1000e-004	3.6000e-004	5.2500e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.5213	1.5213	3.0000e-005	4.0000e-005	1.5329

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	9.9900e-003	0.0952	0.1309	2.0000e-004		4.7300e-003	4.7300e-003		4.3800e-003	4.3800e-003	0.0000	17.5946	17.5946	5.5100e-003	0.0000	17.7324
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.9900e-003	0.0952	0.1309	2.0000e-004		4.7300e-003	4.7300e-003		4.3800e-003	4.3800e-003	0.0000	17.5946	17.5946	5.5100e-003	0.0000	17.7324

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	5.1000e-004	3.6000e-004	5.2500e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.5213	1.5213	3.0000e-005	4.0000e-005	1.5329
Total	5.1000e-004	3.6000e-004	5.2500e-003	2.0000e-005	1.9800e-003	1.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.3000e-004	0.0000	1.5213	1.5213	3.0000e-005	4.0000e-005	1.5329

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9073					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1900e-003	0.0217	0.0302	5.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003	0.0000	4.2554	4.2554	2.5000e-004	0.0000	4.2618
Total	0.9105	0.0217	0.0302	5.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003	0.0000	4.2554	4.2554	2.5000e-004	0.0000	4.2618

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	2.1200e-003	1.5100e-003	0.0219	7.0000e-005	8.2300e-003	4.0000e-005	8.2800e-003	2.1900e-003	4.0000e-005	2.2300e-003	0.0000	6.3386	6.3386	1.5000e-004	1.5000e-004	6.3873
Total	2.1200e-003	1.5100e-003	0.0219	7.0000e-005	8.2300e-003	4.0000e-005	8.2800e-003	2.1900e-003	4.0000e-005	2.2300e-003	0.0000	6.3386	6.3386	1.5000e-004	1.5000e-004	6.3873

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.9073					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1900e-003	0.0217	0.0302	5.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003	0.0000	4.2554	4.2554	2.5000e-004	0.0000	4.2618
Total	0.9105	0.0217	0.0302	5.0000e-005		1.1800e-003	1.1800e-003		1.1800e-003	1.1800e-003	0.0000	4.2554	4.2554	2.5000e-004	0.0000	4.2618

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	2.1200e-003	1.5100e-003	0.0219	7.0000e-005	8.2300e-003	4.0000e-005	8.2800e-003	2.1900e-003	4.0000e-005	2.2300e-003	0.0000	6.3386	6.3386	1.5000e-004	1.5000e-004	6.3873
Total	2.1200e-003	1.5100e-003	0.0219	7.0000e-005	8.2300e-003	4.0000e-005	8.2800e-003	2.1900e-003	4.0000e-005	2.2300e-003	0.0000	6.3386	6.3386	1.5000e-004	1.5000e-004	6.3873

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	tons/yr										MT/yr					
Mitigated	0.8787	0.9521	8.5532	0.0189	2.0185	0.0133	2.0318	0.5388	0.0123	0.5511	0.0000	1,765.2206	1,765.2206	0.1144	0.0772	1,791.0798
Unmitigated	0.8787	0.9521	8.5532	0.0189	2.0185	0.0133	2.0318	0.5388	0.0123	0.5511	0.0000	1,765.2206	1,765.2206	0.1144	0.0772	1,791.0798

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,352.70	1,220.40	1015.20	4,393,042	4,393,042
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	673.47	734.86	856.38	965,388	965,388
Recreational Swimming Pool	0.00	0.00	0.00		
Total	2,026.17	1,955.26	1,871.58	5,358,430	5,358,430

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
City Park	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Enclosed Parking with Elevator	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
High Turnover (Sit Down Restaurant)	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Recreational Swimming Pool	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	436.4829	436.4829	0.0368	4.4700e-003	438.7346
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	436.4829	436.4829	0.0368	4.4700e-003	438.7346
Natural Gas Mitigated	0.0260	0.2274	0.1335	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.2193	257.2193	4.9300e-003	4.7200e-003	258.7478
Natural Gas Unmitigated	0.0260	0.2274	0.1335	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.2193	257.2193	4.9300e-003	4.7200e-003	258.7478

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.0104e+006	0.0162	0.1387	0.0590	8.9000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.6463	160.6463	3.0800e-003	2.9500e-003	161.6009
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	1.80971e+006	9.7600e-003	0.0887	0.0745	5.3000e-004		6.7400e-003	6.7400e-003		6.7400e-003	6.7400e-003	0.0000	96.5730	96.5730	1.8500e-003	1.7700e-003	97.1469
Recreational Swimming Pool	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
Total		0.0260	0.2274	0.1336	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.2193	257.2193	4.9300e-003	4.7200e-003	258.7478

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas 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					
Apartments Mid Rise	3.0104e+006	0.0162	0.1387	0.0590	8.9000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.6463	160.6463	3.0800e-003	2.9500e-003	161.6009
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	1.80971e+006	9.7600e-003	0.0887	0.0745	5.3000e-004		6.7400e-003	6.7400e-003		6.7400e-003	6.7400e-003	0.0000	96.5730	96.5730	1.8500e-003	1.7700e-003	97.1469
Recreational Swimming Pool	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
Total		0.0260	0.2274	0.1336	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.2193	257.2193	4.9300e-003	4.7200e-003	258.7478

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.03513e+006	183.5764	0.0155	1.8800e-003	184.5235
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	1.17722e+006	208.7740	0.0176	2.1400e-003	209.8510
High Turnover (Sit Down Restaurant)	248850	44.1324	3.7200e-003	4.5000e-004	44.3601
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		436.4829	0.0368	4.4700e-003	438.7346

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.03513e+006	183.5764	0.0155	1.8800e-003	184.5235
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	1.17722e+006	208.7740	0.0176	2.1400e-003	209.8510
High Turnover (Sit Down Restaurant)	248850	44.1324	3.7200e-003	4.5000e-004	44.3601
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		436.4829	0.0368	4.4700e-003	438.7346

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1903	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725
Unmitigated	1.1903	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725

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	0.0907					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0151					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0846	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725
Total	1.1904	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0907					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0151					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0846	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725
Total	1.1904	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	77.2445	0.6708	0.0164	98.9096
Unmitigated	77.2445	0.6708	0.0164	98.9096

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.5916 / 11.0903	68.0552	0.5785	0.0142	86.7415
City Park	0 / 0.357444	0.7043	6.0000e-005	1.0000e-005	0.7079
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.12474 / 0.135621	5.8478	0.0697	1.6900e-003	8.0925
Recreational Swimming Pool	0.687835 / 0.421576	2.6372	0.0226	5.5000e-004	3.3677
Total		77.2445	0.6709	0.0164	98.9096

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.5916 / 11.0903	68.0552	0.5785	0.0142	86.7415
City Park	0 / 0.357444	0.7043	6.0000e-005	1.0000e-005	0.7079
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.12474 / 0.135621	5.8478	0.0697	1.6900e-003	8.0925
Recreational Swimming Pool	0.687835 / 0.421576	2.6372	0.0226	5.5000e-004	3.3677
Total		77.2445	0.6709	0.0164	98.9096

8.0 Waste Detail

8.1 Mitigation Measures Waste

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	55.5830	3.2849	0.0000	137.7045
Unmitigated	55.5830	3.2849	0.0000	137.7045

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	124.2	25.2115	1.4900	0.0000	62.4604
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	83.3	16.9092	0.9993	0.0000	41.8917
Recreational Swimming Pool	66.29	13.4563	0.7952	0.0000	33.3373
Total		55.5830	3.2849	0.0000	137.7045

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	124.2	25.2115	1.4900	0.0000	62.4604
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	83.3	16.9092	0.9993	0.0000	41.8917
Recreational Swimming Pool	66.29	13.4563	0.7952	0.0000	33.3373
Total		55.5830	3.2849	0.0000	137.7045

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

Slater Avenue Mixed Use Development - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Slater Avenue Mixed Use Development

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	541.00	Space	0.46	216,400.00	0
City Park	0.30	Acre	0.30	13,068.00	0
High Turnover (Sit Down Restaurant)	7.00	1000sqft	0.16	7,000.00	0
Recreational Swimming Pool	11.63	1000sqft	0.27	11,627.00	0
Apartments Mid Rise	270.00	Dwelling Unit	2.15	270,000.00	772

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acres based on project site plan.

Construction Phase - Schedule from client

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Assumed 8hr work day.

Off-road Equipment - Assumed 8hr work day.

Off-road Equipment - Assumed 8hr work day.

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading - Acres based on lot size (3x lot acres)

Trips and VMT -

Vehicle Trips - Trip Rate Based on Project Trip Generation (EPD Solutions 2021)

Woodstoves - No woodstoves and fireplaces proposed.

Construction Off-road Equipment Mitigation - [http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-\(pm\)-2.5-significance-thresholds-and-calculation-methodology/pm2-5-working-group-meeting-2-overhead-presentation.ppt](http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/pm2-5-working-group-meeting-2-overhead-presentation.ppt)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	68
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	68
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	25.00
tblConstructionPhase	NumDays	5.00	25.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	229.50	0.00
tblFireplaces	NumberNoFireplace	27.00	270.00
tblFireplaces	NumberWood	13.50	0.00
tblGrading	AcresOfGrading	20.00	10.00
tblGrading	AcresOfGrading	87.50	0.00
tblGrading	MaterialExported	0.00	2,550.00
tblLandUse	LandUseSquareFeet	11,630.00	11,627.00
tblLandUse	LotAcreage	4.87	0.46
tblLandUse	LotAcreage	7.11	2.15
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	ST_TR	4.91	4.52
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	122.40	104.98
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	4.09	3.76
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	142.64	122.34
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	5.44	5.01
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	112.18	96.21
tblVehicleTrips	WD_TR	28.82	0.00
tblWoodstoves	NumberCatalytic	13.50	0.00
tblWoodstoves	NumberNoncatalytic	13.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.5331	50.4488	28.3943	0.0712	18.2675	2.1600	20.4275	9.9840	1.9872	11.9713	0.0000	7,151.983 4	7,151.983 4	1.7886	0.4351	7,260.523 4
2023	73.0058	18.4299	27.4826	0.0696	3.7897	0.7778	4.5675	1.0152	0.7307	1.7458	0.0000	7,006.577 7	7,006.577 7	0.8118	0.2599	7,104.324 4
Maximum	73.0058	50.4488	28.3943	0.0712	18.2675	2.1600	20.4275	9.9840	1.9872	11.9713	0.0000	7,151.983 4	7,151.983 4	1.7886	0.4351	7,260.523 4

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.5331	50.4488	28.3943	0.0712	5.9824	2.1600	8.1424	3.2312	1.9872	5.2184	0.0000	7,151.983 4	7,151.983 4	1.7886	0.4351	7,260.523 4
2023	73.0058	18.4299	27.4826	0.0696	3.7897	0.7778	4.5675	1.0152	0.7307	1.7458	0.0000	7,006.577 7	7,006.577 7	0.8118	0.2599	7,104.324 4
Maximum	73.0058	50.4488	28.3943	0.0712	5.9824	2.1600	8.1424	3.2312	1.9872	5.2184	0.0000	7,151.983 4	7,151.983 4	1.7886	0.4351	7,260.523 4

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	55.70	0.00	49.15	61.39	0.00	49.23	0.00	0.00	0.00	0.00	0.00	0.00

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Energy	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
Mobile	5.4636	5.2233	51.0581	0.1157	12.1987	0.0791	12.2779	3.2515	0.0735	3.3250		11,903.4203	11,903.4203	0.7323	0.4849	12,066.2399
Total	12.3416	6.7268	74.1273	0.1247	12.1987	0.3010	12.4998	3.2515	0.2954	3.5469	0.0000	13,497.2724	13,497.2724	0.8010	0.5134	13,670.2966

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	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Energy	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
Mobile	5.4636	5.2233	51.0581	0.1157	12.1987	0.0791	12.2779	3.2515	0.0735	3.3250		11,903.4203	11,903.4203	0.7323	0.4849	12,066.2399
Total	12.3416	6.7268	74.1273	0.1247	12.1987	0.3010	12.4998	3.2515	0.2954	3.5469	0.0000	13,497.2724	13,497.2724	0.8010	0.5134	13,670.2966

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Demolition	Demolition	9/1/2022	9/28/2022	5	20	
2	Site Preparation	Site Preparation	9/29/2022	11/2/2022	5	25	
3	Grading	Grading	11/3/2022	11/14/2022	5	8	
4	Building Construction	Building Construction	11/15/2022	10/2/2023	5	230	
5	Paving	Paving	10/3/2023	10/26/2023	5	18	
6	Architectural Coating	Architectural Coating	10/27/2023	11/30/2023	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0.46

Residential Indoor: 546,750; Residential Outdoor: 182,250; Non-Residential Indoor: 10,500; Non-Residential Outdoor: 3,500; Striped Parking Area: 12,984 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	3	8.00	212	0.43
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	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	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Demolition	6	15.00	0.00	719.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	319.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	299.00	70.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	60.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7785	0.0000	7.7785	1.1777	0.0000	1.1777			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	7.7785	1.2427	9.0212	1.1777	1.1553	2.3330		3,746.781 2	3,746.781 2	1.0524		3,773.092 0

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1456	5.5971	1.5722	0.0215	0.6270	0.0424	0.6693	0.1717	0.0405	0.2122		2,430.5666	2,430.5666	0.2317	0.3893	2,552.3665
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	0.0451	0.0303	0.4936	1.4600e-003	0.1677	9.0000e-004	0.1686	0.0445	8.3000e-004	0.0453		148.6620	148.6620	3.4700e-003	3.3200e-003	149.7380
Total	0.1908	5.6274	2.0658	0.0229	0.7947	0.0433	0.8379	0.2162	0.0414	0.2575		2,579.2285	2,579.2285	0.2352	0.3926	2,702.1045

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4891	0.0000	2.4891	0.3769	0.0000	0.3769			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920
Total	2.6392	25.7194	20.5941	0.0388	2.4891	1.2427	3.7318	0.3769	1.1553	1.5321	0.0000	3,746.7812	3,746.7812	1.0524		3,773.0920

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1456	5.5971	1.5722	0.0215	0.6270	0.0424	0.6693	0.1717	0.0405	0.2122		2,430.5666	2,430.5666	0.2317	0.3893	2,552.3665
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	0.0451	0.0303	0.4936	1.4600e-003	0.1677	9.0000e-004	0.1686	0.0445	8.3000e-004	0.0453		148.6620	148.6620	3.4700e-003	3.3200e-003	149.7380
Total	0.1908	5.6274	2.0658	0.0229	0.7947	0.0433	0.8379	0.2162	0.0414	0.2575		2,579.2285	2,579.2285	0.2352	0.3926	2,702.1045

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.4790	50.4124	20.0053	0.0570		2.1590	2.1590		1.9862	1.9862		5,517.2355	5,517.2355	1.7844		5,561.8451
Total	4.4790	50.4124	20.0053	0.0570	18.0663	2.1590	20.2252	9.9307	1.9862	11.9169		5,517.2355	5,517.2355	1.7844		5,561.8451

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0542	0.0364	0.5924	1.7500e-003	0.2012	1.0900e-003	0.2023	0.0534	1.0000e-003	0.0544		178.3944	178.3944	4.1700e-003	3.9800e-003	179.6856
Total	0.0542	0.0364	0.5924	1.7500e-003	0.2012	1.0900e-003	0.2023	0.0534	1.0000e-003	0.0544		178.3944	178.3944	4.1700e-003	3.9800e-003	179.6856

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					5.7812	0.0000	5.7812	3.1778	0.0000	3.1778			0.0000			0.0000
Off-Road	4.4790	50.4124	20.0053	0.0570		2.1590	2.1590		1.9862	1.9862	0.0000	5,517.2355	5,517.2355	1.7844		5,561.8451
Total	4.4790	50.4124	20.0053	0.0570	5.7812	2.1590	7.9402	3.1778	1.9862	5.1641	0.0000	5,517.2355	5,517.2355	1.7844		5,561.8451

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0542	0.0364	0.5924	1.7500e-003	0.2012	1.0900e-003	0.2023	0.0534	1.0000e-003	0.0544		178.3944	178.3944	4.1700e-003	3.9800e-003	179.6856
Total	0.0542	0.0364	0.5924	1.7500e-003	0.2012	1.0900e-003	0.2023	0.0534	1.0000e-003	0.0544		178.3944	178.3944	4.1700e-003	3.9800e-003	179.6856

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.3838	0.0000	7.3838	3.4588	0.0000	3.4588			0.0000			0.0000
Off-Road	2.9303	33.8518	15.5033	0.0438		1.3506	1.3506		1.2426	1.2426		4,245.4266	4,245.4266	1.3731		4,279.7531
Total	2.9303	33.8518	15.5033	0.0438	7.3838	1.3506	8.7344	3.4588	1.2426	4.7014		4,245.4266	4,245.4266	1.3731		4,279.7531

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1615	6.2082	1.7439	0.0238	0.6954	0.0470	0.7424	0.1905	0.0449	0.2354		2,695.934 4	2,695.934 4	0.2570	0.4318	2,831.032 4
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	0.0451	0.0303	0.4936	1.4600e-003	0.1677	9.0000e-004	0.1686	0.0445	8.3000e-004	0.0453		148.6620	148.6620	3.4700e-003	3.3200e-003	149.7380
Total	0.2067	6.2385	2.2375	0.0253	0.8631	0.0479	0.9110	0.2349	0.0458	0.2807		2,844.596 4	2,844.596 4	0.2605	0.4351	2,980.770 3

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3628	0.0000	2.3628	1.1068	0.0000	1.1068			0.0000			0.0000
Off-Road	2.9303	33.8518	15.5033	0.0438		1.3506	1.3506		1.2426	1.2426	0.0000	4,245.426 6	4,245.426 6	1.3731		4,279.753 0
Total	2.9303	33.8518	15.5033	0.0438	2.3628	1.3506	3.7134	1.1068	1.2426	2.3494	0.0000	4,245.426 6	4,245.426 6	1.3731		4,279.753 0

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1615	6.2082	1.7439	0.0238	0.6954	0.0470	0.7424	0.1905	0.0449	0.2354		2,695.934 4	2,695.934 4	0.2570	0.4318	2,831.032 4
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	0.0451	0.0303	0.4936	1.4600e-003	0.1677	9.0000e-004	0.1686	0.0445	8.3000e-004	0.0453		148.6620	148.6620	3.4700e-003	3.3200e-003	149.7380
Total	0.2067	6.2385	2.2375	0.0253	0.8631	0.0479	0.9110	0.2349	0.0458	0.2807		2,844.596 4	2,844.596 4	0.2605	0.4351	2,980.770 3

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.152 0	2,737.152 0	0.6711		2,753.928 8
Total	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.152 0	2,737.152 0	0.6711		2,753.928 8

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1164	3.1409	1.1152	0.0133	0.4476	0.0306	0.4782	0.1288	0.0292	0.1581		1,451.503 0	1,451.503 0	0.0832	0.2080	1,515.570 2
Worker	0.8996	0.6045	9.8399	0.0291	3.3421	0.0180	3.3602	0.8863	0.0166	0.9030		2,963.328 4	2,963.328 4	0.0693	0.0662	2,984.777 1
Total	1.0160	3.7454	10.9551	0.0424	3.7897	0.0486	3.8383	1.0152	0.0458	1.0610		4,414.831 5	4,414.831 5	0.1524	0.2742	4,500.347 4

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	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.152 0	2,737.152 0	0.6711		2,753.928 8
Total	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.152 0	2,737.152 0	0.6711		2,753.928 8

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1164	3.1409	1.1152	0.0133	0.4476	0.0306	0.4782	0.1288	0.0292	0.1581		1,451.503 0	1,451.503 0	0.0832	0.2080	1,515.570 2
Worker	0.8996	0.6045	9.8399	0.0291	3.3421	0.0180	3.3602	0.8863	0.0166	0.9030		2,963.328 4	2,963.328 4	0.0693	0.0662	2,984.777 1
Total	1.0160	3.7454	10.9551	0.0424	3.7897	0.0486	3.8383	1.0152	0.0458	1.0610		4,414.831 5	4,414.831 5	0.1524	0.2742	4,500.347 4

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.153 5	2,738.153 5	0.6670		2,754.828 8
Total	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.153 5	2,738.153 5	0.6670		2,754.828 8

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0707	2.4532	1.0171	0.0126	0.4476	0.0126	0.4602	0.1288	0.0120	0.1409		1,382.1457	1,382.1457	0.0822	0.1983	1,443.2996
Worker	0.8425	0.5390	9.1555	0.0282	3.3421	0.0171	3.3592	0.8863	0.0157	0.9021		2,886.2785	2,886.2785	0.0627	0.0616	2,906.1960
Total	0.9132	2.9922	10.1726	0.0408	3.7897	0.0297	3.8194	1.0152	0.0278	1.0429		4,268.4242	4,268.4242	0.1448	0.2599	4,349.4956

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	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029	0.0000	2,738.1535	2,738.1535	0.6670		2,754.8288
Total	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029	0.0000	2,738.1535	2,738.1535	0.6670		2,754.8288

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0707	2.4532	1.0171	0.0126	0.4476	0.0126	0.4602	0.1288	0.0120	0.1409		1,382.1457	1,382.1457	0.0822	0.1983	1,443.2996
Worker	0.8425	0.5390	9.1555	0.0282	3.3421	0.0171	3.3592	0.8863	0.0157	0.9021		2,886.2785	2,886.2785	0.0627	0.0616	2,906.1960
Total	0.9132	2.9922	10.1726	0.0408	3.7897	0.0297	3.8194	1.0152	0.0278	1.0429		4,268.4242	4,268.4242	0.1448	0.2599	4,349.4956

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1097	10.5809	14.5491	0.0226		0.5261	0.5261		0.4863	0.4863		2,154.9759	2,154.9759	0.6748		2,171.8453
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1097	10.5809	14.5491	0.0226		0.5261	0.5261		0.4863	0.4863		2,154.9759	2,154.9759	0.6748		2,171.8453

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0564	0.0361	0.6124	1.8900e-003	0.2236	1.1400e-003	0.2247	0.0593	1.0500e-003	0.0603		193.0621	193.0621	4.1900e-003	4.1200e-003	194.3944
Total	0.0564	0.0361	0.6124	1.8900e-003	0.2236	1.1400e-003	0.2247	0.0593	1.0500e-003	0.0603		193.0621	193.0621	4.1900e-003	4.1200e-003	194.3944

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	1.1097	10.5809	14.5491	0.0226		0.5261	0.5261		0.4863	0.4863	0.0000	2,154.9759	2,154.9759	0.6748		2,171.8453
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1097	10.5809	14.5491	0.0226		0.5261	0.5261		0.4863	0.4863	0.0000	2,154.9759	2,154.9759	0.6748		2,171.8453

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0564	0.0361	0.6124	1.8900e-003	0.2236	1.1400e-003	0.2247	0.0593	1.0500e-003	0.0603		193.0621	193.0621	4.1900e-003	4.1200e-003	194.3944
Total	0.0564	0.0361	0.6124	1.8900e-003	0.2236	1.1400e-003	0.2247	0.0593	1.0500e-003	0.0603		193.0621	193.0621	4.1900e-003	4.1200e-003	194.3944

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.5811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
Total	72.8367	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1691	0.1082	1.8372	5.6600e-003	0.6707	3.4300e-003	0.6741	0.1779	3.1600e-003	0.1810		579.1863	579.1863	0.0126	0.0124	583.1832
Total	0.1691	0.1082	1.8372	5.6600e-003	0.6707	3.4300e-003	0.6741	0.1779	3.1600e-003	0.1810		579.1863	579.1863	0.0126	0.0124	583.1832

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.5811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
Total	72.8367	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1691	0.1082	1.8372	5.6600e-003	0.6707	3.4300e-003	0.6741	0.1779	3.1600e-003	0.1810		579.1863	579.1863	0.0126	0.0124	583.1832
Total	0.1691	0.1082	1.8372	5.6600e-003	0.6707	3.4300e-003	0.6741	0.1779	3.1600e-003	0.1810		579.1863	579.1863	0.0126	0.0124	583.1832

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4636	5.2233	51.0581	0.1157	12.1987	0.0791	12.2779	3.2515	0.0735	3.3250		11,903.4203	11,903.4203	0.7323	0.4849	12,066.2399
Unmitigated	5.4636	5.2233	51.0581	0.1157	12.1987	0.0791	12.2779	3.2515	0.0735	3.3250		11,903.4203	11,903.4203	0.7323	0.4849	12,066.2399

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,352.70	1,220.40	1015.20	4,393,042	4,393,042
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	673.47	734.86	856.38	965,388	965,388
Recreational Swimming Pool	0.00	0.00	0.00		
Total	2,026.17	1,955.26	1,871.58	5,358,430	5,358,430

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
City Park	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Enclosed Parking with Elevator	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
High Turnover (Sit Down Restaurant)	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Recreational Swimming Pool	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

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	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
NaturalGas Unmitigated	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	8247.66	0.0890	0.7601	0.3234	4.8500e-003		0.0615	0.0615		0.0615	0.0615		970.3134	970.3134	0.0186	0.0178	976.0795
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	4958.11	0.0535	0.4861	0.4083	2.9200e-003		0.0369	0.0369		0.0369	0.0369		583.3070	583.3070	0.0112	0.0107	586.7733
Recreational Swimming Pool	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
Total		0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	8.24766	0.0890	0.7601	0.3234	4.8500e-003		0.0615	0.0615		0.0615	0.0615		970.3134	970.3134	0.0186	0.0178	976.0795
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	4.95811	0.0535	0.4861	0.4083	2.9200e-003		0.0369	0.0369		0.0369	0.0369		583.3070	583.3070	0.0112	0.0107	586.7733
Recreational Swimming Pool	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
Total		0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Unmitigated	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

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	0.4971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6765	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235		40.2317	40.2317	0.0389		41.2039
Total	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6765	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235		40.2317	40.2317	0.0389		41.2039
Total	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Mixed Use Development - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Slater Avenue Mixed Use Development

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	541.00	Space	0.46	216,400.00	0
City Park	0.30	Acre	0.30	13,068.00	0
High Turnover (Sit Down Restaurant)	7.00	1000sqft	0.16	7,000.00	0
Recreational Swimming Pool	11.63	1000sqft	0.27	11,627.00	0
Apartments Mid Rise	270.00	Dwelling Unit	2.15	270,000.00	772

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Lot Acres based on project site plan.

Construction Phase - Schedule from client

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes

Off-road Equipment - Assumed 8hr work day.

Off-road Equipment - Assumed 8hr work day.

Off-road Equipment - Assumed 8hr work day.

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading - Acres based on lot size (3x lot acres)

Trips and VMT -

Vehicle Trips - Trip Rate Based on Project Trip Generation (EPD Solutions 2021)

Woodstoves - No woodstoves and fireplaces proposed.

Construction Off-road Equipment Mitigation - [http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-\(pm\)-2.5-significance-thresholds-and-calculation-methodology/pm2-5-working-group-meeting-2-overhead-presentation.ppt](http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/pm2-5-working-group-meeting-2-overhead-presentation.ppt)

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	WaterExposedAreaPM10PercentReduction	61	68
tblConstDustMitigation	WaterExposedAreaPM25PercentReduction	61	68
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	18.00	25.00
tblConstructionPhase	NumDays	5.00	25.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	229.50	0.00
tblFireplaces	NumberNoFireplace	27.00	270.00
tblFireplaces	NumberWood	13.50	0.00
tblGrading	AcresOfGrading	20.00	10.00
tblGrading	AcresOfGrading	87.50	0.00
tblGrading	MaterialExported	0.00	2,550.00
tblLandUse	LandUseSquareFeet	11,630.00	11,627.00
tblLandUse	LotAcreage	4.87	0.46
tblLandUse	LotAcreage	7.11	2.15
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	UsageHours	6.00	8.00

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblVehicleTrips	ST_TR	4.91	4.52
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	122.40	104.98
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	4.09	3.76
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	142.64	122.34
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	5.44	5.01
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	112.18	96.21
tblVehicleTrips	WD_TR	28.82	0.00
tblWoodstoves	NumberCatalytic	13.50	0.00
tblWoodstoves	NumberNoncatalytic	13.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.5380	50.4523	27.7510	0.0698	18.2675	2.1600	20.4275	9.9840	1.9872	11.9713	0.0000	7,083.5360	7,083.5360	1.7887	0.4354	7,254.1299
2023	73.0215	18.5922	26.8886	0.0683	3.7897	0.7778	4.5676	1.0152	0.7308	1.7459	0.0000	6,870.6098	6,870.6098	0.8132	0.2643	6,969.6963
Maximum	73.0215	50.4523	27.7510	0.0698	18.2675	2.1600	20.4275	9.9840	1.9872	11.9713	0.0000	7,083.5360	7,083.5360	1.7887	0.4354	7,254.1299

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	4.5380	50.4523	27.7510	0.0698	5.9824	2.1600	8.1424	3.2312	1.9872	5.2184	0.0000	7,083.5360	7,083.5360	1.7887	0.4354	7,254.1299
2023	73.0215	18.5922	26.8886	0.0683	3.7897	0.7778	4.5676	1.0152	0.7308	1.7459	0.0000	6,870.6098	6,870.6098	0.8132	0.2643	6,969.6963
Maximum	73.0215	50.4523	27.7510	0.0698	5.9824	2.1600	8.1424	3.2312	1.9872	5.2184	0.0000	7,083.5360	7,083.5360	1.7887	0.4354	7,254.1299

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	55.70	0.00	49.15	61.39	0.00	49.23	0.00	0.00	0.00	0.00	0.00	0.00

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Energy	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
Mobile	5.4200	5.6131	50.7878	0.1113	12.1987	0.0792	12.2779	3.2515	0.0736	3.3250		11,450.3738	11,450.3738	0.7607	0.5060	11,620.1750
Total	12.2980	7.1166	73.8570	0.1203	12.1987	0.3011	12.4998	3.2515	0.2955	3.5469	0.0000	13,044.2259	13,044.2259	0.8294	0.5345	13,224.2318

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	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Energy	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
Mobile	5.4200	5.6131	50.7878	0.1113	12.1987	0.0792	12.2779	3.2515	0.0736	3.3250		11,450.3738	11,450.3738	0.7607	0.5060	11,620.1750
Total	12.2980	7.1166	73.8570	0.1203	12.1987	0.3011	12.4998	3.2515	0.2955	3.5469	0.0000	13,044.2259	13,044.2259	0.8294	0.5345	13,224.2318

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Demolition	Demolition	9/1/2022	9/28/2022	5	20	
2	Site Preparation	Site Preparation	9/29/2022	11/2/2022	5	25	
3	Grading	Grading	11/3/2022	11/14/2022	5	8	
4	Building Construction	Building Construction	11/15/2022	10/2/2023	5	230	
5	Paving	Paving	10/3/2023	10/26/2023	5	18	
6	Architectural Coating	Architectural Coating	10/27/2023	11/30/2023	5	25	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 10

Acres of Paving: 0.46

Residential Indoor: 546,750; Residential Outdoor: 182,250; Non-Residential Indoor: 10,500; Non-Residential Outdoor: 3,500; Striped Parking Area: 12,984 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Crawler Tractors	4	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	3	8.00	212	0.43
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	0	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	Cement and Mortar Mixers	2	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
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
Demolition	6	15.00	0.00	719.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	319.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	299.00	70.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	60.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.7785	0.0000	7.7785	1.1777	0.0000	1.1777			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553		3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	7.7785	1.2427	9.0212	1.1777	1.1553	2.3330		3,746.781 2	3,746.781 2	1.0524		3,773.092 0

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1421	5.8170	1.5952	0.0215	0.6270	0.0424	0.6694	0.1717	0.0406	0.2123		2,431.144 1	2,431.144 1	0.2315	0.3894	2,552.969 3
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	0.0492	0.0333	0.4594	1.3900e-003	0.1677	9.0000e-004	0.1686	0.0445	8.3000e-004	0.0453		141.5344	141.5344	3.5500e-003	3.5300e-003	142.6759
Total	0.1913	5.8503	2.0546	0.0229	0.7947	0.0433	0.8380	0.2162	0.0414	0.2576		2,572.678 4	2,572.678 4	0.2350	0.3929	2,695.645 2

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.4891	0.0000	2.4891	0.3769	0.0000	0.3769			0.0000			0.0000
Off-Road	2.6392	25.7194	20.5941	0.0388		1.2427	1.2427		1.1553	1.1553	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0
Total	2.6392	25.7194	20.5941	0.0388	2.4891	1.2427	3.7318	0.3769	1.1553	1.5321	0.0000	3,746.781 2	3,746.781 2	1.0524		3,773.092 0

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1421	5.8170	1.5952	0.0215	0.6270	0.0424	0.6694	0.1717	0.0406	0.2123		2,431.144 1	2,431.144 1	0.2315	0.3894	2,552.969 3
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	0.0492	0.0333	0.4594	1.3900e-003	0.1677	9.0000e-004	0.1686	0.0445	8.3000e-004	0.0453		141.5344	141.5344	3.5500e-003	3.5300e-003	142.6759
Total	0.1913	5.8503	2.0546	0.0229	0.7947	0.0433	0.8380	0.2162	0.0414	0.2576		2,572.678 4	2,572.678 4	0.2350	0.3929	2,695.645 2

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	4.4790	50.4124	20.0053	0.0570		2.1590	2.1590		1.9862	1.9862		5,517.235 5	5,517.235 5	1.7844		5,561.845 1
Total	4.4790	50.4124	20.0053	0.0570	18.0663	2.1590	20.2252	9.9307	1.9862	11.9169		5,517.235 5	5,517.235 5	1.7844		5,561.845 1

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0590	0.0400	0.5512	1.6700e-003	0.2012	1.0900e-003	0.2023	0.0534	1.0000e-003	0.0544		169.8412	169.8412	4.2600e-003	4.2400e-003	171.2111
Total	0.0590	0.0400	0.5512	1.6700e-003	0.2012	1.0900e-003	0.2023	0.0534	1.0000e-003	0.0544		169.8412	169.8412	4.2600e-003	4.2400e-003	171.2111

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					5.7812	0.0000	5.7812	3.1778	0.0000	3.1778			0.0000			0.0000
Off-Road	4.4790	50.4124	20.0053	0.0570		2.1590	2.1590		1.9862	1.9862	0.0000	5,517.2355	5,517.2355	1.7844		5,561.8451
Total	4.4790	50.4124	20.0053	0.0570	5.7812	2.1590	7.9402	3.1778	1.9862	5.1641	0.0000	5,517.2355	5,517.2355	1.7844		5,561.8451

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0590	0.0400	0.5512	1.6700e-003	0.2012	1.0900e-003	0.2023	0.0534	1.0000e-003	0.0544		169.8412	169.8412	4.2600e-003	4.2400e-003	171.2111
Total	0.0590	0.0400	0.5512	1.6700e-003	0.2012	1.0900e-003	0.2023	0.0534	1.0000e-003	0.0544		169.8412	169.8412	4.2600e-003	4.2400e-003	171.2111

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.3838	0.0000	7.3838	3.4588	0.0000	3.4588			0.0000			0.0000
Off-Road	2.9303	33.8518	15.5033	0.0438		1.3506	1.3506		1.2426	1.2426		4,245.4266	4,245.4266	1.3731		4,279.7531
Total	2.9303	33.8518	15.5033	0.0438	7.3838	1.3506	8.7344	3.4588	1.2426	4.7014		4,245.4266	4,245.4266	1.3731		4,279.7531

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1576	6.4521	1.7694	0.0238	0.6954	0.0471	0.7425	0.1905	0.0450	0.2355		2,696.5750	2,696.5750	0.2567	0.4319	2,831.7010
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	0.0492	0.0333	0.4594	1.3900e-003	0.1677	9.0000e-004	0.1686	0.0445	8.3000e-004	0.0453		141.5344	141.5344	3.5500e-003	3.5300e-003	142.6759
Total	0.2068	6.4854	2.2287	0.0252	0.8631	0.0480	0.9111	0.2349	0.0459	0.2808		2,838.1093	2,838.1093	0.2603	0.4354	2,974.3769

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.3628	0.0000	2.3628	1.1068	0.0000	1.1068			0.0000			0.0000
Off-Road	2.9303	33.8518	15.5033	0.0438		1.3506	1.3506		1.2426	1.2426	0.0000	4,245.4266	4,245.4266	1.3731		4,279.7530
Total	2.9303	33.8518	15.5033	0.0438	2.3628	1.3506	3.7134	1.1068	1.2426	2.3494	0.0000	4,245.4266	4,245.4266	1.3731		4,279.7530

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1576	6.4521	1.7694	0.0238	0.6954	0.0471	0.7425	0.1905	0.0450	0.2355		2,696.5750	2,696.5750	0.2567	0.4319	2,831.7010
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	0.0492	0.0333	0.4594	1.3900e-003	0.1677	9.0000e-004	0.1686	0.0445	8.3000e-004	0.0453		141.5344	141.5344	3.5500e-003	3.5300e-003	142.6759
Total	0.2068	6.4854	2.2287	0.0252	0.8631	0.0480	0.9111	0.2349	0.0459	0.2808		2,838.1093	2,838.1093	0.2603	0.4354	2,974.3769

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.1520	2,737.1520	0.6711		2,753.9288
Total	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122		2,737.1520	2,737.1520	0.6711		2,753.9288

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1148	3.2640	1.1552	0.0133	0.4476	0.0307	0.4783	0.1288	0.0293	0.1582		1,451.9584	1,451.9584	0.0830	0.2082	1,516.0852
Worker	0.9799	0.6639	9.1566	0.0277	3.3421	0.0180	3.3602	0.8863	0.0166	0.9030		2,821.2514	2,821.2514	0.0708	0.0704	2,844.0058
Total	1.0947	3.9279	10.3118	0.0410	3.7897	0.0487	3.8384	1.0152	0.0459	1.0611		4,273.2097	4,273.2097	0.1538	0.2787	4,360.0910

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	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288
Total	1.8146	16.7670	17.4392	0.0288		0.8645	0.8645		0.8122	0.8122	0.0000	2,737.1520	2,737.1520	0.6711		2,753.9288

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1148	3.2640	1.1552	0.0133	0.4476	0.0307	0.4783	0.1288	0.0293	0.1582		1,451.958 4	1,451.958 4	0.0830	0.2082	1,516.085 2
Worker	0.9799	0.6639	9.1566	0.0277	3.3421	0.0180	3.3602	0.8863	0.0166	0.9030		2,821.251 4	2,821.251 4	0.0708	0.0704	2,844.005 8
Total	1.0947	3.9279	10.3118	0.0410	3.7897	0.0487	3.8384	1.0152	0.0459	1.0611		4,273.209 7	4,273.209 7	0.1538	0.2787	4,360.091 0

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.153 5	2,738.153 5	0.6670		2,754.828 8
Total	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029		2,738.153 5	2,738.153 5	0.6670		2,754.828 8

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0682	2.5626	1.0496	0.0126	0.4476	0.0127	0.4603	0.1288	0.0121	0.1409		1,384.178 5	1,384.178 5	0.0820	0.1988	1,445.461 2
Worker	0.9208	0.5918	8.5289	0.0269	3.3421	0.0171	3.3592	0.8863	0.0157	0.9021		2,748.277 8	2,748.277 8	0.0642	0.0655	2,769.406 2
Total	0.9890	3.1544	9.5785	0.0395	3.7897	0.0298	3.8195	1.0152	0.0278	1.0430		4,132.456 3	4,132.456 3	0.1461	0.2643	4,214.867 4

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	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029	0.0000	2,738.153 5	2,738.153 5	0.6670		2,754.828 8
Total	1.6735	15.4377	17.3101	0.0288		0.7481	0.7481		0.7029	0.7029	0.0000	2,738.153 5	2,738.153 5	0.6670		2,754.828 8

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0682	2.5626	1.0496	0.0126	0.4476	0.0127	0.4603	0.1288	0.0121	0.1409		1,384.178 5	1,384.178 5	0.0820	0.1988	1,445.461 2
Worker	0.9208	0.5918	8.5289	0.0269	3.3421	0.0171	3.3592	0.8863	0.0157	0.9021		2,748.277 8	2,748.277 8	0.0642	0.0655	2,769.406 2
Total	0.9890	3.1544	9.5785	0.0395	3.7897	0.0298	3.8195	1.0152	0.0278	1.0430		4,132.456 3	4,132.456 3	0.1461	0.2643	4,214.867 4

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.1097	10.5809	14.5491	0.0226		0.5261	0.5261		0.4863	0.4863		2,154.975 9	2,154.975 9	0.6748		2,171.845 3
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1097	10.5809	14.5491	0.0226		0.5261	0.5261		0.4863	0.4863		2,154.975 9	2,154.975 9	0.6748		2,171.845 3

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0616	0.0396	0.5705	1.8000e-003	0.2236	1.1400e-003	0.2247	0.0593	1.0500e-003	0.0603		183.8313	183.8313	4.2900e-003	4.3800e-003	185.2446
Total	0.0616	0.0396	0.5705	1.8000e-003	0.2236	1.1400e-003	0.2247	0.0593	1.0500e-003	0.0603		183.8313	183.8313	4.2900e-003	4.3800e-003	185.2446

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	1.1097	10.5809	14.5491	0.0226		0.5261	0.5261		0.4863	0.4863	0.0000	2,154.9759	2,154.9759	0.6748		2,171.8453
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.1097	10.5809	14.5491	0.0226		0.5261	0.5261		0.4863	0.4863	0.0000	2,154.9759	2,154.9759	0.6748		2,171.8453

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0616	0.0396	0.5705	1.8000e-003	0.2236	1.1400e-003	0.2247	0.0593	1.0500e-003	0.0603		183.8313	183.8313	4.2900e-003	4.3800e-003	185.2446
Total	0.0616	0.0396	0.5705	1.8000e-003	0.2236	1.1400e-003	0.2247	0.0593	1.0500e-003	0.0603		183.8313	183.8313	4.2900e-003	4.3800e-003	185.2446

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.5811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253
Total	72.8367	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944		375.2641	375.2641	0.0225		375.8253

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1848	0.1188	1.7115	5.3900e-003	0.6707	3.4300e-003	0.6741	0.1779	3.1600e-003	0.1810		551.4939	551.4939	0.0129	0.0132	555.7337
Total	0.1848	0.1188	1.7115	5.3900e-003	0.6707	3.4300e-003	0.6741	0.1779	3.1600e-003	0.1810		551.4939	551.4939	0.0129	0.0132	555.7337

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	72.5811					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2556	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253
Total	72.8367	1.7373	2.4148	3.9600e-003		0.0944	0.0944		0.0944	0.0944	0.0000	375.2641	375.2641	0.0225		375.8253

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1848	0.1188	1.7115	5.3900e-003	0.6707	3.4300e-003	0.6741	0.1779	3.1600e-003	0.1810		551.4939	551.4939	0.0129	0.0132	555.7337
Total	0.1848	0.1188	1.7115	5.3900e-003	0.6707	3.4300e-003	0.6741	0.1779	3.1600e-003	0.1810		551.4939	551.4939	0.0129	0.0132	555.7337

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	5.4200	5.6131	50.7878	0.1113	12.1987	0.0792	12.2779	3.2515	0.0736	3.3250		11,450.3738	11,450.3738	0.7607	0.5060	11,620.1750
Unmitigated	5.4200	5.6131	50.7878	0.1113	12.1987	0.0792	12.2779	3.2515	0.0736	3.3250		11,450.3738	11,450.3738	0.7607	0.5060	11,620.1750

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,352.70	1,220.40	1015.20	4,393,042	4,393,042
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	673.47	734.86	856.38	965,388	965,388
Recreational Swimming Pool	0.00	0.00	0.00		
Total	2,026.17	1,955.26	1,871.58	5,358,430	5,358,430

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
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
City Park	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Enclosed Parking with Elevator	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
High Turnover (Sit Down Restaurant)	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Recreational Swimming Pool	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

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	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
NaturalGas Unmitigated	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	8247.66	0.0890	0.7601	0.3234	4.8500e-003		0.0615	0.0615		0.0615	0.0615		970.3134	970.3134	0.0186	0.0178	976.0795
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	4958.11	0.0535	0.4861	0.4083	2.9200e-003		0.0369	0.0369		0.0369	0.0369		583.3070	583.3070	0.0112	0.0107	586.7733
Recreational Swimming Pool	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
Total		0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	8.24766	0.0890	0.7601	0.3234	4.8500e-003		0.0615	0.0615		0.0615	0.0615		970.3134	970.3134	0.0186	0.0178	976.0795
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	4.95811	0.0535	0.4861	0.4083	2.9200e-003		0.0369	0.0369		0.0369	0.0369		583.3070	583.3070	0.0112	0.0107	586.7733
Recreational Swimming Pool	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
Total		0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Unmitigated	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

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	0.4971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6765	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235		40.2317	40.2317	0.0389		41.2039
Total	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6765	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235		40.2317	40.2317	0.0389		41.2039
Total	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Mixed Use Development - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Existing CalEEMod LST Sheets

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Slater Avenue Existing Land Uses LST
Orange County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	49.40	1000sqft	1.19	49,400.00	0
Parking Lot	1.64	Acre	1.64	71,438.40	0
City Park	0.33	Acre	0.33	14,549.04	0
High Turnover (Sit Down Restaurant)	6.40	1000sqft	0.18	6,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Square Footage reduced due to decreased occupancy.

Construction Phase - LST Operational Analysis Only

Off-road Equipment - LST Operational Analysis Only

Grading -

Vehicle Trips - LST Operational Analysis. Trip Rates from project Traffic Impact Analysis (EPD Solutions, 2021)

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	0.00

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseEndDate	8/11/2021	8/4/2021
tblLandUse	LotAcreage	1.13	1.19
tblLandUse	LotAcreage	0.15	0.18
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	1.76
tblVehicleTrips	ST_TR	122.40	108.02
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	0.56
tblVehicleTrips	SU_TR	142.64	125.88
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	7.77
tblVehicleTrips	WD_TR	112.18	99.00

2.0 Emissions Summary

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
2021	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

		Highest		
--	--	---------	--	--

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2333	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5300e-003
Energy	0.0113	0.1030	0.0865	6.2000e-004		7.8300e-003	7.8300e-003		7.8300e-003	7.8300e-003	0.0000	275.1207	275.1207	0.0159	3.7200e-003	276.6279
Mobile	0.2539	0.1215	1.0002	3.6000e-004	0.0112	8.6000e-004	0.0121	2.9900e-003	8.0000e-004	3.7800e-003	0.0000	33.3383	33.3383	0.0223	0.0104	37.0016
Waste						0.0000	0.0000		0.0000	0.0000	24.7913	0.0000	24.7913	1.4651	0.0000	61.4194
Water						0.0000	0.0000		0.0000	0.0000	3.4018	36.3828	39.7846	0.3525	8.6200e-003	51.1658
Total	0.4985	0.2245	1.0875	9.8000e-004	0.0112	8.6900e-003	0.0199	2.9900e-003	8.6300e-003	0.0116	28.1931	344.8432	373.0363	1.8558	0.0228	426.2162

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.2333	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5300e-003
Energy	0.0113	0.1030	0.0865	6.2000e-004		7.8300e-003	7.8300e-003		7.8300e-003	7.8300e-003	0.0000	275.1207	275.1207	0.0159	3.7200e-003	276.6279
Mobile	0.2539	0.1215	1.0002	3.6000e-004	0.0112	8.6000e-004	0.0121	2.9900e-003	8.0000e-004	3.7800e-003	0.0000	33.3383	33.3383	0.0223	0.0104	37.0016
Waste						0.0000	0.0000		0.0000	0.0000	24.7913	0.0000	24.7913	1.4651	0.0000	61.4194
Water						0.0000	0.0000		0.0000	0.0000	3.4018	36.3828	39.7846	0.3525	8.6200e-003	51.1658
Total	0.4985	0.2245	1.0875	9.8000e-004	0.0112	8.6900e-003	0.0199	2.9900e-003	8.6300e-003	0.0116	28.1931	344.8432	373.0363	1.8558	0.0228	426.2162

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/5/2021	8/4/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.64

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	tons/yr										MT/yr					
Mitigated	0.2539	0.1215	1.0002	3.6000e-004	0.0112	8.6000e-004	0.0121	2.9900e-003	8.0000e-004	3.7800e-003	0.0000	33.3383	33.3383	0.0223	0.0104	37.0016
Unmitigated	0.2539	0.1215	1.0002	3.6000e-004	0.0112	8.6000e-004	0.0121	2.9900e-003	8.0000e-004	3.7800e-003	0.0000	33.3383	33.3383	0.0223	0.0104	37.0016

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	383.84	86.94	27.66	9,069	9,069
High Turnover (Sit Down Restaurant)	633.60	691.33	805.63	20,619	20,619
Parking Lot	0.00	0.00	0.00		
Total	1,017.44	778.27	833.30	29,688	29,688

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	0.10	0.10	0.10	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	0.10	0.10	0.10	8.50	72.50	19.00	37	20	43

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
General Office Building	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
High Turnover (Sit Down Restaurant)	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
Parking Lot	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	162.9680	162.9680	0.0138	1.6700e-003	163.8088
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	162.9680	162.9680	0.0138	1.6700e-003	163.8088
Natural Gas Mitigated	0.0113	0.1030	0.0865	6.2000e-004		7.8300e-003	7.8300e-003		7.8300e-003	7.8300e-003	0.0000	112.1527	112.1527	2.1500e-003	2.0600e-003	112.8192
Natural Gas Unmitigated	0.0113	0.1030	0.0865	6.2000e-004		7.8300e-003	7.8300e-003		7.8300e-003	7.8300e-003	0.0000	112.1527	112.1527	2.1500e-003	2.0600e-003	112.8192

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	447070	2.4100e-003	0.0219	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.8574	23.8574	4.6000e-004	4.4000e-004	23.9991
High Turnover (Sit Down Restaurant)	1.65459e+006	8.9200e-003	0.0811	0.0681	4.9000e-004		6.1600e-003	6.1600e-003		6.1600e-003	6.1600e-003	0.0000	88.2953	88.2953	1.6900e-003	1.6200e-003	88.8200
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0113	0.1030	0.0865	6.2000e-004		7.8300e-003	7.8300e-003		7.8300e-003	7.8300e-003	0.0000	112.1527	112.1527	2.1500e-003	2.0600e-003	112.8192

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	447070	2.4100e-003	0.0219	0.0184	1.3000e-004		1.6700e-003	1.6700e-003		1.6700e-003	1.6700e-003	0.0000	23.8574	23.8574	4.6000e-004	4.4000e-004	23.9991
High Turnover (Sit Down Restaurant)	1.65459e+006	8.9200e-003	0.0811	0.0681	4.9000e-004		6.1600e-003	6.1600e-003		6.1600e-003	6.1600e-003	0.0000	88.2953	88.2953	1.6900e-003	1.6200e-003	88.8200
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0113	0.1030	0.0865	6.2000e-004		7.8300e-003	7.8300e-003		7.8300e-003	7.8300e-003	0.0000	112.1527	112.1527	2.1500e-003	2.0600e-003	112.8192

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	666406	118.1841	9.9800e-003	1.2100e-003	118.7938
High Turnover (Sit Down Restaurant)	227520	40.3497	3.4100e-003	4.1000e-004	40.5578
Parking Lot	25003.4	4.4343	3.7000e-004	5.0000e-005	4.4571
Total		162.9681	0.0138	1.6700e-003	163.8088

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
General Office Building	666406	118.1841	9.9800e-003	1.2100e-003	118.7938
High Turnover (Sit Down Restaurant)	227520	40.3497	3.4100e-003	4.1000e-004	40.5578
Parking Lot	25003.4	4.4343	3.7000e-004	5.0000e-005	4.4571
Total		162.9681	0.0138	1.6700e-003	163.8088

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2333	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5300e-003
Unmitigated	0.2333	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5300e-003

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	0.0269					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2064					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5300e-003
Total	0.2333	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5300e-003

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0269					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2064					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	7.0000e-005	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5300e-003
Total	0.2333	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.4300e-003	1.4300e-003	0.0000	0.0000	1.5300e-003

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	39.7846	0.3525	8.6200e-003	51.1658
Unmitigated	39.7846	0.3525	8.6200e-003	51.1658

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.393189	0.7747	7.0000e-005	1.0000e-005	0.7787
General Office Building	8.78005 / 5.38132	33.6634	0.2887	7.0700e-003	42.9882
High Turnover (Sit Down Restaurant)	1.94262 / 0.123997	5.3465	0.0637	1.5400e-003	7.3989
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		39.7846	0.3525	8.6200e-003	51.1658

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0.393189	0.7747	7.0000e-005	1.0000e-005	0.7787
General Office Building	8.78005 / 5.38132	33.6634	0.2887	7.0700e-003	42.9882
High Turnover (Sit Down Restaurant)	1.94262 / 0.123997	5.3465	0.0637	1.5400e-003	7.3989
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		39.7846	0.3525	8.6200e-003	51.1658

8.0 Waste Detail

8.1 Mitigation Measures Waste

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	24.7913	1.4651	0.0000	61.4194
Unmitigated	24.7913	1.4651	0.0000	61.4194

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
General Office Building	45.94	9.3254	0.5511	0.0000	23.1033
High Turnover (Sit Down Restaurant)	76.16	15.4598	0.9137	0.0000	38.3010
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		24.7913	1.4651	0.0000	61.4194

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
General Office Building	45.94	9.3254	0.5511	0.0000	23.1033
High Turnover (Sit Down Restaurant)	76.16	15.4598	0.9137	0.0000	38.3010
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		24.7913	1.4651	0.0000	61.4194

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Slater Avenue Existing Land Uses LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number
----------------	--------

11.0 Vegetation

Slater Avenue Existing Land Uses LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Slater Avenue Existing Land Uses LST
Orange County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	49.40	1000sqft	1.19	49,400.00	0
Parking Lot	1.64	Acre	1.64	71,438.40	0
City Park	0.33	Acre	0.33	14,549.04	0
High Turnover (Sit Down Restaurant)	6.40	1000sqft	0.18	6,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Square Footage reduced due to decreased occupancy.

Construction Phase - LST Operational Analysis Only

Off-road Equipment - LST Operational Analysis Only

Grading -

Vehicle Trips - LST Operational Analysis. Trip Rates from project Traffic Impact Analysis (EPD Solutions, 2021)

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	0.00

Slater Avenue Existing Land Uses LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseEndDate	8/11/2021	8/4/2021
tblLandUse	LotAcreage	1.13	1.19
tblLandUse	LotAcreage	0.15	0.18
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	1.76
tblVehicleTrips	ST_TR	122.40	108.02
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	0.56
tblVehicleTrips	SU_TR	142.64	125.88
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	7.77
tblVehicleTrips	WD_TR	112.18	99.00

2.0 Emissions Summary

Slater Avenue Existing Land Uses LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135
Energy	0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347
Mobile	1.8470	0.7838	5.9960	2.4700e-003	0.0778	5.8700e-003	0.0837	0.0207	5.4200e-003	0.0262		251.9822	251.9822	0.1531	0.0755	278.3042
Total	3.1878	1.3484	6.4761	5.8600e-003	0.0778	0.0488	0.1266	0.0207	0.0483	0.0691		929.4040	929.4040	0.1661	0.0879	959.7523

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	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135
Energy	0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347
Mobile	1.8470	0.7838	5.9960	2.4700e-003	0.0778	5.8700e-003	0.0837	0.0207	5.4200e-003	0.0262		251.9822	251.9822	0.1531	0.0755	278.3042
Total	3.1878	1.3484	6.4761	5.8600e-003	0.0778	0.0488	0.1266	0.0207	0.0483	0.0691		929.4040	929.4040	0.1661	0.0879	959.7523

Slater Avenue Existing Land Uses LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/5/2021	8/4/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.64

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Slater Avenue Existing Land Uses LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	1.8470	0.7838	5.9960	2.4700e-003	0.0778	5.8700e-003	0.0837	0.0207	5.4200e-003	0.0262		251.9822	251.9822	0.1531	0.0755	278.3042
Unmitigated	1.8470	0.7838	5.9960	2.4700e-003	0.0778	5.8700e-003	0.0837	0.0207	5.4200e-003	0.0262		251.9822	251.9822	0.1531	0.0755	278.3042

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	383.84	86.94	27.66	9,069	9,069
High Turnover (Sit Down Restaurant)	633.60	691.33	805.63	20,619	20,619
Parking Lot	0.00	0.00	0.00		
Total	1,017.44	778.27	833.30	29,688	29,688

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	0.10	0.10	0.10	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	0.10	0.10	0.10	8.50	72.50	19.00	37	20	43

Slater Avenue Existing Land Uses LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
General Office Building	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
High Turnover (Sit Down Restaurant)	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
Parking Lot	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347
NaturalGas Unmitigated	0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347

Slater Avenue Existing Land Uses LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1224.85	0.0132	0.1201	0.1009	7.2000e-004		9.1300e-003	9.1300e-003		9.1300e-003	9.1300e-003		144.0999	144.0999	2.7600e-003	2.6400e-003	144.9562
High Turnover (Sit Down Restaurant)	4533.13	0.0489	0.4444	0.3733	2.6700e-003		0.0338	0.0338		0.0338	0.0338		533.3093	533.3093	0.0102	9.7800e-003	536.4785
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347

Slater Avenue Existing Land Uses LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.22485	0.0132	0.1201	0.1009	7.2000e-004		9.1300e-003	9.1300e-003		9.1300e-003	9.1300e-003		144.0999	144.0999	2.7600e-003	2.6400e-003	144.9562
High Turnover (Sit Down Restaurant)	4.53313	0.0489	0.4444	0.3733	2.6700e-003		0.0338	0.0338		0.0338	0.0338		533.3093	533.3093	0.0102	9.7800e-003	536.4785
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Existing Land Uses LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135
Unmitigated	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135

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	0.1472					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135
Total	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135

Slater Avenue Existing Land Uses LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1472					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135
Total	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Existing Land Uses LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Slater Avenue Existing Land Uses LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Slater Avenue Existing Land Uses LST

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	49.40	1000sqft	1.19	49,400.00	0
Parking Lot	1.64	Acre	1.64	71,438.40	0
City Park	0.33	Acre	0.33	14,549.04	0
High Turnover (Sit Down Restaurant)	6.40	1000sqft	0.18	6,400.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2021
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	390.98	CH4 Intensity (lb/MW hr)	0.033	N2O Intensity (lb/MW hr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Square Footage reduced due to decreased occupancy.
- Construction Phase - LST Operational Analysis Only
- Off-road Equipment - LST Operational Analysis Only
- Grading -
- Vehicle Trips - LST Operational Analysis. Trip Rates from project Traffic Impact Analysis (EPD Solutions, 2021)

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	5.00	0.00

Slater Avenue Existing Land Uses LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblConstructionPhase	PhaseEndDate	8/11/2021	8/4/2021
tblLandUse	LotAcreage	1.13	1.19
tblLandUse	LotAcreage	0.15	0.18
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.21	1.76
tblVehicleTrips	ST_TR	122.40	108.02
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	0.70	0.56
tblVehicleTrips	SU_TR	142.64	125.88
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	9.74	7.77
tblVehicleTrips	WD_TR	112.18	99.00

2.0 Emissions Summary

Slater Avenue Existing Land Uses LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135
Energy	0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347
Mobile	1.8141	0.8416	7.0243	2.4600e-003	0.0778	5.9200e-003	0.0837	0.0207	5.4700e-003	0.0262		250.7304	250.7304	0.1716	0.0799	278.8273
Total	3.1548	1.4061	7.5044	5.8500e-003	0.0778	0.0488	0.1266	0.0207	0.0484	0.0691		928.1522	928.1522	0.1847	0.0923	960.2755

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	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135
Energy	0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347
Mobile	1.8141	0.8416	7.0243	2.4600e-003	0.0778	5.9200e-003	0.0837	0.0207	5.4700e-003	0.0262		250.7304	250.7304	0.1716	0.0799	278.8273
Total	3.1548	1.4061	7.5044	5.8500e-003	0.0778	0.0488	0.1266	0.0207	0.0484	0.0691		928.1522	928.1522	0.1847	0.0923	960.2755

Slater Avenue Existing Land Uses LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	8/5/2021	8/4/2021	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 1.64

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

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	0	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Slater Avenue Existing Land Uses LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	1.8141	0.8416	7.0243	2.4600e-003	0.0778	5.9200e-003	0.0837	0.0207	5.4700e-003	0.0262		250.7304	250.7304	0.1716	0.0799	278.8273
Unmitigated	1.8141	0.8416	7.0243	2.4600e-003	0.0778	5.9200e-003	0.0837	0.0207	5.4700e-003	0.0262		250.7304	250.7304	0.1716	0.0799	278.8273

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
General Office Building	383.84	86.94	27.66	9,069	9,069
High Turnover (Sit Down Restaurant)	633.60	691.33	805.63	20,619	20,619
Parking Lot	0.00	0.00	0.00		
Total	1,017.44	778.27	833.30	29,688	29,688

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
General Office Building	0.10	0.10	0.10	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down)	0.10	0.10	0.10	8.50	72.50	19.00	37	20	43

Slater Avenue Existing Land Uses LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
General Office Building	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
High Turnover (Sit Down Restaurant)	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097
Parking Lot	0.540789	0.057394	0.189042	0.132650	0.024514	0.006324	0.014751	0.004812	0.000674	0.000394	0.023812	0.000748	0.004097

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Category	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
	lb/day										lb/day					
NaturalGas Mitigated	0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347
NaturalGas Unmitigated	0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347

Slater Avenue Existing Land Uses LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1224.85	0.0132	0.1201	0.1009	7.2000e-004		9.1300e-003	9.1300e-003		9.1300e-003	9.1300e-003		144.0999	144.0999	2.7600e-003	2.6400e-003	144.9562
High Turnover (Sit Down Restaurant)	4533.13	0.0489	0.4444	0.3733	2.6700e-003		0.0338	0.0338		0.0338	0.0338		533.3093	533.3093	0.0102	9.7800e-003	536.4785
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347

Slater Avenue Existing Land Uses LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
General Office Building	1.22485	0.0132	0.1201	0.1009	7.2000e-004		9.1300e-003	9.1300e-003		9.1300e-003	9.1300e-003		144.0999	144.0999	2.7600e-003	2.6400e-003	144.9562
High Turnover (Sit Down Restaurant)	4.53313	0.0489	0.4444	0.3733	2.6700e-003		0.0338	0.0338		0.0338	0.0338		533.3093	533.3093	0.0102	9.7800e-003	536.4785
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0621	0.5645	0.4742	3.3900e-003		0.0429	0.0429		0.0429	0.0429		677.4092	677.4092	0.0130	0.0124	681.4347

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Existing Land Uses LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135
Unmitigated	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135

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	0.1472					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135
Total	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135

Slater Avenue Existing Land Uses LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.1472					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.1309					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.5000e-004	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135
Total	1.2786	5.0000e-005	5.9200e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0126	0.0126	3.0000e-005		0.0135

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Existing Land Uses LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

CalEEMod LST Sheets

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Slater Avenue Mixed Use Development LST

Orange County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	541.00	Space	0.46	216,400.00	0
City Park	0.30	Acre	0.30	13,068.00	0
High Turnover (Sit Down Restaurant)	7.00	1000sqft	0.16	7,000.00	0
Recreational Swimming Pool	11.63	1000sqft	0.27	11,627.00	0
Apartments Mid Rise	270.00	Dwelling Unit	2.15	270,000.00	772

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Lot Acres based on project site plan.
- Construction Phase - Operation Analysis Only
- Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes
- Grading - Acres based on lot size (3x lot acres)
- Trips and VMT - Operation Analysis Only
- Vehicle Trips - Trip Rate Based on Project Trip Generation (EPD Solutions 2021)
- Woodstoves - No woodstoves and fireplaces proposed.

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation -

Off-road Equipment - Operation Analysis Only

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	PhaseName	Architectural Coating	Operation Only
tblConstructionPhase	NumDays	18.00	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	229.50	0.00
tblFireplaces	NumberNoFireplace	27.00	270.00
tblFireplaces	NumberWood	13.50	0.00
tblLandUse	LandUseSquareFeet	11,630.00	11,627.00
tblLandUse	LotAcreage	4.87	0.46
tblLandUse	LotAcreage	7.11	2.15
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	PhaseName	Architectural Coating	Operation Only
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOnRoadDust	PhaseName	Architectural Coating	Operation Only
tblTripsAndVMT	PhaseName	Architectural Coating	Operation Only
tblTripsAndVMT	WorkerTripNumber	60.00	0.00
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	HO_TL	8.70	0.10
tblVehicleTrips	HS_TL	5.90	0.10
tblVehicleTrips	HW_TL	14.70	0.10
tblVehicleTrips	ST_TR	4.91	4.52
tblVehicleTrips	ST_TR	1.96	0.00

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	122.40	104.98
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	4.09	3.76
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	142.64	122.34
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	5.44	5.01
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	112.18	96.21
tblVehicleTrips	WD_TR	28.82	0.00
tblWoodstoves	NumberCatalytic	13.50	0.00
tblWoodstoves	NumberNoncatalytic	13.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

		Highest		
--	--	---------	--	--

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1903	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725
Energy	0.0260	0.2274	0.1335	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	693.7022	693.7022	0.0418	9.1800e-003	697.4824
Mobile	0.4735	0.2262	1.9650	7.2000e-004	0.0244	1.5600e-003	0.0260	6.5200e-003	1.4400e-003	7.9600e-003	0.0000	66.7858	66.7858	0.0406	0.0198	73.7129
Waste						0.0000	0.0000		0.0000	0.0000	55.5830	0.0000	55.5830	3.2849	0.0000	137.7045
Water						0.0000	0.0000		0.0000	0.0000	6.4733	70.7712	77.2445	0.6708	0.0164	98.9096
Total	1.6899	0.4858	4.8907	2.2900e-003	0.0244	0.0350	0.0594	6.5200e-003	0.0348	0.0414	62.0563	835.8213	897.8776	4.0425	0.0454	1,012.4818

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	1.1903	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725
Energy	0.0260	0.2274	0.1335	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	693.7022	693.7022	0.0418	9.1800e-003	697.4824
Mobile	0.4735	0.2262	1.9650	7.2000e-004	0.0244	1.5600e-003	0.0260	6.5200e-003	1.4400e-003	7.9600e-003	0.0000	66.7858	66.7858	0.0406	0.0198	73.7129
Waste						0.0000	0.0000		0.0000	0.0000	55.5830	0.0000	55.5830	3.2849	0.0000	137.7045
Water						0.0000	0.0000		0.0000	0.0000	6.4733	70.7712	77.2445	0.6708	0.0164	98.9096
Total	1.6899	0.4858	4.8907	2.2900e-003	0.0244	0.0350	0.0594	6.5200e-003	0.0348	0.0414	62.0563	835.8213	897.8776	4.0425	0.0454	1,012.4818

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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Operation Only	Architectural Coating	10/27/2023	10/26/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Operation Only - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4735	0.2262	1.9650	7.2000e-004	0.0244	1.5600e-003	0.0260	6.5200e-003	1.4400e-003	7.9600e-003	0.0000	66.7858	66.7858	0.0406	0.0198	73.7129
Unmitigated	0.4735	0.2262	1.9650	7.2000e-004	0.0244	1.5600e-003	0.0260	6.5200e-003	1.4400e-003	7.9600e-003	0.0000	66.7858	66.7858	0.0406	0.0198	73.7129

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,352.70	1,220.40	1015.20	42,935	42,935
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	673.47	734.86	856.38	21,917	21,917
Recreational Swimming Pool	0.00	0.00	0.00		
Total	2,026.17	1,955.26	1,871.58	64,852	64,852

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
Apartments Mid Rise	0.10	0.10	0.10	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down)	0.10	0.10	0.10	8.50	72.50	19.00	37	20	43
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
City Park	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Enclosed Parking with Elevator	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
High Turnover (Sit Down Restaurant)	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Recreational Swimming Pool	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

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	436.4829	436.4829	0.0368	4.4700e-003	438.7346
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	436.4829	436.4829	0.0368	4.4700e-003	438.7346
NaturalGas Mitigated	0.0260	0.2274	0.1335	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.2193	257.2193	4.9300e-003	4.7200e-003	258.7478
NaturalGas Unmitigated	0.0260	0.2274	0.1335	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.2193	257.2193	4.9300e-003	4.7200e-003	258.7478

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.0104e+006	0.0162	0.1387	0.0590	8.9000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.6463	160.6463	3.0800e-003	2.9500e-003	161.6009
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	1.80971e+006	9.7600e-003	0.0887	0.0745	5.3000e-004		6.7400e-003	6.7400e-003		6.7400e-003	6.7400e-003	0.0000	96.5730	96.5730	1.8500e-003	1.7700e-003	97.1469
Recreational Swimming Pool	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
Total		0.0260	0.2274	0.1336	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.2193	257.2193	4.9300e-003	4.7200e-003	258.7478

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Mid Rise	3.0104e+006	0.0162	0.1387	0.0590	8.9000e-004		0.0112	0.0112		0.0112	0.0112	0.0000	160.6463	160.6463	3.0800e-003	2.9500e-003	161.6009
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	1.80971e+006	9.7600e-003	0.0887	0.0745	5.3000e-004		6.7400e-003	6.7400e-003		6.7400e-003	6.7400e-003	0.0000	96.5730	96.5730	1.8500e-003	1.7700e-003	97.1469
Recreational Swimming Pool	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
Total		0.0260	0.2274	0.1336	1.4200e-003		0.0180	0.0180		0.0180	0.0180	0.0000	257.2193	257.2193	4.9300e-003	4.7200e-003	258.7478

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.03513e+006	183.5764	0.0155	1.8800e-003	184.5235
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	1.17722e+006	208.7740	0.0176	2.1400e-003	209.8510
High Turnover (Sit Down Restaurant)	248850	44.1324	3.7200e-003	4.5000e-004	44.3601
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		436.4829	0.0368	4.4700e-003	438.7346

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Mid Rise	1.03513e+006	183.5764	0.0155	1.8800e-003	184.5235
City Park	0	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	1.17722e+006	208.7740	0.0176	2.1400e-003	209.8510
High Turnover (Sit Down Restaurant)	248850	44.1324	3.7200e-003	4.5000e-004	44.3601
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		436.4829	0.0368	4.4700e-003	438.7346

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.1903	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725
Unmitigated	1.1903	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725

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	0.0907					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0151					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0846	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725
Total	1.1904	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0907					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.0151					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0846	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725
Total	1.1904	0.0322	2.7922	1.5000e-004		0.0154	0.0154		0.0154	0.0154	0.0000	4.5622	4.5622	4.4100e-003	0.0000	4.6725

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	77.2445	0.6708	0.0164	98.9096
Unmitigated	77.2445	0.6708	0.0164	98.9096

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.5916 / 11.0903	68.0552	0.5785	0.0142	86.7415
City Park	0 / 0.357444	0.7043	6.0000e-005	1.0000e-005	0.7079
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.12474 / 0.135621	5.8478	0.0697	1.6900e-003	8.0925
Recreational Swimming Pool	0.687835 / 0.421576	2.6372	0.0226	5.5000e-004	3.3677
Total		77.2445	0.6709	0.0164	98.9096

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Mid Rise	17.5916 / 11.0903	68.0552	0.5785	0.0142	86.7415
City Park	0 / 0.357444	0.7043	6.0000e-005	1.0000e-005	0.7079
Enclosed Parking with Elevator	0 / 0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	2.12474 / 0.135621	5.8478	0.0697	1.6900e-003	8.0925
Recreational Swimming Pool	0.687835 / 0.421576	2.6372	0.0226	5.5000e-004	3.3677
Total		77.2445	0.6709	0.0164	98.9096

8.0 Waste Detail

8.1 Mitigation Measures Waste

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	55.5830	3.2849	0.0000	137.7045
Unmitigated	55.5830	3.2849	0.0000	137.7045

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	124.2	25.2115	1.4900	0.0000	62.4604
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	83.3	16.9092	0.9993	0.0000	41.8917
Recreational Swimming Pool	66.29	13.4563	0.7952	0.0000	33.3373
Total		55.5830	3.2849	0.0000	137.7045

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Mid Rise	124.2	25.2115	1.4900	0.0000	62.4604
City Park	0.03	6.0900e-003	3.6000e-004	0.0000	0.0151
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
High Turnover (Sit Down Restaurant)	83.3	16.9092	0.9993	0.0000	41.8917
Recreational Swimming Pool	66.29	13.4563	0.7952	0.0000	33.3373
Total		55.5830	3.2849	0.0000	137.7045

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

Slater Avenue Mixed Use Development LST - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Slater Avenue Mixed Use Development LST

Orange County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	541.00	Space	0.46	216,400.00	0
City Park	0.30	Acre	0.30	13,068.00	0
High Turnover (Sit Down Restaurant)	7.00	1000sqft	0.16	7,000.00	0
Recreational Swimming Pool	11.63	1000sqft	0.27	11,627.00	0
Apartments Mid Rise	270.00	Dwelling Unit	2.15	270,000.00	772

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Lot Acres based on project site plan.
- Construction Phase - Operation Analysis Only
- Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes
- Grading - Acres based on lot size (3x lot acres)
- Trips and VMT - Operation Analysis Only
- Vehicle Trips - Trip Rate Based on Project Trip Generation (EPD Solutions 2021)
- Woodstoves - No woodstoves and fireplaces proposed.

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation -

Off-road Equipment - Operation Analysis Only

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	PhaseName	Architectural Coating	Operation Only
tblConstructionPhase	NumDays	18.00	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	229.50	0.00
tblFireplaces	NumberNoFireplace	27.00	270.00
tblFireplaces	NumberWood	13.50	0.00
tblLandUse	LandUseSquareFeet	11,630.00	11,627.00
tblLandUse	LotAcreage	4.87	0.46
tblLandUse	LotAcreage	7.11	2.15
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	PhaseName	Architectural Coating	Operation Only
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOnRoadDust	PhaseName	Architectural Coating	Operation Only
tblTripsAndVMT	PhaseName	Architectural Coating	Operation Only
tblTripsAndVMT	WorkerTripNumber	60.00	0.00
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	HO_TL	8.70	0.10
tblVehicleTrips	HS_TL	5.90	0.10
tblVehicleTrips	HW_TL	14.70	0.10
tblVehicleTrips	ST_TR	4.91	4.52
tblVehicleTrips	ST_TR	1.96	0.00

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	122.40	104.98
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	4.09	3.76
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	142.64	122.34
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	5.44	5.01
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	112.18	96.21
tblVehicleTrips	WD_TR	28.82	0.00
tblWoodstoves	NumberCatalytic	13.50	0.00
tblWoodstoves	NumberNoncatalytic	13.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Energy	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
Mobile	3.0880	1.3004	10.5102	4.3700e-003	0.1510	9.5100e-003	0.1605	0.0403	8.7700e-003	0.0490		449.4377	449.4377	0.2485	0.1280	493.7992
Total	9.9660	2.8039	33.5794	0.0133	0.1510	0.2314	0.3825	0.0403	0.2307	0.2709	0.0000	2,043.2898	2,043.2898	0.3171	0.1565	2,097.8559

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	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Energy	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
Mobile	3.0880	1.3004	10.5102	4.3700e-003	0.1510	9.5100e-003	0.1605	0.0403	8.7700e-003	0.0490		449.4377	449.4377	0.2485	0.1280	493.7992
Total	9.9660	2.8039	33.5794	0.0133	0.1510	0.2314	0.3825	0.0403	0.2307	0.2709	0.0000	2,043.2898	2,043.2898	0.3171	0.1565	2,097.8559

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Operation Only	Architectural Coating	10/27/2023	10/26/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.46

Residential Indoor: 546,750; Residential Outdoor: 182,250; Non-Residential Indoor: 10,500; Non-Residential Outdoor: 3,500; Striped Parking Area: 12,984 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Operation Only	Air Compressors	0	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
Operation Only	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	3.0880	1.3004	10.5102	4.3700e-003	0.1510	9.5100e-003	0.1605	0.0403	8.7700e-003	0.0490		449.4377	449.4377	0.2485	0.1280	493.7992
Unmitigated	3.0880	1.3004	10.5102	4.3700e-003	0.1510	9.5100e-003	0.1605	0.0403	8.7700e-003	0.0490		449.4377	449.4377	0.2485	0.1280	493.7992

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,352.70	1,220.40	1015.20	42,935	42,935
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	673.47	734.86	856.38	21,917	21,917
Recreational Swimming Pool	0.00	0.00	0.00		
Total	2,026.17	1,955.26	1,871.58	64,852	64,852

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
Apartments Mid Rise	0.10	0.10	0.10	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	0.10	0.10	0.10	8.50	72.50	19.00	37	20	43
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
City Park	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Enclosed Parking with Elevator	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
High Turnover (Sit Down Restaurant)	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Recreational Swimming Pool	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Natural Gas Mitigated	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
Natural Gas Unmitigated	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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					
Apartments Mid Rise	8247.66	0.0890	0.7601	0.3234	4.8500e-003		0.0615	0.0615		0.0615	0.0615		970.3134	970.3134	0.0186	0.0178	976.0795
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	4958.11	0.0535	0.4861	0.4083	2.9200e-003		0.0369	0.0369		0.0369	0.0369		583.3070	583.3070	0.0112	0.0107	586.7733
Recreational Swimming Pool	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
Total		0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	8.24766	0.0890	0.7601	0.3234	4.8500e-003		0.0615	0.0615		0.0615	0.0615		970.3134	970.3134	0.0186	0.0178	976.0795
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	4.95811	0.0535	0.4861	0.4083	2.9200e-003		0.0369	0.0369		0.0369	0.0369		583.3070	583.3070	0.0112	0.0107	586.7733
Recreational Swimming Pool	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
Total		0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Unmitigated	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

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	0.4971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6765	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235		40.2317	40.2317	0.0389		41.2039
Total	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6765	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235		40.2317	40.2317	0.0389		41.2039
Total	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Mixed Use Development LST - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied**8.0 Waste Detail**

8.1 Mitigation Measures Waste**9.0 Operational Offroad**

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Slater Avenue Mixed Use Development LST

Orange County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking with Elevator	541.00	Space	0.46	216,400.00	0
City Park	0.30	Acre	0.30	13,068.00	0
High Turnover (Sit Down Restaurant)	7.00	1000sqft	0.16	7,000.00	0
Recreational Swimming Pool	11.63	1000sqft	0.27	11,627.00	0
Apartments Mid Rise	270.00	Dwelling Unit	2.15	270,000.00	772

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Lot Acres based on project site plan.
- Construction Phase - Operation Analysis Only
- Off-road Equipment - Crawler Tractors in place of Tractors/Loaders/Backhoes
- Grading - Acres based on lot size (3x lot acres)
- Trips and VMT - Operation Analysis Only
- Vehicle Trips - Trip Rate Based on Project Trip Generation (EPD Solutions 2021)
- Woodstoves - No woodstoves and fireplaces proposed.

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Construction Off-road Equipment Mitigation -

Off-road Equipment - Operation Analysis Only

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	PhaseName	Architectural Coating	Operation Only
tblConstructionPhase	NumDays	18.00	0.00
tblFireplaces	FireplaceDayYear	25.00	0.00
tblFireplaces	FireplaceHourDay	3.00	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberGas	229.50	0.00
tblFireplaces	NumberNoFireplace	27.00	270.00
tblFireplaces	NumberWood	13.50	0.00
tblLandUse	LandUseSquareFeet	11,630.00	11,627.00
tblLandUse	LotAcreage	4.87	0.46
tblLandUse	LotAcreage	7.11	2.15
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	PhaseName	Architectural Coating	Operation Only
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOnRoadDust	PhaseName	Architectural Coating	Operation Only
tblTripsAndVMT	PhaseName	Architectural Coating	Operation Only
tblTripsAndVMT	WorkerTripNumber	60.00	0.00
tblVehicleTrips	CC_TL	8.40	0.10
tblVehicleTrips	CNW_TL	6.90	0.10
tblVehicleTrips	CW_TL	16.60	0.10
tblVehicleTrips	HO_TL	8.70	0.10
tblVehicleTrips	HS_TL	5.90	0.10
tblVehicleTrips	HW_TL	14.70	0.10
tblVehicleTrips	ST_TR	4.91	4.52
tblVehicleTrips	ST_TR	1.96	0.00

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	ST_TR	122.40	104.98
tblVehicleTrips	ST_TR	9.10	0.00
tblVehicleTrips	SU_TR	4.09	3.76
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	142.64	122.34
tblVehicleTrips	SU_TR	13.60	0.00
tblVehicleTrips	WD_TR	5.44	5.01
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	112.18	96.21
tblVehicleTrips	WD_TR	28.82	0.00
tblWoodstoves	NumberCatalytic	13.50	0.00
tblWoodstoves	NumberNoncatalytic	13.50	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Energy	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
Mobile	3.0154	1.4002	12.2946	4.3500e-003	0.1510	9.5400e-003	0.1606	0.0403	8.8000e-003	0.0491		447.7223	447.7223	0.2781	0.1356	495.0771
Total	9.8934	2.9037	35.3638	0.0133	0.1510	0.2315	0.3825	0.0403	0.2307	0.2710	0.0000	2,041.5744	2,041.5744	0.3468	0.1641	2,099.1339

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	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Energy	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
Mobile	3.0154	1.4002	12.2946	4.3500e-003	0.1510	9.5400e-003	0.1606	0.0403	8.8000e-003	0.0491		447.7223	447.7223	0.2781	0.1356	495.0771
Total	9.8934	2.9037	35.3638	0.0133	0.1510	0.2315	0.3825	0.0403	0.2307	0.2710	0.0000	2,041.5744	2,041.5744	0.3468	0.1641	2,099.1339

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	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	Operation Only	Architectural Coating	10/27/2023	10/26/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.46

Residential Indoor: 546,750; Residential Outdoor: 182,250; Non-Residential Indoor: 10,500; Non-Residential Outdoor: 3,500; Striped Parking Area: 12,984 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Operation Only	Air Compressors	0	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
Operation Only	1	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	3.0154	1.4002	12.2946	4.3500e-003	0.1510	9.5400e-003	0.1606	0.0403	8.8000e-003	0.0491		447.7223	447.7223	0.2781	0.1356	495.0771
Unmitigated	3.0154	1.4002	12.2946	4.3500e-003	0.1510	9.5400e-003	0.1606	0.0403	8.8000e-003	0.0491		447.7223	447.7223	0.2781	0.1356	495.0771

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Mid Rise	1,352.70	1,220.40	1015.20	42,935	42,935
City Park	0.00	0.00	0.00		
Enclosed Parking with Elevator	0.00	0.00	0.00		
High Turnover (Sit Down Restaurant)	673.47	734.86	856.38	21,917	21,917
Recreational Swimming Pool	0.00	0.00	0.00		
Total	2,026.17	1,955.26	1,871.58	64,852	64,852

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
Apartments Mid Rise	0.10	0.10	0.10	40.20	19.20	40.60	86	11	3
City Park	16.60	8.40	6.90	33.00	48.00	19.00	66	28	6

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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
Enclosed Parking with Elevator	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
High Turnover (Sit Down	0.10	0.10	0.10	8.50	72.50	19.00	37	20	43
Recreational Swimming Pool	16.60	8.40	6.90	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Mid Rise	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
City Park	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Enclosed Parking with Elevator	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
High Turnover (Sit Down Restaurant)	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942
Recreational Swimming Pool	0.544795	0.058861	0.186903	0.129401	0.024381	0.006522	0.014242	0.004855	0.000656	0.000385	0.024332	0.000723	0.003942

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Natural Gas Mitigated	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528
Natural Gas Unmitigated	0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas 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					
Apartments Mid Rise	8247.66	0.0890	0.7601	0.3234	4.8500e-003		0.0615	0.0615		0.0615	0.0615		970.3134	970.3134	0.0186	0.0178	976.0795
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	4958.11	0.0535	0.4861	0.4083	2.9200e-003		0.0369	0.0369		0.0369	0.0369		583.3070	583.3070	0.0112	0.0107	586.7733
Recreational Swimming Pool	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
Total		0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Mid Rise	8.24766	0.0890	0.7601	0.3234	4.8500e-003		0.0615	0.0615		0.0615	0.0615		970.3134	970.3134	0.0186	0.0178	976.0795
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Enclosed Parking with Elevator	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
High Turnover (Sit Down Restaurant)	4.95811	0.0535	0.4861	0.4083	2.9200e-003		0.0369	0.0369		0.0369	0.0369		583.3070	583.3070	0.0112	0.0107	586.7733
Recreational Swimming Pool	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
Total		0.1424	1.2462	0.7318	7.7700e-003		0.0984	0.0984		0.0984	0.0984		1,553.6204	1,553.6204	0.0298	0.0285	1,562.8528

6.0 Area Detail

6.1 Mitigation Measures Area

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039
Unmitigated	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

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	0.4971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6765	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235		40.2317	40.2317	0.0389		41.2039
Total	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.4971					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	5.5619					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.6765	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235		40.2317	40.2317	0.0389		41.2039
Total	6.7356	0.2574	22.3375	1.1800e-003		0.1235	0.1235		0.1235	0.1235	0.0000	40.2317	40.2317	0.0389	0.0000	41.2039

7.0 Water Detail

7.1 Mitigation Measures Water

Slater Avenue Mixed Use Development LST - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

Fuel Calculations

Model Output: OFFROAD2017 (v1.0.1) Emissions Inventory

Region Type: Sub-Area

Region: Orange (SC)

Calendar Year: 2022

Scenario: All Adopted Rules - Exhaust

Vehicle Classification: OFFROAD2017 Equipment Types

Units: tons/day for Emissions, gallons/year for Fuel, hours/year for Activity, Horsepower-hours/year for Horsepower-hours

Region	Calendar Year	VehClass	MdlYr	HP_Bin	Fuel	Fuel Consumption	Horsepower Hours	Fuel Rate
Orange (SC)	2022	OFF - ConstMin - Concrete/Industrial Saws	Aggregate	Aggregate	Diesel	4880.05	116508	0.041886
Orange (SC)	2022	ConstMin - Excavators	Aggregate	Aggregate	Diesel	1892137.371	95293217.91	0.019856
Orange (SC)	2022	ConstMin - Rubber Tired Dozers	Aggregate	Aggregate	Diesel	209958.0623	10191488.45	0.020601
Orange (SC)	2022	ConstMin - Crawler Tractors	Aggregate	Aggregate	Diesel	1051090.969	47398004.46	0.022176
Orange (SC)	2022	ConstMin - Graders	Aggregate	Aggregate	Diesel	711213.7563	33609122.25	0.021161
Orange (SC)	2022	ConstMin - Cranes	Aggregate	Aggregate	Diesel	425603.1316	28572995.69	0.014895
Orange (SC)	2022	Industrial - Forklifts	Aggregate	Aggregate	Diesel	1385048.757	132611575.6	0.010444
Orange (SC)	2022	OFF - Light Commercial - Generator Sets	Aggregate	Aggregate	Diesel	460498.6	10880285	0.042324
Orange (SC)	2022	ConstMin - Tractors/Loaders/Backhoes	Aggregate	Aggregate	Diesel	2632233.068	137476165.1	0.019147
Orange (SC)	2022	OFF - Light Commercial - Welders	Aggregate	Aggregate	Diesel	511427.05	19804064.15	0.025824
Orange (SC)	2022	OFF - ConstMin - Cement and Mortar Mixers	Aggregate	Aggregate	Diesel	9022.8	281915.05	0.032005
Orange (SC)	2022	ConstMin - Pavers	Aggregate	Aggregate	Diesel	126213.8971	5861612.846	0.021532
Orange (SC)	2022	ConstMin - Paving Equipment	Aggregate	Aggregate	Diesel	73456.15288	3978231.575	0.018465
Orange (SC)	2022	ConstMin - Rollers	Aggregate	Aggregate	Diesel	327355.7491	16503050.37	0.019836
Orange (SC)	2022	OFF - Light Commercial - Air Compressors	Aggregate	Aggregate	Diesel	98754.4	3579044	0.027592

Source: EMFAC2021 (v1.0.1) Emissions Inventory

Region Type: Sub-Area

Region: Los Angeles (SC)

Calendar Year: 2022

Season: Annual

Vehicle Classification: EMFAC2007 Categories

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

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	Fuel Consumption	Fuel Rate
Orange (SC)	2022	HHDT	Aggregate	Aggregate	Diesel	382208925.7	65300.43017	5.85
Orange (SC)	2022	MHDT	Aggregate	Aggregate	Diesel	354824303	39855.09641	8.90

Source: EMFAC2021 (v1.0.0) Emissions Inventory

Region Type: Sub-Area

Region: Los Angeles (SC)

Calendar Year: 2021

Season: Winter

Vehicle Classification: EMFAC2007 Categories

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

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	VMT	Fuel Consumption	Fuel Rate
Orange (SC)	2022	LDA	Aggregate	Aggregate	Gasoline	14788101043	513837.0107	28.78
Orange (SC)	2022	LDT1	Aggregate	Aggregate	Gasoline	1235805874	50940.23916	24.26
Orange (SC)	2022	LDT2	Aggregate	Aggregate	Gasoline	7116698572	307484.7674	23.14
							50/25/25 Split	26.24